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# APPENDIX TO THE JOURNALS

OF THE

# SENATE AND ASSEMBLY

OF THE

FORTY-FIRST SESSION

OF THE

LEGISLATURE OF THE STATE OF CALIFORNIA

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VOLUME III.



SACRAMENTO

ROBERT L. TELFER - - - - SUPERINTENDENT OF STATE PRINTING

1915





### **Errata.**

No. 3—Report of Board of Dental Examiners, 1912-1913, will be found in Vol. 5, between Report of Building and Loan Association and Report of State Dairy Bureau.





### VOLUME III.

- 1—Report of Railroad Commission, 1913-1914.
- 2—Report of Board of Charities and Corrections, 1912-1914.
- 3—Report of Board of Dental Examiners, 1913-1914.
- 4—Report of State Veterinarian, 1913-1914.
- 5—Report of State Board of Agriculture, 1913.
- 6—Report of State Board of Agriculture, 1914.
- 7—Report of Industrial Home for the Adult Blind, 1912-1914.
- 8—Report of California School for Girls, 1914.
- 9—Report of Superintendent Capitol Building and Grounds, 1911-1914.





REPORT

OF THE

# Railroad Commission of California

From July 1, 1913, to June 30, 1914



CALIFORNIA  
STATE PRINTING OFFICE  
1914

## COMMISSIONERS.

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JOHN M. ESHLEMAN, President.

H. D. LOVELAND.

ALEX GORDON.

MAX THELEN.

EDWIN O. EDGERTON.

\*328.794  
C12:41

CHARLES R. DETRICK,  
Secretary.

102183

Office of Commission :

833 Market Street,  
San Francisco.

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## LETTER OF TRANSMITTAL.

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OCTOBER 15, 1914.

To His Excellency, HIRAM W. JOHNSON,  
Governor of California:

In compliance with the Public Utilities Act of March 23, 1912, we herewith submit the annual report of the Railroad Commission for the fiscal year from July 1, 1913, to June 30, 1914.

The work of the Commission has nearly doubled in the past fiscal year owing to the increase of work made necessary by the transfer of control over public utilities by fifty-six cities by special elections. This includes large cities like San Jose and Oakland.

The Commission has received 597 formal applications, 209 formal complaints and 2,254 informal complaints, making a total of 3,060 as compared with the previous year, when 2,013 matters were filed.

There have been decisions rendered in 663 formal applications, 217 formal cases and 1,805 informal complaints.

### LEGAL DEPARTMENT.

During the past fiscal year the legal department has been engaged upon the following court cases for the Commission:

1. *The Pacific Telephone and Telegraph Company vs. Railroad Commission.* (166 Cal. 640.)

This was a proceeding to review an order of the Commission directing that physical connections be made at two specified points between the exchanges of The Pacific Telephone and Telegraph Company and two independent telephone companies, one in Tehama County and one in Glenn County. While the Supreme Court annulled the Commission's order on the ground that it amounted to a "taking" of property in violation of the federal constitution, the constitutionality of the Public Utilities Act of California was upheld, and the procedure provided for the expeditious review of orders of the Commission directly by the Supreme Court was sustained.

The decision of the Supreme Court, in so far as it annulled the Commission's order for the alleged "taking" of property, has been repudiated by the federal courts and the highest courts in several states. Reference to these particular decisions is made elsewhere in this annual report.

2. *Tyndale Palmer vs. Railroad Commission.* (167 Cal. 163.)

In this case the Supreme Court upholds an order of the Railroad Commission dismissing the complaint of certain individuals asking that the Southern California Mountain Water Company supply them with water. The order of the Commission was based on the fact that the water company had water only sufficient for the needs of the inhabitants of San Diego and other existing consumers.

3. *Del Mar Water, Light and Power Company vs. Railroad Commission.* (167 Cal. 665.)

In this case the Supreme Court annulled an order of the Commission directing Del Mar Water, Light and Power Company to extend its mains to serve a certain individual. The basis of the court's decision is that the Commission did not find that the individual desiring service was within the territory to which the water company had dedicated its water. In the original decision the court strongly intimated that the water company was not even a public utility. The Commission asked for a rehearing upon this one point, and the court rendered a modified opinion declaring that it was not intended to hold that the company was not a public utility.

4. *Southern Pacific Company vs. Railroad Commission et al.* (Decided by the District Court of the United States for the Northern District of California on May 26, 1914.)

In this case the Southern Pacific Company sought to enjoin the Railroad Commission, its attorney and others from prosecuting the company if it should guarantee certain car equipment trust certificates without having first obtained the consent of the Railroad Commission.

The Commission asked that the bill be dismissed for lack of jurisdiction and want of equity.

Judge Van Fleet dismissed the bill, calling attention to the fact that the controversy had become a moot one, as the Southern Pacific had, in fact, applied to the Railroad Commission for authority to guarantee the certificates, and the authority was granted by the Commission.

5. *Title Guarantee and Trust Company, Trustee, and Miradero Water Company vs. Railroad Commission.* (48 Cal. 171.)

This was a proceeding to review an order of the Commission directing two water companies operating within the city of Glendale to install meters and service connections at their own expense.

The Supreme Court held that jurisdiction over this matter rested in the city authorities, and not in the Commission, and accordingly annulled the Commission's order. The Supreme Court also held in the original decision that the Railroad Commission had no jurisdiction of any kind within incorporated cities. The Commission applied for a rehearing upon this point and the Supreme Court struck out that portion of the original decision which had reference thereto.

6. *Wilmington Transportation Company vs. Railroad Commission.* (166 Cal 741.)

In this case the Supreme Court upheld an order of the Commission which assumed jurisdiction to regulate the rates charged by the Wilmington Transportation Company for carrying freight and passengers upon a direct line between San Pedro on the mainland, and Avalon on Catalina Island. The company claimed that as a part of this voyage was over the high seas the transportation was not subject to state regu-



lation. The decision of the Supreme Court sustaining the Railroad Commission has been appealed to the United States Supreme Court.

7. *Kern Trading and Oil Company and Associated Oil Company vs. Associated Pipe Line Company, Railroad Commission et al.*

In this case, brought in the Federal District Court for the Northern District of California, an injunction is sought to restrain the defendant pipe line company from complying with the provisions of the oil pipe line statutes passed by the California legislature in 1913, and to enjoin the Railroad Commission, its attorney and others from enforcing the provisions of said statutes.

The Commission asked that the complaint be dismissed for lack of jurisdiction and want of equity.

This case is now awaiting decision.

8. *Oro Electric Corporation vs. Railroad Commission.* (47 Cal. Dec. 547.)

This is a proceeding to review an order of the Commission denying to the Oro Electric Corporation a certificate of public convenience and necessity to supply electric energy in the city of Stockton. The Supreme Court, on April 10, 1914, rendered a decision annulling the Railroad Commission's order. The Commission applied for a rehearing of this decision. The application was granted and the Supreme Court vacated its decision. Argument has been had upon rehearing and the matter now awaits the decision of the Supreme Court.

9. *Railroad Commission vs. Alabama Great Southern Railroad Company et al.*

This is an action brought by the Railroad Commission before the Interstate Commerce Commission against a large number of carriers engaged in interstate commerce. The complaint seeks a reduction in the refrigeration rates and the carload minimum applicable to shipments of deciduous fruit from California to all points East.

Evidence has been introduced, argument had before the Interstate Commerce Commission en banc at Washington, D. C., and the case now awaits the decision of the Interstate Commerce Commission.

10. *City of Los Angeles vs. Central Trust Company of New York, Southern Pacific Railroad Company et al.* (L. A. No. 3663.)

This is an appeal from a decision of the superior court of Los Angeles County holding that the city has the right to construct streets over the tracks of railroads without first obtaining the consent of the Commission in accordance with section 43 of the Public Utilities Act.

The Railroad Commission filed a brief as *amicus curiæ* in this case, and the decision is now awaited.

11. *Limoneira Company, Farmers' Ditch Company and Thermal Belt Water Company vs. Railroad Commission.* (L. A. No. 3806.)

This is a proceeding to review an order of the Railroad Commission fixing the rates to be charged for water to be supplied by Santa Clara Water and Irrigation Company.

Briefs are now being prepared in this case.

12. *Hanlon vs. Railroad Commission.* (L. A. 3888.)

This is a petition for a writ of mandamus to compel the Railroad Commission to hear and determine an application by Hanlon for an order authorizing one Durfy to sell Durfy's water system to Hanlon.

This case has been argued and now awaits decision.

In addition to handling these cases the legal department has given advice on all legal questions when requested by the Railroad Commission, or any commissioner or department, and has answered such written and oral requests for legal information as have been referred to it.

**RATES.**

The following is a brief summary of the work in the adjustment of freight and passenger rates in the last fiscal year:

1. The filing of 9,362 rate tariffs for the past year compared with 5,111 for 1913.

2. Application of all carriers to raise minimum charge from 25 cents after investigation denied.

3. Increase of river steamer freight rates denied.

4. Increase in Pullman drawing room rates denied.

5. Increase on oil and refinery tops freight rate denied.

6. Nine hundred and eighty-seven authorizations to publish rates less than thirty days' notice.

7. Four hundred and eighty-two applications under section 63 of the Public Utilities Act to increase transportation rates disposed of.

8. One hundred and ninety-nine reparation freight and passenger rate claims investigated and refunds authorized amounting to \$29,290.02.

9. Two thousand three hundred and seventy-one informal rate and service complaints filed.

10. Long and short haul investigation carried on. Carriers granted authority to meet water competition without prejudice to intermediate rates.

11. Express rates investigated and completed making reductions in favor of shippers of \$750,000.00 per annum.

12. Lumber rates being investigated and to be given formal hearing before Commission.

13. Freight rates to mountain cities of Tuolumne County investigated and new basis of rates filed.

14. Sacramento Valley class rates being investigated that will affect the entire rate adjustment north of San Francisco. Temporary adjustment agreed upon reducing rates \$250,000.00 per annum.

15. Class and commodity rates north of Stockton and including Ione branch investigated and found not excessive.

16. Rates on Amador Central Railway investigated, and it was found that the earning capacity of the road did not warrant reduction in rates. Complaint dismissed.

17. Commodity rates on Placerville branch adjusted to complainants' satisfaction resulting in withdrawal of formal complaint.

18. Pullman investigation developed underpaid employees relying on tips of public for an existence. Rates of this company called into question and set for future hearing.

19. Commutation rates to transbay cities investigated and final adjustments made.

20. Clay freight rates to San Francisco bay points investigated and reductions made.

21. Cotton rates from Imperial Valley ordered reduced 30 per cent to San Pedro.

22. Sand rates. Request to cancel same by carriers denied.

23. Commodity rates, Shasta region, investigated and settled by compromise with carrier.

24. Street car and suburban passenger rates in Los Angeles ordered readjusted.

25. Passenger rates to suburban cities on Northwestern Pacific readjusted and reduced.

26. Refrigeration rates on fresh fruit. Complaint filed with Interstate Commerce Commission. Decision awaited.

27. Live stock rates from Imperial Valley investigated and reduced informally after conference with carriers.

28. Fruit rates to Sacramento Valley investigated and reduction made informally after conference with carriers.

29. Joint rates on lumber from San Pedro to East San Pedro reduced from \$1.20 to \$1.00 per ton.

30. San Jose Railway, Alum Rock branch, found inadequate and ordered reconstructed.

#### TELEPHONE.

1. Long distance toll rates investigated and reductions made amounting to \$526,000.00.

2. Two hundred and forty-six informal complaints filed and investigated, being double the previous year.

3. Eighty informal orders issued on rates and establishing toll stations and exchanges.

4. San Jose rates investigated and reductions made amounting to \$12,237.00 annually.

#### SERVICE DEPARTMENT.

Informal complaints covering the following subjects investigated and adjusted:

1. Insufficient equipment and lack of seating facilities on common carriers.

2. Inadequate depot facilities, lighting, heating and comfort of passengers.

3. Locations of new stations.
  4. Stopping of trains.
  5. Requests for more frequent train service.
  6. Violations of full crew law and hours of service.
- Operating rules of all carriers examined and enforcement investigated.  
Investigation of operation and condition of tracks of thirty-six railroads.

All accidents investigated and in thirty-six cases special investigations made.

Clearances on railroads and street railroads investigated and made subject of General Order No. 26.

Headlight investigation made in accordance with act to enforce compliance.

Special investigations in accidents during the year have been as follows:

1. Accident on American River bridge on Northern Electric Railway Company.
2. Accident at Bagdad on the Arizona division of the Santa Fe.
3. Accident on the Yosemite Valley Railroad.

#### STOCKS AND BONDS.

During the year 154 applications for the issuance of stocks, bonds, notes and certificates of indebtedness have been applied for, for the total amount of \$298,679,794.87, of which \$217,564,768.00 have been approved. Applications were denied in the amount of \$14,749,912.63, and applications were dismissed to the amount of \$3,780,110.68. There are pending at this time applications to the amount of \$67,601,271.57.

In several cases the Commission has passed upon applications for approval of bonds issued without proper authority from this Commission.

#### PHYSICAL VALUATION.

During the year the valuation work has been carried forward with diligence. Valuations have now been completed for twenty-eight roads, with a total mileage of 1,322.25 miles of main track. Valuations are nearly complete for eight other roads with a total of 1,140.41 miles, and are well under way for 1,501.59 additional miles.

Respectfully.

#### RAILROAD COMMISSION OF THE STATE OF CALIFORNIA.

JOHN M. ESHLEMAN,  
H. D. LOVELAND,  
ALEX GORDON,  
MAX THELEN,  
EDWIN O. EDGERTON,  
*Commissioners.*



## ADMINISTRATION.

The secretary's office is charged with the administration duties of the Commission, including the care of all records, documents and finances dealing with the appropriations, pay-roll and traveling expenses of employees. The volume of business has continually increased until at the present time two rooms are devoted to the filing of official papers and correspondence, with an increase from two to five clerks.

The duo decimal filing system, as installed at the beginning of this Commission, continues to prove the accuracy of a general filing system that is capable of future expansion without any changes in the system.

During the fiscal year ending June 30, 1914, the following tabulation of formal and informal matters is recorded:

	During fiscal year	Total to June 30, 1914
<i>Formal.</i>		
Number of applications filed.....	597	1,210
Number of applications decided.....	663	1,119
Number of cases filed.....	209	630
Number of cases decided.....	217	335
<i>Informal.</i>		
Number of complaints filed.....	2,254	4,409
Number of complaints decided.....	1,805	3,783

Owing to the numerous decisions rendered by the Commission it has been found necessary to print the decisions in volumes of six month periods instead of twelve month periods, the volumes being for the periods as follows:

Volume number	Period	Decision numbers
1	January 1, 1911, to December 31, 1912.....	24 to 394
2	January 1, 1913, to June 30, 1913.....	395 to 763
3	July 1, 1913, to December 31, 1913.....	764 to 1,188
4	January 1, 1914, to June 30, 1914.....	1,189 to 1,638

These copies have been sold at a price of \$1.50 each, which just about covers the cost of printing and binding.

At the end of the present fiscal year the personnel of the Commission consisted of the following:

Commissioners .....	5
Secretary's office .....	23
Legal .....	2
Reporting Department .....	8
Stock and Bond Department.....	9
Accounting Department .....	9
Rate Department .....	26
Engineering Department .....	34
Los Angeles office .....	1

The following municipalities have transferred the control over their utilities to the Commission:

Antioch	Ontario
Bakersfield	Orange
Belvedere	Oroville
Claremont	Pacific Grove
Corona	Palo Alto
Covina	El Paso De Robles
Daly City	Petaluma
Dixon	Redlands
Eagle Rock	Redondo Beach
El Centro	St. Helena
Hayward	Salinas City
Hemet	San Anselmo
Hermosa Beach	San Leandro
Hollister	San Mateo
Huntington Beach	San Rafael
Huntington Park	San Jose
Inglewood	Santa Maria
Kennett	Santa Monica
Long Beach	Sausalito
Los Gatos	Sisson
Mill Valley	Sonoma
Monterey	Sonora
Morgan Hill	South Pasadena
Napa	Sunnyvale
National City	Taft
Newport Beach	Tracy
Oakdale	Vallejo
Oakland	Willits

During the fiscal year there have been held 632 formal hearings in all the large cities and towns of the state from Yreka to San Diego.

## LEGAL DEPARTMENT.

The legal department consists of the attorney and an assistant attorney. Since March, 1912, when the attorney became a member of the Commission, his salary as commissioner has included his services as attorney, so that no additional salary is paid for his legal services.

This department gives advice on legal questions when requested by the Railroad Commission, or any commissioner or department, and answers such written and oral requests for legal information as are referred to it. While these duties demand considerable attention, the major portion of the department's efforts during the past year have been devoted to conducting the Railroad Commission's litigation in the courts.

During the year ending June 30, 1914, the department has been engaged upon court cases for the Commission as follows:

1. *The Pacific Telephone and Telegraph Company vs. Railroad Commission* (166 Cal. 640).

This was a proceeding to review an order rendered by the Railroad Commission in two cases brought before the Commission and consolidated for hearing, *i. e.*, Case No. 271, *Tehama County Telephone Company vs. The Pacific Telephone and Telegraph Company* and Case No. 272, *Glenn County Telephone Company vs. The Pacific Telephone and Telegraph Company* (Volume II, Opinions and Orders of Railroad Commission of California, p. 104).

The Railroad Commission in its order directed that physical connection be made at two specified points between the exchanges respectively of The Pacific Telephone and Telegraph Company and the complainant companies, and that long distance telephone messages be thereafter transmitted over such connections under the conditions specified in the order.

On March 6, 1913, the telephone company filed in the Supreme Court its petition for a writ of review (S. F. No. 6499). On March 10, 1913, the writ issued. After oral argument and the filing of briefs, including three briefs by this department, the case was submitted on July 24, 1913. On December 20, 1913, the Supreme Court rendered its decision annulling the Railroad Commission's order.

Three separate opinions were filed.

Justice Henshaw, with whom Justices Lorigan and Melvin concurred, held:

(1) That the Public Utilities Act violates no provision of the constitution of California, and that it can be attacked, if at all, only on the ground that it violates some provision of the federal constitution.

(2) That the provisions of the Public Utilities Act providing for a review of the Railroad Commission's decisions directly by the Supreme Court, without the intervention of the lower courts, are valid.

(3) That the Railroad Commission has the right to exercise such powers of eminent domain relating to public utilities as the legislature may confer upon it, without the intervention of a jury.

(4) That the Railroad Commission's order amounts to an exercise of the power of eminent domain, and not of the police power, and that as no compensation was awarded for any "taking" of property, the Commission's order violated the federal constitution and was hence null and void.

Justice Sloss, with whom Justice Shaw agreed, wrote a concurring opinion, in which, while agreeing with the conclusion that the order should be annulled, he held that the Supreme Court had power on certiorari to consider only the question whether the Railroad Commission had acted within its jurisdiction and also that section 40 of the Public Utilities Act violates the federal constitution in not providing for compensation for the "taking" of property in orders for physical connection between telephone lines.

Justice Angellotti wrote a dissenting opinion in which he held that the Railroad Commission's order did not amount to a "taking" of property for which compensation must be awarded, but that it was a valid exercise of the state's police powers.

This decision is a sweeping victory for the Railroad Commission on every point except one. The Public Utilities Act has been upheld, the right of the legislature to confer additional powers on the Railroad Commission affirmed, and the speedy and effective method of reviewing the Railroad Commission's orders directly by the Supreme Court sustained.

The one point on which the case was decided against the Railroad Commission was that the Railroad Commission's order amounted to an exercise of the power of eminent domain, and that compensation should have been awarded for the "taking." This department urged that the Railroad Commission's order was a valid regulation, under the state's police power, of public utility property for the purpose to which it had been dedicated and that the principles of eminent domain are entirely inapplicable. In taking this position, this department relied on decisions of the United States Supreme Court uniformly sustaining the power of state railroad commissions, under the police power, to direct that physical connections be made between the tracks of competing railroad companies without any compensation for any "taking" of property. (*Wisconsin, Minnesota and Pacific R.R. Co. vs. Jacobsen*, 179 U. S. 287; *State of Washington vs. Fairchild*, 224 U. S. 510; *Grand Trunk Railway vs. Michigan Railroad Commission*, 231 U. S. 457.) It seems difficult to understand why one principle of law



should apply to physical connections between *railroad* companies and an entirely different principle to physical connections between *telephone* companies.

It is significant that in *The Pacific Telephone and Telegraph Company vs. Wright-Dickinson Company*, 214 Fed. 666, decided on May 4, 1914, three federal judges, in deciding the same question (which is admittedly a federal question) in connection with a similar order of the Oregon Railroad Commission, directing that physical connection be made for long distance purposes between competing telephone companies, expressly refused to follow the California decision and upheld the Oregon Railroad Commission's order as being a valid exercise of the state's police power. Likewise, in *Idaho Power and Light Company vs. Blomquist*, 141 Pac. 1083, 1097, the Supreme Court of Idaho expressed its disapproval of the California decision and followed the *Wright-Dickinson* case.

An illuminating note on this case in 50 Lawyers' Reports Annotated, New Series, pp. 652-659, points out that Justice Henshaw's attempt to distinguish the decisions of the United States Supreme Court in the railroad physical connection cases is not justified, and that the holding of the California Supreme Court that the matter is one of eminent domain is contrary to the decided cases and clearly erroneous. See also editorial by Professor W. C. Jones in Volume II, California Law Review, page 224 (March, 1914), commenting adversely upon the California Supreme Court's decision.

It is also of interest to note that on the very day on which the California decision was rendered, the American Bell Telephone Company, the parent of The Pacific Telephone and Telegraph Company, voluntarily agreed with the federal government to make physical connections with the lines of the so-called independent telephone companies without any compensation for any "taking" of property. Hence, the one point on which this case was decided against the California Commission loses its importance as a practical matter.

2. *Tyndale Palmer vs. Railroad Commission* (47 Cal. Dec. 201, 284).

This was a proceeding to review an order rendered by the Railroad Commission on January 21, 1913, in Case No. 261, *Tyndale Palmer et al. vs. Southern California Mountain Water Company* (Vol. II, Opinions and Orders of Railroad Commission of California, p. 43), by which order the Railroad Commission dismissed the complaint in so far as it requested that the Southern California Mountain Water Company and the city of San Diego, its successor, be required to supply water for irrigating purposes to the lands of complainants situated in the Otay Valley, in San Diego County.

The petition for the writ was filed in the Supreme Court on April 21, 1913 (S. F. No. 6555), and the writ issued on May 1, 1913. After

the filing of briefs by all parties, the matter was argued and submitted on July 7, 1913.

On January 20, 1914, the Supreme Court rendered its decision affirming the Railroad Commission's order. On February 19, 1914, the court denied petitioner's petition for rehearing.

3. *Del Mar Water, Light and Power Company vs. Railroad Commission* (47 Cal. Dec. 571, 631).

This was a proceeding to review an order of the Railroad Commission rendered on March 17, 1913, in Case No. 326, *Glass vs. Del Mar Water, Light and Power Company* (Vol. II, Opinions and Orders of Railroad Commission of California, p. 335), in which order the Railroad Commission directed defendant to extend a pipe line and deliver water through the same to a point near the property of the complainant in Del Mar, San Diego County, on conditions specified in the order.

The petition for the writ was filed in the Supreme Court on May 17, 1913 (L. A. No. 3533). On June 16, 1913, the writ issued. After argument and the filing of briefs, the case was submitted on December 31, 1913. On April 11, 1914, the Supreme Court rendered its decision annulling the Railroad Commission's order.

Justice Melvin, with whom Justice Lorigan concurred, held that Del Mar Water, Light and Power Company is not a public utility. Justice Shaw wrote a concurring opinion, which was also signed by Justices Henshaw, Sloss and Angellotti. The concurring opinion fails to pass on the question whether petitioner is a public utility, but holds that the Railroad Commission's order is void on the ground that the land of Glass was not within the territory which the water company had held itself out as serving.

On April 30, 1914, this department filed a petition for rehearing. The petition points out that neither the first opinion, holding that petitioner is not a public utility, nor the second opinion, intimating that it may not be a public utility in any way, refer to section 23 of article XII of the constitution of California, to the Public Utilities Act or to chapter 80 of the Laws of 1913, under which constitutional and statutory provisions, if valid, the water company is clearly a public utility; that the only remaining question is whether these constitutional and statutory provisions in any respect violate the federal constitution; and that this question is not touched upon in either opinion. Samuel C. Wiel filed a petition as *amicus curiae*, in which he urges that both opinions are rendered in apparent disregard of the provisions of section 67 of the Public Utilities Act, providing in part that the findings and conclusions of the Railroad Commission on questions of fact shall be final and shall not be subject to review.

On May 11, 1914, the court, while denying a rehearing, held that nothing in the opinions referring to the question whether Del Mar

Water, Light and Power Company is a public utility is to be regarded as having the force of decision and that the concurring opinion, which alone the court declares is to be considered,

“merely declares that the land of the claimant, Glass, is not, *and is not found by the commission to be* [italics by court] within the district, or area, to the use of which the water owned or controlled by that company is dedicated and, therefore, that he is not entitled to demand distribution thereof to his land.”

Justice Angellotti, while concurring in the foregoing language, filed a separate opinion stating that he had doubts as to the correctness of the court's judgment annulling the Railroad Commission's order, and believed that further consideration should be given to the case by the court, and hence dissented from the order denying a rehearing.

As the case did not refer to the constitutional and statutory provisions which govern the question whether a corporation or individual is a public utility and as the opinion which purported to pass on this question was later disregarded by the court itself, this case can not be regarded as passing on this very important question. The net result of the case is simply that the court found that the Railroad Commission did not make the finding above referred to.

4. *Southern Pacific Company vs. Railroad Commission et al.*

This was a bill of complaint against the members of the Railroad Commission, the attorney of the Railroad Commission, the attorney general of California and the district attorney of the city and county of San Francisco. The purpose of the bill was to secure an injunction against the defendants to restrain them from prosecuting the Southern Pacific Company if it should guarantee certain car equipment trust certificates without first having secured the consent of the Railroad Commission, as provided by section 52 of the Public Utilities Act.

The bill was filed in the United States Circuit Court, Ninth Circuit, Northern District of California, on July 19, 1913, (Equity No. 29). This department moved to dismiss the bill on the ground of lack of jurisdiction and want of equity. Oral argument on this motion was had on August 18, 1913, and the closing brief of respondents was filed on September 30, 1913.

On May 26, 1914, Justice Van Fleet filed his opinion directing the dismissal of the bill, and on May 28, 1914, the decree of dismissal was signed and filed.

The opinion held that the controversy had become moot, due to the fact that Southern Pacific Company, after the filing of the bill, applied to the Railroad Commission and secured the Commission's consent to the issue of a portion of the very car equipment trust certificates as to which the Southern Pacific Company had requested the court to



issue an injunction (Vol. III, Opinions and Orders of Railroad Commission of California, p. 562).

5. *Title Guarantee and Trust Company, trustee, and Miradero Water Company vs. Railroad Commission* (48 Cal. Dec. 171).

This was a proceeding to review an order of the Railroad Commission rendered on June 11, 1913, in Case No. 365, *City of Glendale vs. Title Guarantee and Trust Company, trustee*, and in Case No. 383, *City of Glendale vs. Miradero Water Company* (Vol. II, Opinions and Orders of Railroad Commission of California, p. 989). In these cases, the city of Glendale asked the Railroad Commission's assistance and the Commission made its order directing the defendant water companies to install service connections to the property line and meters at their own expense, for the service of water to residents of the city of Glendale owning property in front of which the water company's mains were laid and needing water service.

The petition for the writ of review was filed in the Supreme Court on July 29, 1913 (S. F. No. 6666). On July 30, 1913, the writ issued. Briefs were filed and oral argument was presented. On November 18, 1913, the case was submitted. On January 9, 1914, the order of submission was set aside and briefs were thereafter filed on a new question suggested by the court. This department's reply brief on this question was filed on March 13, 1914, and the case was again submitted on March 14, 1914. On August 3, 1914, the Supreme Court rendered its decision annulling the Railroad Commission's order.

The court's decision fully sustains the Railroad Commission's position that it is the duty of water companies, at their own expense, to lay the service pipe to the property line and to install the meter, but holds that this duty should be enforced by the city of Glendale and not by the Railroad Commission. The court holds that matters concerning the meter are incidental to the establishment of rates, which power the city admittedly possesses, and that the installation of the service pipe is covered by section 549 of the Civil Code, providing in part that city or town authorities "may prescribe proper rules relating to the delivery of water, not inconsistent with the laws of the state."

Justice Shaw, who wrote the decision, then proceeded to hold that under section 11 of article XI of the constitution of California conferring upon municipalities the power to enact "police regulations," California cities and towns have had since 1879 the state's entire power to supervise and regulate public utilities within their limits, including not merely power over rates, but also over service, extensions, finances, and the issue of securities. While this language was not necessary to the decision of the case, the doctrine announced was so novel and of such vital importance to the Railroad Commission, in that it deprived the Commission of important powers which it had been generally sup-



posed to possess, that this department found it necessary, on August 31, 1914, to file a petition for rehearing on this one point. The petition points out that the court refers to no decided case in support of its conclusion and that there are no cases in support thereof; that some ten or twelve cases from other states have reached a contrary conclusion; and that the court's interpretation of section 11 of article XI makes it necessary to consider as surplusage other provisions of the constitution, numerous statutory provisions, and the provisions of many freeholders' charters, conferring upon cities powers with respect to public utilities which under this interpretation of section 11 of article XI had already been conferred upon them.

On September 2, 1914, the court, while denying a rehearing, made its order striking out all of its former opinion in any way referring to section 11 of article XI.

6. *Wilmington Transportation Company vs. Railroad Commission* (166 Cal. 741).

This was a proceeding to review an order of the Railroad Commission rendered on July 9, 1913, in Case No. 381, *Miller and Donaldson vs. Wilmington Transportation Company* (Vol. III, Opinions and Orders of Railroad Commission of California, p. 42). The Railroad Commission's order overruled a motion to dismiss the complaint on the ground of lack of jurisdiction. The complaint attacked the freight and passenger rates charged by the Wilmington Transportation Company on its vessels between San Pedro and Catalina Island. These points are both within Los Angeles County, but are separated by some twenty-one miles of high seas.

The case presents the interesting and important question whether the State of California can exercise jurisdiction over the rates of transportation charged by vessels plying exclusively between California ports, but traversing, in part, the high seas while on their voyages.

The petition for the writ of review was filed in the Supreme Court on August 11, 1913 (S. F. No. 6687). On the next day, the writ of review issued. After the filing of briefs and oral argument, the case was submitted on October 21, 1913.

On December 29, 1913, the Supreme Court, speaking through Justice Angellotti, rendered its decision affirming the Railroad Commission's order and sustaining the Commission's jurisdiction.

Wilmington Transportation Company has now appealed to the United States Supreme Court, and the case has been given No. 369, October term, 1914. Both parties have joined in a motion to advance the case for hearing, which motion will be presented after the court reconvenes in October, 1914.

7. *Kern Trading and Oil Company and Associated Oil Company vs. Associated Pipe Line Company, Railroad Commission et al.*

This is a bill for an injunction to enjoin the defendant pipe line company from complying with the provisions of the oil pipe line statutes of the legislature of 1913, and to enjoin the Railroad Commission, its attorney and the attorney general of California from enforcing the provisions of said statutes.

On August 25, 1913, the bill was filed in the United States District Court, Ninth Circuit, Northern District of California (Equity No. 35). On August 27, 1913, a temporary restraining order was issued, under which order, however, the Railroad Commission was permitted to proceed in its investigations of the Associated Pipe Line Company and to take all steps in said investigations up to the making of an order directing the company to comply with chapter 327 of the Laws of 1913.

On September 27, 1913, this department argued its motion to dismiss the bill for lack of jurisdiction and want of equity. Briefs were filed by all parties. Francis J. Heney and James F. Farragher filed a brief as *amici curiae* in support of the validity of the oil pipe line statutes.

The last brief was filed on October 17, 1913. A decision is now being awaited.

8. *Oro Electric Corporation vs. Railroad Commission* (47 Cal. Dec. 547).

This is a proceeding to review an order of the Railroad Commission rendered on August 15, 1913, in Application No. 347, denying to Oro Electric Corporation a certificate of public convenience and necessity to enter the city of Stockton and to serve the city with electric energy in competition with the existing company. (Vol. II, Opinions and Orders of Railroad Commission of California, p. 748, and Vol. III, p. 429.)

The petition for the writ of review was filed in the Supreme Court on September 15, 1913 (S.F. No. 6724). On November 5, 1913, the writ of review issued. After oral argument and the filing of briefs, the case was submitted on February 5, 1914.

On April 10, 1914, the Supreme Court rendered its decision annulling the Railroad Commission's order. Justice Shaw, in rendering the decision, held that the city of Stockton had power to grant the Oro Electric Company's franchise; that this power of the city necessarily implies power on the part of the grantee of the franchise to exercise the same; and that the Railroad Commission's order denying to Oro Electric Corporation a certificate of public convenience and necessity impaired powers preserved to the city of Stockton by section 23 of article XII of the constitution of California and was hence void.

On May 1, 1914, this department filed a petition for rehearing. The petition urges that the charter of Stockton on which the court based its decision did not become effective until *after* the Oro Electric fran-

chise was granted; that the powers impaired by the Railroad Commission's order were the powers of the Oro Electric Corporation and not any power of the city of Stockton; and that as the city of Stockton had no power over Oro Electric Corporation on March 23, 1912, none could be impaired. The petition points out that the power over certificates of public convenience and necessity is vital to the effective performance of the Railroad Commission's work and that no powers reserved to the cities are impaired thereby. Petitions for rehearing were also filed by some six or eight of the leading law firms in California, as *amici curiae*, in support of the Railroad Commission's order.

On May 9, 1914, the court made its order granting the petitions for rehearing and setting aside the order theretofore made. Argument on rehearing was held on July 22, 1914. Final briefs have now been filed and the matter was finally again submitted on August 18, 1914.

9. *Railroad Commission of California vs. Alabama Great Southern Railroad Company et al.*

This is an action brought by the Railroad Commission before the Interstate Commerce Commission against a large number of carriers engaged in interstate commerce, for the purpose of securing a reduction in the minimum carload weight of deciduous fruit shipped from California, from 26,000 to 24,000 pounds, and to secure a reduction on refrigeration rates on deciduous fruit. This complaint was filed in behalf of the growers of deciduous fruit in this state after public hearings and further investigations by the Railroad Commission. (Vol. II, Opinions and Orders of Railroad Commission of California, p. 135.)

The complaint in this case was filed with the Interstate Commerce Commission on December 5, 1913. The hearing was held in San Francisco on February 11 and 12, 1914, at which time this department presented the evidence for the Railroad Commission. Thereafter this department filed opening and closing briefs and Assistant Attorney Douglas Brookman went to Washington, D. C., and argued the case on April 18, 1914, before the Interstate Commerce Commission *en banc*. The case is now awaiting decision.

10. *City of Los Angeles vs. Central Trust Company of New York, Southern Pacific Railroad Company et al.*

This is an appeal by defendants from a decision of the superior court in and for Los Angeles County, decreeing to city of Los Angeles the right to extend a street across a railroad track in Los Angeles without first securing from the Railroad Commission an order authorizing the crossing, as prescribed by section 43 of the Public Utilities Act. The transcript on appeal was filed in the Supreme Court on November 5, 1913, and Los Angeles No. 3663 assigned to the case.

Acting under instructions from the Railroad Commission, and under permission from the Supreme Court, this department, on May 18, 1914,



filed a brief as *amicus curiae* in support of said section 43 of the Public Utilities Act, and of its applicability to the case at bar. Appellants' reply brief was filed on May 23, 1914, and the decision is now being awaited.

11. *Limoncira Company, Farmers Ditch Irrigating Company, Thermal Belt Water Company vs. Railroad Commission.*

This is a proceeding to review an order rendered by the Railroad Commission on April 22, 1914, and a supplemental order rendered on May 1, 1914, in Application No. 136, being an application of Santa Clara Water and Irrigating Company for an order authorizing an increase in its rates for water. By said orders, the Railroad Commission increased the rate to be paid for water by the petitioners herein.

The petition was filed with the Supreme Court on June 12, 1914 (L. A. No. 3886). On June 17, 1914, the writ issued. Briefs are now being prepared.

12. *Hanlon vs. Railroad Commission.*

This is a petition for a writ of mandamus to compel the Railroad Commission to hear and determine Application No. 941, being application of Hanlon for an order authorizing one Durfy to sell Durfy's water system to Hanlon.

The petition was filed with the Supreme Court on June 17, 1914. On July 6, 1914, the case was argued and submitted. Briefs have been filed and the case is now awaiting decision.

The case presents the question whether the Railroad Commission must pass on the application of a *third party* for an order authorizing a utility to sell its property. The Railroad Commission takes the position that under section 51 of the Public Utilities Act it has jurisdiction to act in cases of this kind only when application is made by the owner of the utility property and that it does not have jurisdiction to act on the application of some one who has no title in the property.

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The legal department reports with deep satisfaction that, notwithstanding repeated assaults upon the powers of the Railroad Commission, and numerous cases hard fought from beginning to end, the Public Utilities Act still stands intact and the Railroad Commission still proceeds uninterruptedly and effectively in the performance of its great work.



## RATES AND SERVICE.

### RATES.

During the past fiscal year the work of the rate department has been of the same general character and along the same lines as the preceding year, though greatly increased in volume. The organization and the force has remained practically the same.

The increase in volume of work has been due in a large measure to the increase in the number of tariffs filed and in the number of applications filed to advance rates or to publish and make effective rates and rate schedules on less than the statutory notice, in addition to the many rate investigations made at the direction of the Commission, or upon the formal or informal complaints of patrons of public utilities. This has necessitated an extensive examination into the rate adjustments and regulations of the utilities to determine the correctness of charges assessed, or preliminary to an informal presentation of the matters to utilities, by correspondence, to enable them voluntarily to revise the rates or regulations complained of, if they appeared to be unreasonable or discriminatory. Many revisions in the rates and practices of utilities have been brought about in this way, and the time and expense of a formal proceeding thereby avoided.

Each tariff filed has been thoroughly checked to ascertain that the provisions of the Public Utilities Act and the Commission's regulations have been adhered to, and every application to increase rates or to establish rates on less than statutory notice has been carefully examined to determine its merits and a recommendation made thereon to the Commission that it be granted or denied or set for formal hearing.

A conception of the volume of the detail work that falls upon the rate department can be had from the following general statement of transactions.

During the twelve months ending June 30, 1913, there were filed with the Commission a total of 5,111 tariffs, and for the following twelve months, which is comprehended in this report, the total reached 9,362, an increase of nearly 100 per cent. These tariffs are divided as follows:

Freight .....	4850
Passenger .....	2228
Telephone .....	1900
Gas .....	220
Electric .....	43
Water .....	39
Warehouse .....	79
Wharf .....	3

Some of these tariffs are composed of only one or two sheets and require but little detail work, while others are very voluminous, containing hundreds of thousands of rates.

The Commission received during the year 2,371 informal complaints, divided as follows:

Transportation:		
Freight rates -----	705	
Passenger rates -----	201	
Express rates -----	98	
Service -----	259	
	<hr/>	1263
Water:		
Rates -----	157	
Service -----	174	
	<hr/>	331
Warehouse -----	49	49
Wharfinger -----	5	5
Telephone:		
Rates -----	107	
Service -----	139	
	<hr/>	246
Gas:		
Rates -----	70	
Service -----	24	
	<hr/>	94
Electric:		
Rates -----	249	
Service -----	134	
	<hr/>	383
		<hr/>
		2371

It will be noted that during the previous fiscal year but 1,400 informal complaints were handled as against nearly 2,400 for the current year, an increase of 70 per cent.

Many of these informal complaints were of a very serious nature but the Commission has been quite successful in disposing of the same without the necessity of formal proceedings. In a few cases it was impossible to arrange any amicable settlement of the controversy and in such cases complainants were either advised to file a formal complaint or the Commission instituted an investigation on its own motion.

#### TRANSPORTATION RATES.

##### Tariffs Filed.

The increase in the number of tariffs filed by transportation companies during the year 1914 is accounted for largely by the fact that many tariffs have been reissued to promulgate adjustments ordered by the Commission and in order to conform to the Commission's policy of requiring simplified tariffs in which rates must be clearly stated

and free from ambiguities. Failure to comply with the rules and regulations governing the construction of tariffs or to give notice of changes in the tariffs, resulted in the rejection of some schedules, although the number rejected has been few in proportion to the total number of publications filed.

#### **Rates Published on Less Than Statutory Notice.**

Under section 15 of the Public Utilities Act, carriers are not permitted to change rates except on filing with the Commission a tariff thirty days in advance of the effective date of the rate. This provision is necessary to prevent endless discrimination, but in exceptional cases changes are permitted on less than thirty days' notice upon application to the Commission and for good cause shown.

During the year the Commission issued 987 authorizations under section 15 of the Public Utilities Act, an increase of about 30 per cent over the preceding year. The merits of each application were investigated and application granted when it was apparent that public necessity required affirmative action.

#### **Applications to Increase Rates.**

During the year the Commission received 482 applications under section 63 of the act, requesting permission to directly increase transportation rates or to make changes in rules and regulations resulting in increases, which applications were given careful consideration. Some were granted informally when investigation developed the fact that changes were proper, others were set for formal hearing, while a few apparently having small merit were rejected, transportation companies being notified to apply for formal hearing should they desire to carry the applications to a conclusion. A brief statement of some of the typical applications made under this section follow:

##### *Minimum Charge.*

Application of all California carriers to raise the minimum charge from 25 cents to an amount equal to 100 pounds at the class governing the freight. Denied.

##### *Glendale and Eagle Rock Passenger Fares.*

Application of Glendale and Eagle Rock Railway to increase passenger fares from 2½ cents to 5 cents per trip. Evidence disclosed that the road was operating at a heavy loss. Granted.

##### *River Rates.*

Application of river steamer lines to increase freight rates. Denied.

##### *Live Stock.*

Application of Atchison, Topeka and Santa Fe Railway and Modesto and Empire Traction Company to increase live stock rates to same basis as Southern Pacific Company from Modesto, account error in publication of tariff. Granted.

*Passengers Occupying Drawing Rooms.*

Application of railroads to require passengers occupying drawing rooms or compartments on Pullman cars to purchase two full fare tickets in addition to Pullman fare for drawing room and one and one half tickets for compartment. Denied.

*Oil and Refinery Products.*

Application of carriers to increase the classification on refinery tops, a product of crude oil. Protest received from all small refineries. Denied.

*Empty Carriers.*

Application of railroads to change classification on oil barrels and drums, increasing less than carload shipments and decreasing carload shipments. Granted.

The above are typical of many applications received by the Commission, which are too voluminous to mention in detail, our only comment being that the applications were either denied or granted as the merits of each particular case warranted.

**Informal Complaints.**

It is the Commission's policy to adjust differences between shippers and carriers by informal action whenever possible, and every specific complaint is thoroughly investigated either by correspondence or by a representative of the Commission in an effort to adjust the difficulty without the delay and expense attendant on formal hearing.

A total of 705 informal complaints involving freight rates and 201 involving passenger rates was handled during the year, an increase of approximately 60 per cent over the last fiscal year; of this number only 157 are still in suspense. The increase is due to the fact that the public is becoming more familiar with the workings of the Commission and its duties to the public. This department checks all freight bills submitted and arranges for the return of overcharges, in either freight rates or passenger fares. These overcharges are frequently due to carelessness of the carriers' agents or because tariffs are ambiguous and not easily interpreted. A great many complainants are under the impression that this Commission has jurisdiction over interstate as well as intrastate traffic and the Commission is appealed to in relation to shipments to and from other states, and while such matters are not within the Commission's jurisdiction, every assistance possible is rendered to aid in the adjustment of difficulties and collection of claims involving interstate rates or regulations.

Shippers are learning that carriers must charge the rates published in tariffs and this regardless of any erroneous quotation made by its agents or shown on bills of lading. The better understanding of this point has made all concerned more careful in quoting of rates. A digest of the



informal complaints relating to transportation rates and regulations handled by this department appears hereinafter in this report.

#### **Informal Reparation Claims.**

Under section 71 of the Public Utilities Act the Commission is authorized to award reparation where rates charged are found to have been excessive, provided no discrimination will result from such reparation.

During the year, 199 of such claims were investigated and refunds amounting to \$29,290.02 authorized. In addition to this, numerous complaints were received concerning direct overcharges and after investigation proper refunds were arranged.

#### **General Rate Cases.**

During the year the Commission heard numerous formal cases involving extensive rate adjustments. The detail report of the decisions and orders of the Commission will be found in separate volumes which contain all the opinions and orders of the Commission. Some of the more important cases are the following:

#### **Long and Short Haul Investigations.**

During the year practically all long and short haul investigations, comprehending passenger rates, were disposed of. There remain over 300 applications concerning freight rates which involve rate adjustments over practically the entire state. The proper disposition of applications seeking relief from the provisions of the Constitution which forbids greater rates for a short haul than for a long haul, except on permission of the Commission, involves a tremendous amount of work and can only be decided after all of the rates under consideration are thoroughly analyzed. The situation is complicated by navigable streams in northern California and the possibility of water transportation by ocean carriers up and down the coast. The Commission has laid down a general rule that carriers may meet water competition without prejudice to intermediate rates until such time as each specific application can be disposed of.

#### **Express Rates.**

The investigation of the Commission into the rates and practices of Wells Fargo and Company Express in California commenced in June, 1911, and after numerous hearings, case was finally submitted January 1, 1913, and decided in August of 1913. The Commission ordered a reduction in express rates approximating \$750,000 per annum and ordered the same to become effective October 1, 1913. Subsequently an application for rehearing was made and at the suggestion of the Interstate Commerce Commission conferences were held with a view to harmonizing the rates of this Commission with those prescribed by the Interstate Commerce Commission. A satisfactory agreement was reached and a general reduction in express rates in the State of California became effective March 16, 1914.

### **Lumber Rates.**

A complaint filed by the San Francisco Chamber of Commerce, attacking all of the lumber rates from San Francisco to points in California, brought about counter complaints from various lumber producing sections of the state, and it became apparent before the completion of the hearing involving the San Francisco rates that the entire lumber rate adjustment in California must be investigated. Because of numerous informal complaints having been filed, the Commission was preparing for just such an emergency and had a vast amount of data already in shape concerning lumber rates. It has been found necessary to make even more extensive investigations and the entire question of lumber rates in California will come up for hearing in October or November of this year.

### **Sierra Railway Rates.**

An application filed by Southern Pacific Company, The Atchison, Topeka and Santa Fe Railway and the Sierra Railway to raise joint rates for the transportation of freight to the mountain cities of Tuolumne County brought about a general protest against the proposed advance and also complaints that existing rates were excessive. After a thorough investigation the Commission prescribed an entire new basis of rates for this line in addition to joint rates with the Southern Pacific and Santa Fe. For further details of case see volume 3, Opinions and Orders of the Commission, page 1017.

### **Sacramento Valley Class Rate Adjustment.**

Numerous informal complaints have been filed against the class rates of the Southern Pacific Company north from San Francisco to the Oregon state line and an adjustment was reached with the Southern Pacific Company comprehending a revision of all of the class rates in this territory.

Subsequent to this adjustment the San Francisco Chamber of Commerce filed a complaint attacking rates in this territory. The city of Redding intervened and asked for affirmative relief on rates from Redding north to the Oregon state line.

The cities of Sacramento and Marysville have also asked for an adjustment, so that at this time the entire scheme of class rates of the Southern Pacific Company north of San Francisco and San Jose is up for hearing.

### **Class and Commodity Rates North of Stockton Including the Ione Branch of the Southern Pacific Company.**

Formal complaint was filed attacking class rates in San Francisco, Sacramento and points north of Stockton to and including Sacramento and the Ione and Valley Springs branches.

Investigation developed that the rates were not excessive and complaint dismissed.

**Investigation of Rates of Amador Central Railway.**

Shippers along the line of the Amador Central Railway attacked all the rates of that line but investigation developed the fact that that line had passed through a receivership and its earning capacity did not warrant a reduction in rates. Complaint dismissed.

**Commodity Rates on the Placerville Branch.**

Subsequent to the decision of the Commission in the case involving class rates on the Placerville branch a general attack was made on all commodity rates. An informal conference with the carriers resulted in a rate adjustment satisfactory to complainants who subsequently requested that complaint be dismissed.

**Pullman Case.**

As a result of numerous informal complaints concerning the practices of the Pullman Company the Commission instituted a general investigation into all of the rules, regulations and practices of that company. Many of the abuses complained of the Pullman Company voluntarily promised to correct and submitted a plan for the handling of telegraphic reservations for berths, which was satisfactory to the Commission.

It appeared that the principal cause for complaint was brought about by inadequate pay to the employees of the Pullman Company, particularly to porters and conductors who were obliged by reason of insufficient wages to accept tips from the public which resulted in giving superior service to those passengers offering the most generous tips.

The Commission suggested that reasonable wages be paid the employees of the Pullman Company but the suggestion was not heeded and the Commission therefore instituted an investigation into the rates of the company to determine whether such rates yielded sufficient revenue to permit the payment of living wages. This hearing has been set before the Commission *en banc* for month of November, 1914.

**Commutation Rates to Alameda County Points Served by the San Francisco-Oakland Terminal Railways.**

In separate complaints, one filed by the citizens of San Lorenzo and another by the citizens of Ashland, an order was made reducing the commutation rates of the San Francisco-Oakland Terminal Railways between Oakland and Ashland and Oakland and San Lorenzo.

**Clay Rates.**

During the year the San Francisco Chamber of Commerce on behalf of the pottery interests in vicinity of San Francisco Bay attacked as unreasonable the rates on clay from the Ione and Lincoln districts to San Francisco Bay points. In this case the Commission held that the rate of \$1.25 per ton was excessive and reduced the same to 85 cents per ton.



In southern California the Merchants' Traffic Association on behalf of the manufacturers of clay products of southern California attacked the rates of the Atchison, Topeka and Santa Fe Railway which, on investigation, the Commission found to be unreasonable and reduced the rates

From—	To—	
Alberhill-----	Los Nietos	from \$1.50 to \$1.10 per ton
Corona-----	Los Angeles	from \$1.25 to \$0.70 per ton
Alberhill-----	Los Angeles	from \$1.50 to \$1.25 per ton
Corona-----	Los Nietos	from \$1.25 to \$0.55 per ton

#### Cotton Rates.

Shippers of cotton from Imperial Valley points attacked the rate on cotton and cotton linters from Imperial Valley to Los Angeles, San Pedro, San Francisco and Oakland. Investigation developed that the rate to San Francisco of 65 cents per hundred pounds between Imperial Valley points and Oakland was not unreasonable, but rate between Imperial Valley and San Pedro found to be unreasonable and reduced from 62 cents to 40 cents per hundred pounds.

#### Sand Rates.

An application of the Southern Pacific Company to cancel rates on sand from points on the Ione branch called forth a vigorous protest from the pottery manufacturers. The application was on the ground that there was no movement of sand from this territory but on showing of protestants that there was a present movement of sand and possible larger movement contemplated, the application was denied.

#### Commodity Rates, Shasta Region.

Mount Shasta Milling Company and other shippers of grain, mill-stuffs and hay complained of the general adjustment of rates of the Southern Pacific Company in the Shasta territory. After the hearing the Southern Pacific Company proposed certain modifications in existing tariffs, which were acceptable to complainants, and cases therefore dismissed.

#### Adjustment of Street Car Fares and Commutation Rates in Los Angeles Suburban Territory.

Complaints were filed at different times by the citizens of Lennox, Inglewood and Vermont Heights which were heard at different times and a readjustment of the commutation rates of the Los Angeles Railway Corporation ordered. For further particulars see volumes 3 and 4, Orders and Opinions of the Commission.

#### Northwestern Pacific Railroad Passenger Fares.

The Commission in this case instituted an investigation into the discriminatory practices of the Northwestern Pacific Railroad in connection with the sale of tickets between San Francisco and San Rafael. This investigation resulted in complaints being filed by civic associations and others concerning the general reasonableness of the rates of



this carrier. In its decision the Commission reduced certain commutation rates and prescribed a uniform basis for main line commutation fares which would eliminate discrimination.

#### **Refrigeration Charges on Fresh Fruit.**

At the request of the California fruit growers the Commission, acting under authority of the Public Utilities Act, filed a complaint with the Interstate Commerce Commission attacking the reasonableness of the existing refrigeration charges on eastern shipments of California fresh fruit and also the minimum weight to which fruit shipments must be loaded. The preparation of the evidence in this case required a very exhaustive analysis of the transcontinental carriers' refrigeration rates and regulations and numerous exhibits to prove the contentions of the Commission were prepared by the rate department. If the Commission's contentions prevail the result will be a very large saving to California fruit shippers by reason of reduced refrigeration charges, and we believe it was proven conclusively that California fruit shippers labored under severe discriminatory conditions.

#### **Imperial Valley Live Stock Rates.**

The National Live Stock Association took up the question of lower rates on live stock from the Imperial Valley to Los Angeles with the intention of filing a formal complaint. The Southern Pacific Company, however, through traffic department, reached an amicable adjustment with the Commission by making substantial reductions in the rates on cattle, sheep and hogs, which were acceptable to the National Live Stock Association, and the complaint was withdrawn.

#### **Commutation and One Way Rates to Alameda County Points.**

In the case of the *East Oakland Protective League vs. Southern Pacific Company*, commutation rates and one way fares to Fremont Way, Fairfax Avenue and Seminary Avenue were reduced to ten cents for one way fare and \$3.00 for commutation tickets, being the same basis as voluntarily established by the Southern Pacific Company for approximately an equal distance on the Berkeley line to Thousand Oaks.

#### **Trans-bay Suburban Fares.**

Following the decision of the Commission in the *East Oakland Protective League* case, new complaints were filed by the East Oakland Protective League, Foothill Improvement Association and other civic bodies attacking the passenger fares on the Melrose line of the Southern Pacific Company. This was followed by an application of the Southern Pacific Company to advance all passenger fares in Alameda County. Several hearings have been held but the issues are so important and are being so bitterly contested that further proceedings will be necessary before the Commission is able to arrive at a decision.

### **Fruit Rates in Sacramento Valley.**

In the informal adjustment arranged with the Southern Pacific Company of the class rates in the Sacramento Valley substantial reductions were obtained on shipments of fresh fruit in carload lots. The adjustment is of particular value to fruit shippers, particularly those shipping to canneries.

### **Joint Rates on Lumber.**

The City Lumber Company, Elder Building Material Company, Higman Lumber Company and other similar concerns located in Los Angeles on the tracks of the Atchison, Topeka and Santa Fe Railway complained of the joint lumber rate of \$1.20 per ton from San Pedro and East San Pedro maintained by the Southern Pacific Company and the San Pedro, Los Angeles and Salt Lake Railroad in connection with the Santa Fe. Complainants sought to have the rate of 80 cents per ton applying directly via any of these lines for a one line movement to Los Angeles made applicable for the joint movement. The Commission, however, determined that a rate of \$1.00 per ton was reasonable for the joint movement which it so ordered and which has since become effective.

### **Alum Rock Line of San Jose Railways Ordered Reconstructed.**

On general complaint of numerous citizens of territory east of San Jose and served by the Alum Rock line of the San Jose Street Railway system that service was unsatisfactory, the Commission made an order directing that the line of this company be reconstructed from narrow to standard gauge and improved service given. Various extensions of time have been necessary because of financial conditions, but a portion of the work has been completed.

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## **SERVICE.**

The railroad service department is under the general supervision of the rate department and consists of a railroad service inspector, two assistant inspectors and a stenographer. The service inspector and his assistants are men of extensive practical railroad experience.

The following is a brief resume of the work that has been handled during the fiscal year ending June 30, 1914:

### **1. Informal Complaints.**

Informal complaints are received by correspondence and are made verbally by complainants and cover a variety of matters relating to the operation, maintenance and facilities of steam and electric railroads. These complaints are largely adjusted by correspondence and

are supplemented by field investigation on the part of inspectors. The principal causes of complaint may be classified as follows:

- A. Insufficient equipment, lack of seating facilities on passenger trains or cars.
- B. Insufficient or inadequate depot facilities, lighting, heating, etc.
- C. Location of new stations.
- D. Requests for stopping of trains.
- E. Requests for more adequate and frequent train service.
- F. Complaints regarding alleged violation of full crew law and hours of service law.

## 2. Formal Hearings.

The service department renders assistance to the Commissioners in formal hearings regarding service matters, where informal cases could not be disposed of and complainants have demanded formal hearing. If a complainant's case can not be settled informally with a carrier due to unwillingness of the carrier to satisfy the complaint, complainants have the right to file formal complaint and on the resultant hearing the Commission bases its order on the evidence produced and investigation made on the Commission's own initiative, and the service department assists in the preparation of data in cases involving service matters.

## 3. Investigation of Operating Methods.

The service department is required to be conversant with the operating rules and regulations and with any special rules applicable to any specific carrier, of all the railroads, both steam and electric, within the state.

## 4. Field Investigation as to Operation of Railroads, Including Condition of Track and Roadbed.

1. July 14, 1913. California Western Railway and Navigation Company.  
General inspection of operating methods.
2. July 14, 1913. Peninsular Railway Company.  
General inspection of operating methods.
3. August 22, 1913. Central California Traction Company.  
General inspection of operating methods.
4. August 28, 1913. Los Angeles and San Diego Beach Railway Company.  
General inspection of safety appliances, equipment and condition of track and roadbed.
5. August 26, 1913. San Jose Railway.  
General inspection of operating methods.
6. September 24, 1913. Watsonville Railway and Navigation Company.  
General inspection of operating methods.
7. September 24, 1913. Monterey and Del Monte Heights Railway Company.  
General inspection of operating methods.
8. September 18, 1913. San Francisco, Napa and Calistoga Railway Company.  
General inspection of operating methods.
9. September 24, 1913. Monterey and Pacific Grove Railway Company.  
General inspection of operating methods.
10. September 23, 1913. Nevada County Narrow Gauge Railroad Company.  
General inspection of operating methods.

11. September 23, 1913. Nevada County Traction Company.  
General inspection and investigation.
12. September 25, 1913. Northern Electric Railway Company.  
General inspection and investigation of dispatching methods.
13. October 1, 1913. Oakland, Antioch and Eastern Railway.  
General inspection of operating methods.
14. October 9, 1913. Los Angeles and San Diego Beach Railway Company.  
General investigation of operating and dispatching methods.
15. October 9, 1913. Point Loma Railroad.  
General inspection of operating methods.
16. October 3, 1913. San Diego and Southeastern Railway.  
General inspection of operating methods.
17. October 11, 1913. San Francisco-Oakland Terminal Railways.  
General inspection of operating methods.
18. October 9, 1913. Visalia Electric Railroad Company.  
General inspection of operating methods.
19. October 27, 1913. Yreka Railroad Company.  
General inspection of operating methods.
20. October 27, 1913. Union Traction Company.  
General inspection of operating methods.
21. October 29, 1913. Pajaro Valley Consolidated Railroad Company.  
General inspection of operating methods.
22. October 23, 1913. Petaluma and Santa Rosa Railway Company.  
General inspection of operating methods.
23. October 30, 1913. Pacific Coast Railway Company.  
General inspection of operating methods.
24. October 31, 1913. McCloud River Railroad Company.  
General inspection of operating methods.
25. November 3, 1913. Yosemite Valley Railroad Company.  
General inspection of operating methods.
26. December 2, 1913. Crescent City Railway Company.  
General inspection as to operating methods.
27. December 10, 1913. Tidewater Southern Railway Company.  
General inspection of operating methods.
28. December 20, 1913. California Central Railroad Company.  
Investigation regarding application to discontinue operation during winter months.
29. January 6, 1914. Northwestern Pacific Railroad Company.  
Investigation of passenger train service.
30. January 29, 1914. Oakland, Antioch and Eastern Railway.  
Investigation as to alleged violation of hours of service law.
31. March 31, 1914. Lake Tahoe Railway and Transportation Company.  
Inspection regarding necessity for compliance with headlight law.
32. April 27, 1914. Holton Interurban Railway Company.  
General inspection of operating methods.
33. May 19, 1914. Redwood Harbor Railroad.  
General inspection of operating methods.
34. May 14, 1914. Sugar Pine Railway Company.  
General inspection of equipment, facilities and operating methods.
35. May 12, 1914. Pacific Electric Railway Company.  
General inspection of manner of operating passenger trains, flagging practices, etc., on Northern Division.
36. May 28, 1914. Ocean Shore Railroad Company.  
General inspection of operating methods.



### 5. Accident Investigations.

The principal accidents investigated during the fiscal year ending June 30, 1914, were as follows:

1. July 11, 1913. Pacific Electric Railway Company.  
Mission Road crossing on San Gabriel line of Northern Division.
2. July 13, 1913. Pacific Electric Railway Company.  
Accident at Vineyard Junction. For complete report see Commission's Decision 887 in Case 431.
3. August 10, 1913. Southern Pacific Company.  
Crossing accident at San Lorenzo.
4. August 21, 1913. Pacific Electric Railway Company.  
Accident on Venice Short Line.
5. August 23, 1913. Northwestern Pacific Railroad Company.  
Derailment at Mill Valley Junction.
6. September 18, 1913. Northern Electric Railway Company.  
Failure of bridge across the American River near Sacramento. See report under "Accident Investigation."
7. September 19, 1913. Southern Pacific Company.  
Investigation of accident at San Jose.
8. September 12, 1913. San Francisco, Napa and Calistoga Railway.  
Accident at Vallejo Wharf. Passenger trains colliding by running through open switch.
9. October 1, 1913. Southern Pacific Company.  
Rear end collision at Oakland.
10. October 6, 1913. Southern Pacific Company.  
Accident at Mayhew Station on Placerville branch.
11. November 23, 1913. Southern Pacific Company.  
Accident at Oakland.
12. December 1, 1913. Southern Pacific Company.  
Accident at Redwood City.
13. December 3, 1913. Southern Pacific Company.  
Accident to train No. 5 near Gorge Station.
14. December 14, 1913. Atchison, Topeka and Santa Fe Railway Company.  
Rear end collision on Valley Division near Storey Station.
15. December 26, 1913. Southern Pacific Company.  
Accident at Elk Grove on Stockton Division.
16. December 11, 1913. Central California Traction Company.  
Automobile accident at Linden Roads resulting in two fatalities and two persons injured.
17. January 13, 1914. Ocean Shore Railroad Company.  
Head-on collision between Palmetto and Onandago stations.
18. February 22, 1914. Southern Pacific Company.  
Accident near Selma Station.
19. March 6, 1914. Southern Pacific Company.  
Accident at Oakland.
20. March 7, 1914. Pacific Electric Railway Company.  
Accident at Huntington boulevard and Orange Grove avenue.
21. March 23, 1914. Pacific Electric Railway Company.  
Accident at Marengo avenue, South Pasadena.
22. March 27, 1914. Pacific Electric Railway Company.  
Rear end collision at North Pomona.
23. March 28, 1914. Pacific Electric Railway Company.  
Accident at Larkellen.
24. April 1, 1914. Southern Pacific Company.  
Automobile accident at highway crossing at Thirty-fourth and R streets, Sacramento.

25. May 7, 1914. Pacific Electric Railway Company.  
Accident on Pasadena Short Line at Pasadena.
26. May 12, 1914. Southern Pacific Company.  
Freight engine struck light buggy in Fresno yard, killing the two occupants of vehicle.
27. May 26, 1914. Southern Pacific Company.  
Electric train struck automobile at Parker avenue, Berkeley, killing occupant of vehicle.
28. May 12, 1914. Southern Pacific Company.  
Accident at Oakland.
29. June 23, 1914. Southern Pacific Company.  
Automobile accident at west end of Southern Pacific Company's Sacramento River bridge, slightly injuring three occupants of vehicle.
30. June 12, 1914. Atchison, Topeka and Santa Fe Railway Company.  
Collision between eastbound California Limited and extra freight train at Bagdad station on the Arizona Division, resulting in death of two passengers and injuries to forty-eight persons. Report of investigation appears under "Accident Investigation."
31. June 15, 1914. Southern Pacific Company.  
Derailment of mixed train near Conley Station on the Ione Branch of the Stockton Division, resulting in the death of one and injury to twenty-three passengers.
32. June 27, 1914. Pacific Electric Railway Company.  
Automobile accident at highway crossing near Signal Hill Station on the Newport Beach line, resulting in death of occupant of vehicle.
33. June 26, 1914. San Diego and Southeastern Railway Company.  
Automobile struck at highway grade crossing resulting in death of driver of vehicle.
34. June 25, 1914. Yosemite Valley Railroad Company.  
Derailment of passenger train resulting in death of one passenger, one employee, and injuries to twenty-one persons. Details of investigation appear under "Accident Investigations."
35. June 28, 1914. Pacific Electric Railway Company.  
Motorecycle collided with street car on Downey Road near Whittier Station resulting in death of rider.
36. June 28, 1914. Northern Electric Railway Company.  
Automobile ran into Interurban train at Twelfth and I streets, Sacramento, resulting in injuries to two occupants of vehicle.

#### 6. General.

(a) Inspections regarding compliance with Commission's General Order No. 26 regarding clearances on railroads and street railroads in the state.

(b) Inspections regarding compliance with headlight law of State of California.

(c) Inspections regarding alleged violation of full crew law of State of California.

(d) Inspections regarding alleged violation of hours of service law of State of California.

(e) Investigations regarding compliance by railroad companies with the Commission's general orders as relating to facilities, operating methods, etc.

**ACCIDENT INVESTIGATIONS.**

The matter of accident investigation is being given preferred attention by the service department, it being the intention whenever possible to investigate all fatalities that may occur within the state on railroads and street railways.

All accidents are required to be reported to the Commission on forms provided the carriers for such purpose and cover two classes of accidents, those arising from the operation of locomotives and cars and those known as industrial accidents, where moving trains, locomotives or cars are not involved. These accidents are further subdivided between railroads operated by steam and those operated by electricity. Collisions, derailments, bridge failures, locomotive boiler explosions, and accidents involving a fatality are required to be reported to the Commission by telegraph or telephone, that if possible immediate investigation by an inspector may be given.

As a result of these investigations, recommendations are made if it be found that the appliances or physical condition of the railroad or the method of operation has been a contributing cause, and the periodical inspections are productive of much data that enables the Commission to suggest methods calculated to insure and enhance safety of operation and remove causes and hazards of accident.

The matter of accidents at highway crossings is of serious moment and while the Commission is frequently suggesting the installation of automatic devices and human flagmen, and the carriers are themselves increasing their protective measures in the safeguarding of highway crossings at grade, the list of casualties is of increased volume each year. The growth of the automobile traffic has been responsible for many of the casualties occurring at highway grade crossings and the investigation of this class of accidents by the service department has not revealed one instance where a fatality has occurred in this class of accident which was due to negligence on the part of the railroad involved.

The matter of automatic block signal protection of congested portions of railroads, especially some of the electric lines, is being given attention, though the difficulty of the carriers financing the cost of these protective appliances retards the installation of these facilities. Where conditions demand it, the service department has recommended the installation of flagmen, automatic crossing bell and wigwag devices, and block signals, and the railroad companies have, without exception, made the installation of the protective devices wherever recommended by the Commission.

The service department, in connection with its investigation of operating rules, regulations and conditions, has frequent opportunity to



confer with the operating officials of railroads and to suggest, informally, methods and suggestions tending toward safety of operating methods and the conservation of the safety of passengers, employees, and the public. It is found that a ready compliance with the suggestions of the Commission's inspectors has been made and it is proposed to continue to cooperate with the officials of the carriers to the end that many cases of accident hazard may be eliminated. The statistics of the Commission show that a very considerable number of accidents are caused to trespassers on the right of way or on cars or trains of the railroads. While a considerable number of the fatalities are to tramps, a very considerable number are to persons who use the right of way as a public highway to avoid traveling a probable greater distance by a safe route to reach their destination. The absence or non-enforcement of laws against trespassing on the rights of way or trains of the railroads contribute materially to the number of accidents recorded against "trespassers."

Among the more prominent accidents investigated by the service department during the year were:

1. Failure of American River bridge of the Northern Electric Railway Company, occurring on September 9, 1913.
2. Accident at Bagdad on the Arizona Division of the Atchison, Topeka and Santa Fe Railway Company, on June 12, 1914.
3. Accident on the Yosemite Valley Railroad Company, on June 25, 1914.

As illustrating the manner of investigating accidents by the service department and the resultant reports of findings, the reports of the investigations into the failure of the Northern Electric Railway Company's American River bridge, the Atchison, Topeka and Santa Fe Railway Bagdad wreck, and also a resume of the investigations in the Yosemite Valley Railroad accident, are given below.

**Abstract from Report on Case 473, Northern Electric Bridge Failure on September 9, 1913.**

On September 9th, at 9:06 p.m., the south end span of the Northern Electric Railway Company's bridge across the American River, near Sacramento, collapsed while a switching movement of gondola cars, loaded with gravel, was being made, resulting in the death of Engineer H. C. Stevens and the injury by scalding, due to escaping steam, of Fireman A. G. Williams.

This bridge is located over the American River, approximately one and one half miles north of Sacramento. It consisted of five 150-foot Pratt truss spans on pile piers, with short trestle approaches at each end. The tension truss members were of steel, and the compression members of Oregon pine.

This bridge was constructed in 1906, when San Francisco was rebuilding after the fire. The best class of piling was very expensive and difficult to obtain, consequently the pier piles secured and driven were of mountain pine and spruce. Before purchasing this piling, the railway company thoroughly tested this class of timber and found same had a tensile strength equal to that of the northern timbers. However, this class of piling does not have the lasting qualities that the timber from the northern woods does, and its life is considerably shorter.



At the time of the bridge failure, a switching crew was engaged in switching gondola cars loaded with gravel from the Southern Pacific transfer tracks to the Northern Electric Railway Company's yard track south of the river (tracks A to B on attached track layout plans). In making this switch movement it was necessary to come out over the bridge, as the switch is located very close to the south end of the bridge. The cars were being handled by a steam locomotive which had been leased from the Southern Pacific Company for freight service. This locomotive was an eight-wheel passenger type locomotive. The gross weights of the locomotive, tender and cars, with contents, were as follows:

Locomotive -----	98,000 pounds.
Tender loaded -----	100,400 pounds.
Southern Pacific car No. 91050 -----	147,800 pounds.
Southern Pacific car No. 91026 -----	146,000 pounds.
Southern Pacific car No. 91023 -----	149,200 pounds.
Southern Pacific car No. 91285 -----	149,900 pounds.

The train with the locomotive backing had pulled onto the bridge far enough to clear the switch when the air was applied by the engineer and the bridge collapsed. At that time the locomotive, three cars and the front trucks of the tender and also the front trucks of the fourth car were on the south 150-foot span, which was the span that collapsed. The south pier was totally destroyed; all of the 19 piles were broken off and the next supporting pier was pushed north approximately 12 inches, and two piles were broken off. Immediately after the collapse of the span, the clearing of the wreckage began, and some of the timber of the south pier was burned that night to furnish light for the workmen. However, the tops of 9 of the 19 piles in the south pier were found and all were thoroughly decayed at the point of breakage. Thirteen of the 19 stumps were examined and showed the same condition as the 9 pile tops examined. These piles were so thoroughly decayed that there was no sound wood in them where the fracture occurred. There was from four to six inches of wood in the condition commonly called dry rot where the wood seemed more or less firm, but on close examination proved to be brittle and "punky." After excavating around these pile stumps, same were tested near the point of fracture and it was found that a pick sunk into the center of most of them could be pulled out with one hand, bringing with it a piece of decayed wood as large as a 2-inch cube. The other six pile stumps in the south pier were inaccessible on account of wreckage and debris piled over and around them.

The point of greatest danger in all timber bridges of this class is at the ground line where the timber is exposed to the air and is alternately wet and dry. Filling at the south end of the bridge and around the south pier to a depth of two or three feet had been done about three years ago. This filling was made apparent while excavating around the pile stumps, but how much had been done could not be determined exactly. The fracture in the piles occurred at what was undoubtedly the original ground line; two or three feet above the point of fracture, in the 9 pile heads examined, there was considerable sound wood. With 5,000 pounds live load and 1,600 pounds dead load per lineal foot of bridge, as shown by the stress sheets, these 19 piles in the pier that failed were each under a load of from 13 to 15 tons, and it is doubtful if in their decayed condition they were able to carry such a load. They could probably resist a considerable direct load while unable to stand even a slight transverse strain.

The failure of the bridge was caused by the decay of the piles to such an extent that they were unable to bear the direct load imposed upon them, and were also unable to withstand the transverse strain put upon them by the sudden application of the brakes to the heavy load on the span. This sudden application of the brakes, even though the train was moving at a slow speed, caused the slack between the drawheads to run up and create an impact which forced the truss in the direction in which the train was moving, namely to the north. This movement threw a transverse strain upon the piles, broke them off and caused the failure of the pier and the collapse of the span.

If the officers of the railroad are responsible for this accident, it is because the bridge was not examined thoroughly enough to disclose its true condition; and that if its true condition was known, that an order restricting the loads which were to be imposed upon the bridge was not issued when it was found that the pier was defective enough to require replacement. However, it is only fair to the

railroad officials to state that the movement of gravel over this bridge is unusual and is much heavier than their usual trains. The cars in the accident were loaded in the neighborhood of Oroville, and were brought by the Southern Pacific Company to Sacramento for delivery to the Oakland, Antioch and Eastern Railroad Company. It is usual to deliver this material on the interchange track of the Central California Traction Company (this track is also used for the same purpose by the Northern Electric Railway Company), located on Front and X streets, where the Northern Electric Railway Company secures the cars and takes them across the Sacramento River and delivers them to the Oakland, Antioch and Eastern Railway.

On Monday, the day of the accident, due to the heavy traffic for the State Fair, this track was filled with cars and the Southern Pacific Company was unable to place the gravel cars as customary. The cars were taken about two and one half miles from this point to a connecting track between the Northern Electric Railway Company and the Southern Pacific Company, near the American River, and delivered there. It was while switching these cars to take them back over the track of the Northern Electric Railway Company that the accident occurred.

In August of this year a general inspection of the bridges on the Northern Electric Railway Company's lines was made by Assistant Engineer Brown, accompanied by General Bridge Foreman McGregor. This particular bridge was inspected by Messrs. Brown, McGregor and Bridge Foreman Brewster about August 10th, and a report of its condition and recommendation was made by Mr. Brown in his general report of bridges rendered to the general manager on August 15, 1913. His report of this bridge is as follows:

#### 1. 2A. AMERICAN RIVER BRIDGE.

*Description*—Six pile piers, 19 to 30 piles each; five 150-foot spans. One-panel trestle approach south end; 2-panel trestle approach north end.

*Condition*—Approaches good for at least one year. *Pier 1, south bank, 10 of the 19 piles need renewal.* Piers 2, 3, 4, 5, river piers; the piling in good condition. *Pier 6, north bank pier, needs 9 of the 19 piles renewed.* Floors of piers are just now being renewed, and the trusses are in good condition.

*Recommendation*—Reinforce piers 1 and 6 by bolting shore timbers to the bad piling. Piles are only affected for a distance of 2 feet below to 2 or 3 feet above ground. The shore timbers would, by being bolted to good, sound timbers below and above, extend the life of the bank piers to such time as the stream piers would have to be renewed.

Shortly after receiving this report Mr. Schindler, the general manager, accompanied by Mr. Rowray, the superintendent of the company, and also the superintendent of a large bridge contracting firm of San Francisco (Thompson Bridge Company), inspected this bridge and their decision was, in regard to the shore piers, that they were safe until they could be conveniently renewed. However, Mr. Schindler decided that these shore piers should be replaced by concrete instead of following the recommendations of Mr. Brown, and cement had been ordered, and piling for false work was on the ground at the time of the accident.

Mr. Schindler is a civil engineer, and has had considerable bridge experience, and inasmuch as temporary bents, at a cost of less than \$100.00, could have been placed which would have made this span safe until the permanent concrete pier was erected, I am satisfied that the true condition of the piling was not known, and that all persons who inspected the bridge were not aware or had forgotten the fact that a fill two feet or three feet around the south end of the bridge and the south pier had been made, and thus they failed to examine the piles at the critical point, namely the original ground line, which is the place where the piles failed. Mr. Brown says that he did not know of this filling, which is undoubtedly the case, for the piles fractured at a point from two to three feet lower than the lowest point reached by Mr. Brown in his examination.

The cause of this bridge failure was the decayed condition of the piling in the south piers, which were unable to withstand the stress placed upon them by the heavily loaded gravel train and engine being brought to a sudden stop on the span by the application of the air brakes.

**Report of Investigation of Accident at Bagdad, on the Arizona Division of the Atchison, Topeka and Santa Fe Railway, on June 12, 1914.**

On Friday, June 12, 1914, at 7.43 p.m., a head-end collision occurred on the Atchison, Topeka and Santa Fe Railway at Bagdad, San Bernardino County, California, causing the death of 2 passengers, injuries to 30 passengers, 6 employees, 11 persons carried under agreement or contract and 1 trespasser.

The injuries to passengers, with one exception, were not of a nature that would indicate fatal results, and the injuries to the employees consisted principally of cuts, sprains and bruises, none of which should result in permanent injury.

The collision occurred at the west end of Bagdad yard, the trains involved being train No. 4, commonly known as the "California Limited," east bound, with engine 1376, composite baggage, buffet and smoker No. 1314; dining car 1427, standard Pullmans Culane, Daggett, Gallup, Montoya, Blackstone, and observation Pullman Elarellano, a total of eight cars. Train No. 4 was in charge of Conductor E. Banows, Engineer A. Crase, and Fireman R. E. Barnett. Train extra No. 1644, which had just completed trip as a west bound local freight from Needles to Bagdad, and at the time of the accident was backing the rear portion of the train on the north passing track, intending to leave it on the north house track, was in charge of Conductor T. T. Holman, Engineer J. T. Vanderbeck, Fireman E. B. Mott, Head Brakeman H. J. Baraclough, Rear Brakeman F. M. Klingsmith, and at the time of the accident, consisted of 19 cars and caboose, or the rear cut of cars on the train as brought from Needles, the head end having been already set out on the south house track.

Train No. 4 is due to leave Bagdad at 7.45 p.m., and under rule 92A of the Atchison, Topeka and Santa Fe Railway, has a right to arrive at Bagdad at or after 7.40 p.m., the rule reading as follows:

92A. A first class train must not arrive at a station where only the leaving time is shown more than five minutes in advance of its schedule leaving time.

Train extra No. 1644 had arrived at Bagdad after working as a local west bound freight from Needles at about 7.10 to 7.15 p.m., the conductor not having registered his arrival until after the accident. This train arrived at Bagdad with 37 cars and the caboose, and headed in on the east end of the south passing track clearing the main line. The head end of the train, consisting of 18 cars, was placed on what is known as the south house track, and after this switch had been performed, the engine coupled on to the remainder of the train and pulled out on to the main line through the switch at the west end of the south passing track, this switch being closed by Head Brakeman Baraclough. When the train had pulled on to the main line a sufficient distance to allow the throwing of the switch leading to the north passing track, this switch was thrown by Conductor Holman of extra No. 1644, and the train was backed into the north passing track clear of the main line, but without lining up the north passing switch for the main line. This movement, according to Conductor Holman's testimony at the investigation, was performed at 6.35 p.m., he admitting that he had misread his watch one hour slow. According to other members of the crew of extra No. 1644, the movement and clearance of the main line was accomplished from 7.35 to 7.37½ p.m.

The approach to Bagdad from the west for a distance of one mile from the west yard limit board is on a descending grade averaging 1.4 per cent. There is a 1 degree curve to the south on a portion of this approach running into a 1,512-foot tangent just prior to approaching the west yard limit board of Bagdad station, where the track is on a 0.4 degree curve to the north for a distance of 750 feet.

From the west yard limit board of Bagdad station to the extreme west switch of Bagdad yard, which serves the north passing track on which the accident happened, is a distance of 2,254 feet, and consists of a long tangent to a point 462 feet west of the north passing track switch, from which point to the switch there is a curve to the north of 1 degree.

Train No. 4 approached Bagdad at a speed of approximately 40 miles per hour, on schedule time and with right of track conferred by portion of time table rule No. 9, referring to rule 93 of Book of Rules and Regulations, and reading:

At Peach Springs, Hackberry, Kingman, Goffs, Cadiz, Bagdad, Ludlow, Newberry, Daggett and Kramer, yard limits are applicable to second class and extra trains only.



The engineer on train No. 4 claimed that the first intimation he had that the switch was set against him was when the light of his headlight showed against the red target of the switch leading to the north passing track, and that immediately he applied the air in emergency, but due to the short distance from the point where emergency was applied to the point of collision, the speed at the time of collision was about 35 miles per hour. The force of the impact drove the engines of trains No. 4 and extra No. 1644 a distance of 200 feet east of the point of collision, and both engines were derailed, standing upright but badly damaged, cylinders on both sides of both engines being stripped from engine frames. Composite car No. 1314 telescoped diner No. 1427, resulting in the death of two passengers in the diner. The other cars of train No. 4 remained on the track and were not seriously damaged. Oil car No. 96846 had front frame bent down into track, oil car No. 96073 derailed; refrigerator car S.F.R.D. 4926 demolished; refrigerator car S.F.R.D. 2984 derailed; oil car No. 95074 derailed and turned over on its side; oil car 99261 derailed. Damage to equipment estimated at \$20,000.00. Track slightly damaged, about \$15.00 labor and material covering replacement.

The primary cause of this accident was the violation by the crew of extra train No. 1644 of the company's rule 87:

An inferior train must keep out of the way of opposing superior trains, and failing to clear the main track by the time required by rule must be protected as prescribed by rule 99.

Rule 99 is the standard rule designating the manner of protecting train by flagging.

The crew of extra 1644 were also at fault in that they apparently had overlooked the fact that they were some minutes on the time of a train of a superior class, as under the time table regulations train No. 4 was due at Bagdad and within its rights any time after 7.40 p.m., the accident happening, according to competent witnesses, at Bagdad, not connected with either train crew, at 7.42 p.m. The conductor of train extra 1644 admits having misread his watch one hour, and the engineer admitted not having compared his watch with a standard clock before leaving Needles as required by the company's instructions; neither had he compared watches with the conductor at any time during the day, which is also a regulation provided if for any reason a standard clock is not accessible.

The Santa Fe rules in this regard are as follows:

Rule 3. Watches of conductors and enginemen must be compared before starting on each trip with a clock designated as a standard clock, except as provided in rule 3 (B). The time when watches are compared must be registered on a prescribed form.

Rule 3 (B). Conductors and enginemen, whose duties prevent them from having access to a standard clock, must compare their watches daily with those of conductors and enginemen who have standard time and who have registered as provided in rule 3.

The conductor of extra 1644, west bound, having thrown the switch leading from the main line to the north passing track, should have seen that same was closed when the engine and cut of cars were backed into the passing track off the main line; this duty would naturally fall on the head brakeman, and in his absence on the engine crew of train extra 1644. The engine crew noticed the headlight of train No. 4, and the fireman made an effort to get to the switch to throw it for the main line, but was unable to reach it by a couple of rail lengths before the engine of train No. 4 passed the switch and took the siding.

\* \* \* \* \*

The cars in train No. 4 that were damaged were No. 1314, a composite baggage, barber shop and buffet smoker, originally built by the Pullman Company in the year 1908, shopped at Topeka, April, 1910; August, 1911; October, 1912, and October, 1913. This car is 72 feet long over end sills; 76 feet 4 inches long over platforms; length inside 71 feet 2 inches; weight 141,000 pounds, electrically lighted and steam heated; steel underframe with steel tie beams spaced on 12-foot centers, 6-wheel trucks and standard steel-tired wheels, 36 inches in diameter; journals 5 by 9 feet with Symington journal boxes, steel axles, Miner tandem draft rigging, national couplers, both ends vestibuled, Westinghouse air brakes, and Forsyth buffing device.

Dining car 1427 was built by Pullman Company and completed in March, 1906; shopped at Topeka, Kansas, May, 1908; January, 1910; September, 1910; October, 1911; October, 1912, and November, 1913. This car is 70 feet long over end sills.



77 feet long over platforms, length inside 69 feet 1 inch; weight 143,300 pounds, electrically lighted, also equipped with gas lighting, steam heated, wooden underframe with 8 longitudinal sills, 5 by 8 inches, with side sills plated with  $\frac{1}{2}$ -inch by 8-inch iron; steel tie beams on 10-foot centers; six-wheel trucks fitted with 36-inch standard steel-tired wheels, steel axles, 5 by 9-inch journals. Symington journal boxes, Miner tandem draft rigging; both ends vestibuled; Westinghouse high-speed air brakes, and Pullman standard anti-telescoping device.

The accident resulted in the telescoping of dining car 1427 by composite car 1314, the latter car being telescoped into car 1427 a distance of about 32 feet and it was in this car that the two parties were instantly killed and the greater number of passengers and employees received injury. The impact of the collision was so great that these cars were evidently lifted from the track at the moment of the collision and composite car 1314 rode over the platform of diner 1427, shearing off the body of car 1427 above the underframing for a distance of about 32 feet. Had both cars been of steel underframe construction, the damage to the diner would not have been as great, though both cars would have been telescoped to some extent, as car 1314 was badly damaged on the end which was telescoped into car 1427. It is understood that the present practice of the Atchison, Topeka and Santa Fe Railway is to gradually eliminate the use of all wooden underframe equipment, both plain and reinforced, on overland trains, and that present and future purchases of this class of equipment are to be of all steel construction.

The trainmen involved were all experienced men, none having had less than seven years experience in train service, and all having had the requisite amount of rest before going on duty prior to the accident.

As the cause of this accident was the failure of the employees to properly observe rules and regulations formulated for their government in the operation of trains, there are no recommendations which could be made regarding the operating methods or appliances of the Atchison, Topeka and Santa Fe Railway, the accident having occurred in yard limits and the rules governing being fully adequate had they been followed in their observance by the employees responsible.

A complete plan of the location of the accident accompanies this report, and full data and plans showing the construction of the two cars of train No. 4 involved in this accident are on file with the Commission.

Respectfully submitted,

W. J. HANDFORD,  
Railroad Service Inspector.

#### **Report of Accident Occurring on Yosemite Valley Railroad on June 25, 1914.**

A derailment occurred on the line of the Yosemite Valley Railroad Company at a point between the stations of Northfork and Bagby on the night of June 25, 1914, at a point 63 feet west of engineer's station 2847 on a 10 degree curve at a point where the track is on a rock fill, with a steep rocky bluff on the north side of the track and the Merced River at the foot of the fill on the south side of the track.

Train No. 3, scheduled to leave El Portal at 8.00 p.m., left on the date of the accident a few minutes later than its schedule and was delayed at a point 7.2 miles east of El Portal at a station called Southfork for a meet. The train then proceeded, and at the time of the accident was running about 18 miles per hour, and consisted of an engine, a combination baggage and smoking car, a straight day coach, and two standard Pullmans. The engine was not working steam at the time of the accident, but was drifting around curves, the engineer having just released his air after having made a slight application for the reduction of speed around a reverse curve just previous to the point of accident.

As the train entered the 10 degree curve at the point of accident, the lead truck of the engine took the curve without trouble, but the drivers on the left side of the engine were derailed, followed by all wheels of the engine tank, the complete derailment and overturning of the combination smoker and baggage car, and the straight day coach, and the derailment of the front truck of the first standard Pullman, the rear trucks of the first Pullman remaining on the rail and all the trucks of the rear Pullman.

The engine ran about  $7\frac{1}{2}$  rail lengths (each being 33 feet) before being brought to a stop, and at the time the engine was stopped, the drivers on the right-hand side of the engine were both on the rail, both drivers on the left-hand side were off the rail, which had turned over about on an angle of 30 degrees, leaving the flange of the driver resting on the base of the rail. The two cars which left the track

went down an embankment at least 70 feet in height, consisting entirely of shale rock which was evidently wasted over this embankment at the time of construction of the line.

Careful investigation of this accident is convincing that the primary cause is the condition of the pine ties with which a very considerable portion of the track is laid. These pine ties have been in the track since the time of construction, at least seven years, and have deteriorated considerably in a manner that is not in evidence from a casual surface inspection. In other words the ties have decayed on the under side, thereby weakening the life and the strength of the tie to hold the spikes. This line is laid with 70-pound steel rail, 33-foot lengths; the regular 6-inch by 8-inch by 8-foot sawn pine tie has been used with a three-hole tie plate under each rail. Standard practice has been followed on curves of double-spiking the tie plate on the outside of rail and single-spiking on the inside of rail. On tangents, standard practice has been followed of one spike on each side of the rail through each tie plate. At the point of the accident the track is on a rock fill, the ballast consisting of reasonably large pieces of shale rock which have been filled in between the ties, thus giving the track, when once properly surfaced, an exceptionally firm foundation, and one that would hold the line and surface of the track and require little or no maintenance to keep same in proper condition. It would appear that this fact has been one of the reasons why the track has not been disturbed and any of the ties in the particular curve in which the accident happened, been removed, either for the purpose of renewal or inspection, and it would appear that the accident was the result of the drivers on the left side of the engine hitting the curve, and the rail giving way, or tipping over a sufficient distance to permit the left drivers dropping off ball of rail onto the base. This derailed the engine tank and the engine tank in turn derailed the two coaches, which started toward the outside of the curve and down the bank, resulting in the death of one passenger and one employee, and injuries to twenty passengers and one employee.

In view of the condition of the pine ties observed on the line of this railroad, not only at curves, but also on tangents (where in a close inspection covering some  $2\frac{1}{2}$  miles, spikes were observed on tangents projecting up at least 2 to  $2\frac{1}{4}$  inches from the tie), it is recommended that the Commission immediately instruct the management of the Yosemite Valley Railroad to immediately proceed toward the renewal of ties on all curves between the stations of Merced Falls and El Portal, and to follow up the renewal of ties on curves with a renewal of such ties as may be in unserviceable condition on their tangents, and it is recommended that until such work is performed, that the management of the Yosemite Valley Railroad Company be required to reduce the speed of all trains, both freight and passenger, on their 10 degree curves and greater to a speed that shall not exceed twelve miles per hour, either east or west bound; this, however, not to affect any lesser minimum speed that may now be in operation by special rules in time card. In view of the existing conditions the hazard and liability of a repetition of this accident and possibly with more fatal results, leads to the recommendation as above outlined.

It is understood that a representative of the engineering department looked over the ground with special reference to the condition of ties and has filed his report with the Commission. As a matter of fact, the condition of the pine ties in the roadbed, as evidenced by such as have been removed from the track, clearly indicates that they are unsafe for use in a road having considerable curvature (some as high as 18 degrees), heavy fills, sloping toward a rapidly moving mountain stream, and the recommendation contained above is made that there may be no further hazard or liability of injury to the traveling public pending the correction of existing conditions on the line of the Yosemite Valley Railroad, as it is certainly not safe to operate this line with the pine ties in their present condition which is one quarter to one half their original condition when new.

That conditions as above noted are apparent, the attached letter, signed by twenty passengers who were on a train derailed on the Yosemite Valley Railway the day previous, is self-evident.

\* \* \* \* \*

The management of the Yosemite Valley Railroad Company requesting that further specific data should be given them as to the ties which should be removed, a more detailed inspection of the condition of the track and roadbed of the Yosemite

Valley Railroad Company was conducted by a representative of the engineering department, who outlined a program for the renewal of ties and also for the widening of a number of embankments where proper support was not in evidence under the ends of the ties. The renewal of ties in accordance with the schedule, and the work of widening of embankments is now in progress, in accordance with the Commission's recommendation and order.

The following is the statistical data accumulated by the Commission from accident reports rendered by railroads during the fiscal year ending June 30, 1914:

SUMMARY OF  
OCCURRING IN CONNECTION WITH OPERATION OF LOCO

Company	Collisions		Derailments	
	Killed	Injured	Killed	Injured
<i>Casualties to Employees on Duty.</i>				
Achison, Topeka and Santa Fe Railway Company.....		10		3
Butte County Railroad Company.....				
California Western Railway and Navigation Company.....				1
Cement, Tolenas and Tidewater Railroad Company.....				
Holton Interurban Railway Company.....				
Iron Mountain Railroad.....				
Los Angeles and San Diego Beach Railway.....				
Mount Tamalpais and Muir Woods Railway.....				
Nevada-California-Oregon Railway.....				
Northwestern Pacific Railroad Company.....		3	1	2
Ocean Shore Railroad Company.....		2		
Pacific Coast Railway Company.....				
San Diego and Southeastern Railway Company.....				
San Joaquin and Eastern Railroad Company.....				
San Pedro, Los Angeles and Salt Lake Railroad Company.....				
Santa Maria Valley Railroad Company.....				
Sierra Railway Company of California.....				
Southern Pacific Company.....		3		8
Sugar Pine Railway Company.....				
Sunset Railway Company.....				
Tonopah and Tidewater Railroad Company.....				
Western Pacific Railway Company.....		2		2
Yosemite Valley Railroad Company.....			1	1
Totals .....		20	2	17
<i>Casualties to Passengers.</i>				
Achison, Topeka and Santa Fe Railway Company.....	2	104		2
Los Angeles and San Diego Beach Railway.....				
Northwestern Pacific Railroad Company.....				1
Ocean Shore Railroad Company.....		1		
San Pedro, Los Angeles and Salt Lake Railroad Company.....				
Southern Pacific Company.....		14	1	31
Sunset Railway Company.....				
Yosemite Valley Railroad Company.....			1	11
Totals .....	2	119	2	46
<i>Casualties to Employees Not on Duty.</i>				
Achison, Topeka and Santa Fe Railway Company.....				
Nevada County Narrow Gauge Railroad Company.....				
Southern Pacific Company.....				
Sunset Railway Company.....				
Western Pacific Railway Company.....				
Totals .....				





SUMMARY OF  
OCCURRING IN CONNECTION WITH OPERATION OF LOCO

Company	Falling from cars or engines		Getting on or off cars or engines	
	Killed	Injured	Killed	Injured
<i>Casualties to Employees on Duty.</i>				
Atchison, Topeka and Santa Fe Railway Company	3	30		22
Butte County Railroad Company		1		
California Western Railroad and Navigation Company				
Cement, Tolenas and Tidewater Railroad Company				
Holton Interurban Railway Company				
Iron Mountain Railroad				
Los Angeles and San Diego Beach Railway				1
Mount Tamalpais and Muir Woods Railway				
Nevada-California-Oregon Railway		1		
Northwestern Pacific Railroad Company		1		7
Ocean Shore Railroad Company		2		
Pacific Coast Railway Company				
San Diego and Southeastern Railway Company				1
San Joaquin and Eastern Railroad Company				
San Pedro, Los Angeles and Salt Lake Railroad Company	1	4		6
Santa Maria Valley Railroad Company				
Sierra Railway Company of California				
Southern Pacific Company	13	57	3	56
Sugar Pine Railway Company				1
Sunset Railway Company				
Tonopah and Tidewater Railroad Company				
Western Pacific Railway Company		4		4
Yosemite Valley Railroad Company				1
Totals	17	100	3	99
<i>Casualties to Passengers.</i>				
Atchison, Topeka and Santa Fe Railway Company		2		9
Los Angeles and San Diego Beach Railway				
Northwestern Pacific Railroad Company		1	1	9
Ocean Shore Railroad Company				
San Pedro, Los Angeles and Salt Lake Railroad Company				1
Southern Pacific Company		5	1	44
Sunset Railway Company				1
Yosemite Valley Railroad Company				
Totals		8	2	64
<i>Casualties to Employees Not on Duty.</i>				
Atchison, Topeka and Santa Fe Railway Company				1
Nevada County Narrow Gauge Railroad Company				
Southern Pacific Company				
Sunset Railway Company		1		
Western Pacific Railway Company				
Totals		1		1

ACCIDENTS—Continued.

OTIVES AND CARS, FOR YEAR ENDING JUNE 30, 1914.

Other accidents on or around trains not here named		Being struck or run over by engine or car at stations or yards		Being struck or run over by engine or car at highway grade crossings		Being struck or run over by engine or car at other places		Other causes		Total	
Killed	Injured	Killed	Injured	Killed	Injured	Killed	Injured	Killed	Injured	Killed	Injured
	5		7			1	1		2	4	157
											1
		1									4
									1		1
											1
									3		5
											1
											1
	1								1		3
	1		1							2	26
	2						1		1		10
			1			1				1	1
											2
							1				1
	14								4	1	38
											1
									1		3
	12	6	19			4	7		8	32	307
											1
		1								1	1
	11		2			3	5			3	32
										1	4
	46	7	31			9	15		21	45	601
	23									2	141
										1	
	2								1	1	14
											1
	7								1		11
	73		1					1	4	3	174
											1
										1	11
	105		1					1	6	8	353
						1				1	1
									1		1
		1	1	2	3	3	2			6	7
											1
			1								1
		1	2	2	3	4	2		1	7	11

SUMMARY OF  
OCCURRING IN CONNECTION WITH OPERATION OF LOCO

Company	Collisions		Derailments	
	Killed	Injured	Killed	Injured
<i>Casualties to Trespassers.</i>				
Atchison, Topeka and Santa Fe Railway Company.....		1		
Northwestern Pacific Railroad Company.....				
San Diego and Arizona Railway Company.....				
San Joaquin and Eastern Railroad Company.....				
San Pedro, Los Angeles and Salt Lake Railroad Company .....				
Southern Pacific Company.....				
Western Pacific Railway Company.....				1
Totals .....		1		1
<i>Casualties to Other Persons (Not Trespassers).</i>				
Atchison, Topeka and Santa Fe Railway Company.....			1	
Northwestern Pacific Railroad Company.....				
San Diego and Southeastern Railway Company.....				
San Pedro, Los Angeles and Salt Lake Railroad Company .....				
Southern Pacific Company.....				
Sunset Railway Company.....				
Western Pacific Railway Company.....				
Totals .....			1	



MOTIVES AND CARS, FOR YEAR ENDING JUNE 30, 1914.

[illegible]

SUMMARY OF  
OCCURRING IN CONNECTION WITH OPERATION OF LOCO

Company	Falling from cars or engines		Getting on or off cars or engines	
	Killed	Injured	Killed	Injured
<i>Casualties to Trespassers.</i>				
Atchison, Topeka and Santa Fe Railway Company--	2	3	5	13
Northwestern Pacific Railroad Company-----				
San Diego and Arizona Railway Company-----		1		
San Joaquin and Eastern Railroad Company-----				1
San Pedro, Los Angeles and Salt Lake Railroad Company -----		1		1
Southern Pacific Company-----	22	13	32	45
Western Pacific Railway Company-----				
Totals -----	24	18	37	60
<i>Casualties to Other Persons (Not Trespassers).</i>				
Atchison, Topeka and Santa Fe Railway Company--				
Northwestern Pacific Railroad Company-----				
San Diego and Southeastern Railway Company-----				
San Pedro, Los Angeles and Salt Lake Railroad Company -----				
Southern Pacific Company-----				
Sunset Railway Company-----				
Western Pacific Railway Company-----				
Totals -----				

ACCIDENTS—Continued.

MOTIVES AND CARS, FOR YEAR ENDING JUNE 30, 1914.

Other accidents on or around trains not here named		Being struck or run over by engine or car at stations or yards		Being struck or run over by engine or car at highway grade crossings		Being struck or run over by engine or car at other places		Other causes		Total	
Killed	Injured	Killed	Injured	Killed	Injured	Killed	Injured	Killed	Injured	Killed	Injured
	2	4	12	3	1	19	11		1	33	44
		4	5			3	1			7	6
											1
											1
	3	5	3			1	2			6	10
	6	16	23	1	2	52	40	2	5	125	136
	2		3			1	1			1	7
	13	29	46	4	3	76	55	2	6	172	205
			.								
	3		1	8	49					9	54
			5	1	6					1	11
				2	2					2	2
			1		6						7
	3	1	1	30	77				5	31	86
					3				1		4
					1						1
	6	1	8	41	144				6	43	165

# RECAPITULATION OCCURRING IN CONNECTION WITH OPERATION OF LOCO

Steam railroads	Accidents to trains					
	Other accidents.	Passenger trains		Passenger and freight train collisions	Freight trains	
		Collisions	Derailments		Collisions	Derailments
Atchison, Topeka and Santa Fe Railway Company	5	1	5	2	12	15
Boca and Loyalton Railroad Company						1
Butte County Railroad Company						
California Western Railroad and Navigation Company						
Cement, Tolenas and Tidewater Railroad Company	1					
Colusa and Lake Railroad Company			1			
Holton Interurban Railway Company		1				
Iron Mountain Railroad						
Los Angeles and San Diego Beach Railway						
McCloud River Railroad Company					1	
Modesto and Empire Traction Company				1		
Mount Tamalpais and Muir Woods Railway						
Nevada-California-Oregon Railway			1			1
Nevada County Narrow Gauge Railroad Company						
Northwestern Pacific Railroad Company	2	2			7	11
Ocean Shore Railroad Company				1	1	
Pacific Coast Railway Company						
Pajaro Valley Consolidated Railroad Company						
Quincy Western Railway Company			1			1
San Diego and Arizona Railway Company						
San Diego and Southeastern Railway Company						
San Joaquin and Eastern Railroad Company						
San Pedro, Los Angeles and Salt Lake Railroad Company						
Santa Maria Valley Railroad Company						2
Sierra Railway Company of California					1	
Southern Pacific Company	17	2	4	2	21	26
Sugar Pine Railway Company						
Sunset Railway Company					1	
Tonopah and Tidewater Railroad Company						
Western Pacific Railway Company			3		2	7
Yosemite Valley Railroad Company			1			
Totals	25	6	16	6	46	64

\*Killed.

\*\*Injured.



## OF ACCIDENTS

MOTIVES AND CARS, FOR YEAR ENDING JUNE 30, 1914.

Total	Highway accidents			Casualties to										Total casualties	
	Killed	Injured	Total	Passengers		Employees on duty		Employees not on duty		Trespassers		Other persons not trespassers			
				K.*	I.**	K.*	I.**	K.*	I.**	K.*	I.**	K.*	I.**	K.*	I.**
40	11	50	61	2	141	4	157	1	1	33	44	9	54	49	397
1							1								1
							4								4
1							1								1
1							1								1
1							5								5
				1			1							1	1
1															
1															
							1								1
2							3								3
									1						1
22	1	6	7	1	14	2	26			7	6	1	11	11	57
2					1		10								11
						1	1							1	1
							1								1
2															
	2	2	4				2				1				1
							1				1	2	2	2	4
															2
		6	6		11	1	38			6	10		7	7	66
2							1								1
1							3								3
72	33	82	115	3	174	32	307	6	7	125	136	31	86	197	710
							1								1
1		3	3		1		1		1				4		7
							1	1						1	1
12		1	1				3	32		1	1	7		1	41
1				1	11	1	4							2	15
163	47	150	197	8	353	45	603	7	11	172	205	43	165	275	1,337

SUMMARY OF  
OCCURRING IN CONNECTION WITH OPERATION OF LOCOMOTIVES

Company	Collisions		Derailments	
	Killed	Injured	Killed	Injured
<i>Casualties to Passengers.</i>				
†California Street Cable Railroad Company.....		12		
Glendale and Montrose Railway.....				
Humboldt Transit Company.....				
Los Angeles Railway Corporation.....		125		14
Monterey and Pacific Grove Railway Company.....				
Northern Electric Railway Company.....				
Oakland, Antioch and Eastern Railway.....				
Pacific Electric Railway Company.....	14	344		17
Pacific Gas and Electric Company.....				
Peninsular Railway Company.....				
Petaluma and Santa Rosa Railway Company.....				
Sacramento and Woodland Railroad Company.....				
San Diego Electric Railway Company.....		3		
San Francisco, Napa and Calistoga Railway.....				
San Francisco-Oakland Terminal Railways.....		4		1
San Jose Railroads.....				
Southern Pacific Company—Electric lines.....				
Stockton Electric Railroad Company.....				
Union Traction Company.....				
United Railroads of San Francisco.....	1	69		18
Totals .....	15	557		50
<i>Casualties to Employees on Duty.</i>				
†California Street Cable Railroad Company.....		2		
Central California Traction Company.....				
Los Angeles Railway Corporation.....		9		2
Monterey and Pacific Grove Railway Company.....				
Northern Electric Railway Company.....				
Oakland, Antioch and Eastern Railway.....				
Pacific Electric Railway Company.....		4		
Pacific Gas and Electric Company.....				
Petaluma and Santa Rosa Railway Company.....				
San Francisco-Oakland Terminal Railways.....		2		
Southern Pacific Company—Electric lines.....				
Tidewater Southern Railway Company.....				
United Railroads of San Francisco.....	1	7		3
Totals .....	1	24		5
<i>Casualties to Employees Not on Duty.</i>				
Los Angeles Railway Corporation.....				
Northern Electric Railway Company.....				
Oakland, Antioch and Eastern Railway.....				
Pacific Electric Railway Company.....		3		1
Pacific Gas and Electric Company.....				
Southern Pacific Company—Electric lines.....				
United Railroads of San Francisco.....				
Totals .....		3		1

†Cable line.



**SUMMARY OF  
OCCURRING IN CONNECTION WITH OPERATION OF LOCOMOTIVES**

Company	Falling from cars or engines		Getting on or off cars or engines	
	Killed	Injured	Killed	Injured
<i>Casualties to Passengers.</i>				
†California Street Cable Railroad Company.....		6	1	4
Glendale and Montrose Railway.....		1		
Humboldt Transit Company.....				1
Los Angeles Railway Corporation.....		2	5	390
Monterey and Pacific Grove Railway Company.....		1		2
Northern Electric Railway Company.....			1	1
Oakland, Antioch and Eastern Railway.....				1
Pacific Electric Railway Company.....	1	13	8	235
Pacific Gas and Electric Company.....		1		3
Peninsular Railway Company.....				1
Petaluma and Santa Rosa Railway Company.....				1
Sacramento and Woodland Railroad Company.....	1			1
San Diego Electric Railway Company.....	2	8		33
San Francisco, Napa and Calistoga Railway.....				1
San Francisco-Oakland Terminal Railways.....	1	12	2	23
San Jose Railroads.....				
Southern Pacific Company—Electric lines.....				8
Stockton Electric Railroad Company.....				4
Union Traction Company.....		3		
United Railroads of San Francisco.....	1	4		133
Totals .....	6	51	17	842
<i>Casualties to Employees on Duty.</i>				
†California Street Cable Railroad Company.....				
Central California Traction Company.....				
Los Angeles Railway Corporation.....				14
Monterey and Pacific Grove Railway Company.....				
Northern Electric Railway Company.....	1			1
Oakland, Antioch and Eastern Railway.....				
Pacific Electric Railway Company.....		15		31
Pacific Gas and Electric Company.....				
Petaluma and Santa Rosa Railway Company.....				
San Francisco-Oakland Terminal Railways.....		1		1
Southern Pacific Company—Electric lines.....				
Tidewater Southern Railway Company.....				
United Railroads of San Francisco.....	1			2
Totals .....	2	16		49
<i>Casualties to Employees Not on Duty.</i>				
Los Angeles Railway Corporation.....			1	
Northern Electric Railway Company.....			1	
Oakland, Antioch and Eastern Railway.....				1
Pacific Electric Railway Company.....				4
Pacific Gas and Electric Company.....				
Southern Pacific Company—Electric lines.....				
United Railroads of San Francisco.....				
Totals .....			2	5

†Cable line.



ACCIDENTS—Continued.

AND CARS ON ELECTRIC RAILROADS, FOR YEAR ENDING JUNE 30, 1914.

Other accidents on or around trains not here named		Being struck or run over by engine or car at station yards		Being struck or run over by engine or car at highway grade crossing		Being struck or run over by engine or car at other places		Other causes		Total	
Killed	Injured	Killed	Injured	Killed	Injured	Killed	Injured	Killed	Injured	Killed	Injured
	10									1	32
											1
											1
	63					2	14			7	608
			2								5
							2			1	3
	1										2
	20									23	631
						1				1	4
									1		2
											1
	7									1	1
										2	52
											1
	3				5				3	3	51
									1		1
	15										24
									1		5
											3
							5	1	35	3	264
	119		2		5	3	21	1	41	42	1,692
											2
										1	1
	35						1		1		62
											1
	5		1							2	10
1	3									1	8
1	5		1		1	2				3	108
							1				1
											1
	2	2	1		1				7	2	22
		1	1		1		2			1	5
											1
							4		10	2	26
2	50	3	4		3	2	8		18	12	248
							1			1	1
										1	
									1		1
							1				9
			1								1
							1				1
											1
			1				3		1	2	14

SUMMARY OF

OCCURRING IN CONNECTION WITH OPERATION OF LOCOMOTIVES

Company	Collisions		Derailments	
	Killed	Injured	Killed	Injured
<i>Casualties to Other Persons (Not Trespassing).</i>				
Bakersfield and Kern Electric Railway Company.....	-----	-----	-----	-----
†California Street Cable Railroad Company.....	-----	-----	-----	-----
Humboldt Transit Company.....	-----	-----	-----	-----
Los Angeles Railway Corporation.....	-----	-----	-----	-----
Northern Electric Railway Company.....	-----	-----	-----	-----
Pacific Electric Railway Company.....	-----	-----	-----	-----
Pacific Gas and Electric Company.....	-----	-----	-----	-----
Petaluma and Santa Rosa Railway Company.....	-----	-----	-----	-----
Point Loma Railroad Company.....	-----	-----	-----	-----
Santa Barbara Consolidated Railway Company.....	-----	-----	-----	-----
San Diego Electric Railway Company.....	-----	-----	-----	-----
San Francisco-Oakland Terminal Railways.....	-----	-----	-----	-----
San Jose Railroads.....	-----	-----	-----	-----
Southern Pacific Company—Electric lines.....	-----	-----	-----	-----
Stockton Electric Railroad Company.....	-----	-----	-----	-----
United Railroads of San Francisco.....	-----	-----	-----	1
Visalia Electric Railroad Company.....	-----	-----	-----	-----
Totals .....	-----	-----	-----	1
<i>Casualties to Trespassers.</i>				
California Street Cable Railroad Company.....	-----	-----	-----	-----
Central California Traction Company.....	-----	-----	-----	-----
Los Angeles Railway Corporation.....	-----	-----	-----	-----
Monterey and Pacific Grove Railway Company.....	-----	-----	-----	-----
Northern Electric Railway Company.....	-----	-----	-----	-----
Oakland, Antioch and Eastern Railway.....	-----	-----	-----	-----
Pacific Electric Railway Company.....	-----	-----	-----	-----
Peninsular Railway Company.....	-----	-----	-----	-----
San Francisco, Napa and Calistoga Railway.....	-----	-----	-----	-----
San Francisco-Oakland Terminal Railways.....	-----	-----	-----	-----
Southern Pacific Company—Electric lines.....	-----	-----	-----	-----
United Railroads of San Francisco.....	-----	-----	-----	-----
Totals .....	-----	-----	-----	-----

†Cable line.

AND CARS ON ELECTRIC RAILROADS, FOR YEAR ENDING JUNE 30, 1914.

[illegible]

**SUMMARY OF**

**OCCURRING IN CONNECTION WITH OPERATION OF LOCOMOTIVES**

Company	Falling from cars or engines		Getting on or off cars or engines	
	Killed	Injured	Killed	Injured
<i>Casualties to Other Persons (Not Trespassing).</i>				
Bakersfield and Kern Electric Railway Company-----				
†California Street Cable Railroad Company-----				
Humboldt Transit Company-----				
Los Angeles Railway Corporation-----				
Northern Electric Railway Company-----				
Pacific Electric Railway Company-----				
Pacific Gas and Electric Company-----				
Petaluma and Santa Rosa Railway Company-----				
Point Loma Railroad Company-----				
Santa Barbara Consolidated Railway Company-----				
San Diego Electric Railway Company-----				3
San Francisco-Oakland Terminal Railways-----		1		
San Jose Railroads-----				
Southern Pacific Company—Electric lines-----				
Stockton Electric Railroad Company-----				
United Railroads of San Francisco-----				
Visalia Electric Railroad Company-----				
Totals -----		1		3
<i>Casualties to Trespassers.</i>				
†California Street Cable Railroad Company-----				
Central California Traction Company-----				
Los Angeles Railway Corporation-----				
Monterey and Pacific Grove Railway Company-----				
Northern Electric Railway Company-----				
Oakland, Antioch and Eastern Railway-----				
Pacific Electric Railway Company-----				
Peninsular Railway Company-----				
San Francisco, Napa and Calistoga Railway-----				
San Francisco-Oakland Terminal Railways-----				
Southern Pacific Company—Electric lines-----				
United Railroads of San Francisco-----		1		
Totals -----		1		

†Cable line.



## ACCIDENTS—Continued.

AND CARS ON ELECTRIC RAILROADS, FOR YEAR ENDING JUNE 30, 1914.

Other accidents on or around trains not here named		Being struck or run over by engine or car at stations or yards		Being struck or run over by engine or car at highway grade crossing		Being struck or run over by engine or car at other places		Other causes		Total	
Killed	Injured	Killed	Injured	Killed	Injured	Killed	Injured	Killed	Injured	Killed	Injured
				2	1					2	1
					1						1
					1		2				3
	5				2	12	198		3	12	208
			1								1
	7	1	4	20	128	5	34		1	26	174
						1	1	1		2	1
					5	2	1			2	6
					2	1				1	2
									1		1
					5		17		1		26
1	1			2	40	1	8		9	4	59
					1						1
		1	1	17	25		5			18	31
						1	2			1	2
						24	274		4	24	279
				1						1	
1	13	2	6	42	211	47	542	1	19	93	796
1					3		4			1	7
			2		2		1				5
1	2									1	2
							1				1
				2			2			2	2
				1		1				2	
	1	1	1			9	7			10	9
				1			1			1	1
						1	1			1	1
		1	1		4					1	5
		2	2			4	6			6	8
											1
2	3	4	6	4	9	15	23			25	42

# RECAPITULATION OCCURRING IN CONNECTION WITH OPERATION OF LOCOMOTIVES

Company	Accidents to trains					
	Other accidents.	Passenger trains		Passenger and freight collisions	Freight trains	
		Collisions	Derailments		Collisions	Derailments
Bakersfield and Kern Electric Railway Company						
†California Street Cable Railroad Company		1				
Central California Traction Company						
Glendale and Montrose Railway						
Humboldt Transit Company						
Los Angeles Railway Corporation		24	5			
Monterey and Pacific Grove Railway Company						
Northern Electric Railway Company						
Oakland, Antioch and Eastern Railway						
Pacific Electric Railway Company		11	2	6	1	
Pacific Gas and Electric Company						
Peninsular Railway Company			1			
Petaluma and Santa Rosa Railway Company						
Point Loma Railroad Company						
Sacramento and Woodland Railroad Company						
Santa Barbara Consolidated Railway Company						
San Diego Electric Railway Company						
San Francisco, Napa and Calistoga Railway						
San Francisco-Oakland Terminal Railways		3	1			
San Jose Railroads						
Southern Pacific Company—Electric lines			1			
Stockton Electric Railroad Company						
Tidewater Southern Railway Company						
Union Traction Company						
United Railroads of San Francisco		25	10	4		
Visalia Electric Railroad Company						
Totals		64	20	10	1	

\*Killed.

\*\*Injured.

†Cable line.

OF ACCIDENTS.

AND CARS ON ELECTRIC RAILROADS, FOR YEAR ENDING JUNE 30, 1914.

Highway accidents				Casualties to—												Total casualties	
Total	Killed	Injured	Total	Passengers		Employees on duty		Employees not on duty		Trespassers		Other persons not trespassers					
				K.*	I.**	K.*	I.**	K.*	I.**	K.*	I.**	K.*	I.**	K.*	I.**		
1	2	1	3	1	33	1	2	1	7	2	1	1	2	1	2	43	6
		2	2		1	1	1		5					1	1	1	1
		1	1		1								3			4	4
29		2	2	7	608		62	1	1	1	2	12	208	21	881	7	16
					5		1				1					3	11
	2		2	1	3	2	10	1		2	2		1	6		16	11
	1		1		2	1	8		1	2				3		11	11
20	20	129	149	23	631	3	108		9	10	9	26	174	62	931	6	8
				1	4	1			1			2	1	4		2	2
1	1		1		2					1	1			1	3	1	1
		5	5		1		1					2	6	2	8	1	1
		2	2									1	2	1	2	1	1
				1	1									1	1	1	1
													26	2	78	2	2
		5	5	2	52					1	1			1	2	1	1
4	2	50	52	3	51	2	22			1	5	4	59	10	137	2	2
		1	1		1								1		69	7	3
1	17	26	43		24	1	5		1	6	8	18	31	25	69	7	3
					5							1	2	1	1	1	1
							1								1	1	1
					3										3	3	3
39				3	264	2	26		1		1	24	279	29	571	1	1
	1		1									1		1			
95	46	228	274	42	1693	13	247	2	14	25	42	93	796	175	2792		

SUMMARY OF  
REPORTED ON COMMISSION'S FORM

Company	Accidents			
	While working on tracks or bridges		At stations, freight houses, engine houses, etc., when no moving car or locomotive is involved	
	Killed	Injured	Killed	Injured
Arcata and Mad River Railroad Company		1		
Achison, Topeka and Santa Fe Railway Company	1	176		270
Amador Central Railroad Company		1		
California Western Railroad and Navigation Company				1
Iron Mountain Railroad				1
Los Angeles and San Diego Beach Railway Company				1
McCloud River Railroad Company				1
Minkler Southern Railway Company		6		
Nevada-California-Oregon Railway		2		
Nevada County Narrow Gauge Railroad Company				3
Northwestern Pacific Railroad Company	3	84		31
Ocean Shore Railroad Company		2		2
Pacific Coast Railway Company		2		2
San Diego and Arizona Railway Company		1		
San Diego and Southeastern Railroad Company				2
San Joaquin and Eastern Railroad Company		6		2
San Pedro, Los Angeles and Salt Lake Railroad Company		34		53
Sierra and Mohawk Railway Company		2		
Sierra Railway Company of California		9		3
Southern Pacific Company	1	195	3	324
Sunset Railway Company		4		
Tonopah and Tidewater Railroad Company		2		
Ventura County Railway Company				1
Western Pacific Railway Company	1	50		6
Yosemite Valley Railroad Company				
Totals	6	577	3	683
<i>Electric Railroads.</i>				
†California Street Cable Railroad Company		2		1
Central California Traction Company				
Glendale and Montrose Railway				
Los Angeles Railway Corporation		16		7
Monterey and Pacific Grove Railway Company (none)				
Northern Electric Railway Company		12		7
Northern Electric Railway Company—Marysville and Colusa branch				1
Oakland, Antioch and Eastern Railway		5		2
Pacific Electric Railway Company	1	61		93
Pacific Gas and Electric Company				
Peninsular Railway Company	1	1		
Petaluma and Santa Rosa Railway Company				
Sacramento and Woodland Railroad Company		3		
San Francisco, Napa and Calistoga Railway				1
San Francisco-Oakland Terminal Railways		18		1
San Jose Railroads				
Southern Pacific Company—Electric lines				2
Stockton Electric Railroad Company		1		
Tidewater-Southern Railway Company				1
United Railroads of San Francisco		22		1
Totals—Electric railroads	2	141		117
Grand total—steam and electric	8	718	3	800

†Cable line.



INDUSTRIAL ACCIDENTS.

14, FOR YEAR ENDING JUNE 30, 1914.

to employees						Accidents to other persons							
In and around machine and other shops		On boats and wharves		At other places		Visitors and other persons not right on the premises or there by permission of the railroad		Trespassers		Total			
Killed	Injured	Killed	Injured	Killed	Injured	Killed	Injured	Killed	Injured	Killed	Injured		
			1									2	
1	139		11		32		6		3	2		637	1
													1
													1
													1
	3												4
													6
													2
													3
	37		17	1	6		4		2	4		181	4
													4
													1
													3
	1												10
	2												
	39				13		1					120	2
													15
1	246	1	29	2	68	2	28	2	8	12		898	5
					1								3
	1												1
	47				12						1	115	1
	1												
2	517	1	58	3	134	2	39	2	13	19		2021	
													3
													4
									4	4	4		1
	8				35		5						71
	11				4								34
													1
	1		1		2							11	
	39		8	1	38		4			2		243	
				1						1			
1	3									2			4
	1				2								3
													3
	6												7
	27		4	1	8						1	58	
													1
	1				3								6
					2								3
													1
	10			1	53						1	86	
1	107		13	4	149		9	4	4	11		540	
3	624	1	71	7	283	2	48	6	17	30		2561	

It will be noted that the following railroads had no accidents resulting in casualties arising from the operation of locomotives and cars to be reported to the Commission during the fiscal year ending June 30, 1914:

Amador Central Railroad Company.  
Arcata and Mad River Railroad Company.  
Bay Point and Clayton Railroad Company.  
Boea and Loyalton Railroad Company.  
Camino, Placerville and Lake Tahoe Railroad Company.  
Crescent City Railway.  
Diamond and Caldor Railway.  
Klamath Lake Railroad Company.  
Lake Tahoe Railway and Transportation Company.  
McCloud River Railroad Company.  
Modesto and Empire Traction Company.  
Quincy Western Railway Company.  
Sacramento Valley and Eastern Railway.  
Sierra and Mohawk Railway Company.  
South San Francisco Belt Railway.  
Stockton Terminal and Eastern Railroad.  
Ventura County Railway Company.  
Yreka Railway Company.

*Electric Railways.*

Fresno Traction Company.  
Monterey and Del Monte Heights Railway Company.  
Nevada County Traction Company.  
Northern Electric Railway Company, Marysville and Colusa branch.

**Track Inspection.**

*Nevada-California-Oregon Railway.*—In connection with a proposed change in time table from daylight to night service on the Nevada-California-Oregon Railway, complaints were received that night operation was unsafe due to the condition of the track and roadbed, and a thorough investigation was made into the physical condition of this property. It was found that conditions were deplorable, that the line was operating with track in dangerous condition for passenger trains at scheduled time-table speed, that ties were in poor condition and that the line was practically without ballast of any kind. As a result of inspection, the Commission directed the Nevada-California-Oregon Railway to immediately restore the daylight service and to immediately submit a program for the rehabilitation of its track and roadbed. The Commission further directed the reduction of train speeds, both freight and passenger, over the worst portions of the track at points where conditions were liable to cause derailment. The schedule of rehabilitation is now being prosecuted by the management of the Nevada-California-Oregon Railway. Other track inspections have been made, and the matter of the safety and proper up-keep of track, roadway, and

bridges, will be given especial attention in future general inspections of railroads and electric railways.

#### Station Facilities.

The matter of adequate and proper depot facilities is being given attention, not only when covered by complaint, but in connection with general inspections.

The service department made a report based on the study of the plans of the Southern Pacific Company as against those submitted by the Fourth Street District Improvement Club for the new station to be erected by the Southern Pacific Company at Third and Townsend streets, San Francisco.

The proposed plan and facilities as presented by the Southern Pacific Company were superior in all respects to the inadequate and incomplete plans of the Fourth Street District Improvement Club, as regards the future expansion of traffic, the facilities and convenience of the traveling public, the accessibility of the station and the establishment of proper terminal facilities. The complaint of the Fourth Street District Improvement Club and their petition for an order compelling the Southern Pacific Company to construct a station in accordance with their substitute plan, was dismissed after a formal hearing by the Commission.

#### Time Tables.

Under the general order of the Commission, all changes in time tables are required to be filed with the Commission and to be posted for the information of the public five days in advance of their effective date. A supplement to this general order requires that in all cases where a reduction in passenger train service is contemplated or where the abandonment of any stop is desired by the railroad, that an outline of the proposed time table must be submitted to the Commission thirty days prior to the date proposed to be made effective and that the permission of the Commission must be obtained prior to making any reduction in service or abandoning any stop.

A file of time tables is kept by the Commission and careful analysis made of the reasons for all requests for the reduction of passenger service or the abandonment of stops. In many cases due to an increase in trains during certain seasons to care for tourist travel, vacation travel, etc., it is customary to reduce passenger train service when the particular travel for which the service was inaugurated is not in evidence. In many cases, however, permission to withdraw passenger trains from service has been denied the railroads, the Commission's investigation having shown that public convenience required the retention of the service. In other instances, a rearrangement of schedule was made, satisfactorily adjusting the extra service of which the railroad desired to be relieved.

Frequent increases in the amount of service, the number of stops, or the number of cars in trains have been ordered when it has been shown by complaint or the Commission's own investigation that additional service was necessary for the proper accommodation of the public.

#### **Abandonment of Stations, Facilities, Etc.**

Under a general order of the Commission, no station, side track, spur stop, facility for handling freight, platform, etc., may be abandoned without the consent of the Commission, and the applications of the carriers for such abandonment are carefully investigated before permission to discontinue their use is granted. In many cases where investigation with shippers or receivers of freight shows that the retention of the facilities is desirable and necessary, the applications have been denied.

#### **TELEPHONE AND TELEGRAPH RATES.**

##### **Long Distance Toll Rates.**

In the annual report for the year ending June 30, 1913, reference was made to matters which were pending before the Commission when that report was closed. In the following, further reference is made to matters which were then pending which have been disposed of during the past year. Particular attention is directed to the Commission's investigation into the long distance toll rates of The Pacific Telephone and Telegraph Company. This investigation was commenced upon the filing with the Commission by the telephone company on March 22, 1912, of Application No. 2 for permission to continue its rates then in effect until the further order of the Commission and was concluded with the Commission's final order which was issued on March 2, 1914. It involved consideration of an investment in toll line plant approximating \$7,500,000.00 in value and is worthy of particular mention not only by reason of its importance both to the telephone company and to the public on account of the principles involved, which vitally affect every user of this corporation's toll service in California, but because also of its probable ultimate effect upon the toll rates of this and other companies throughout the entire Pacific Coast.

Before the Public Utilities Act became effective on March 23, 1912, it was a matter of common knowledge that the rates charged the public for long distance telephone service were notoriously irregular and inconsistent and the impression that they were unreasonable, unjust and discriminatory generally prevailed in the minds of the public. The rates then in effect consisted of three general classes known as "county" rates, "exception" rates and "special" rates, which had been fixed upon by the company largely as a measure of expediency rather than through a proper consideration of what they should have been. They were not determined upon any definite uniform basis of charge. Similar rates were charged for dissimilar distances; relatively high rates were



charged for short-haul messages as compared with the rates charged for long-haul messages. There was no definite relation between the rates charged for short-haul messages for a one-minute conversation and the rates charged for three-minute conversations, or vice versa. There was no definite relation between the rates charged and the length of the haul involved.

Briefly stated the investigation embraced a thorough study of approximately 72 per cent of the total toll traffic actually handled during the period taken as the basis of this study and moving over the principal toll routes in the company's territory. The result of this investigation was an order fixing a uniform schedule of rates for long distance toll charges, allowing a minimum charge of 10 cents for distances not exceeding fourteen miles; 15 cents for distances over fourteen miles and not exceeding twenty-nine miles; 20 cents for distances over twenty-nine miles and not exceeding forty-four miles; and further based upon a rate of  $\frac{1}{2}$  cent per air line mile for distances exceeding forty-four miles for conversations of two minutes or less for "particular party" service. Overtime charges are allowed on the basis of 50 per cent of the initial rates for each minute in excess of two minutes. Charges for "two-number" service are fixed upon the same basis except that three-minute conversations are allowed for initial rates and where optional "particular party" and "two-number" service is offered, the "particular party" rates become 5 cents higher than where "particular party" service is offered exclusively. The result of these new rates is an annual saving to telephone users in California over this company's system alone estimated at approximately \$526,000.00, while still allowing the company a net return of approximately 9 per cent on its toll plant investment.

Since this order, which became effective March 21, 1914, and which was primarily directed against the operations of The Pacific Telephone and Telegraph Company in California, was issued it has been voluntarily adopted with the Commission's permission by The United States Long Distance Telephone and Telegraph Company over its system in the southern part of California. Its adoption by that company will add a further saving to telephone users in that section of the state estimated at approximately \$14,000.00 annually.

#### **San Jose Rates.**

On April 8, 1913, the city of San Jose, through its mayor, filed formal complaint calling into question the rates and various practices of The Pacific Telephone and Telegraph Company in that city. The rates applying in San Jose apply also to service in Santa Clara, Sunnyvale and Campbell due to the requirements of these various communities for intercommunication, and since jurisdiction over all public utilities operating within the incorporation of San Jose has been transferred

by a vote of the city to the Commission since this complaint was filed, and since the Commission's jurisdiction extends also to the other communities mentioned, an order was issued which reduced the rates for certain classes of service at all of these points. The total annual reduction to telephone patrons in these four exchanges amounts to approximately \$12,237.00. The order in this case recognizes the right of the telephone company to collect its monthly accounts in advance, but requires the discontinuance of the former practice of requiring subscribers to deposit \$5.00 as a condition precedent to the installation of telephones.

#### Informal Complaints.

The number of informal complaints involving telephone and telegraph matters coming before the Commission during the past year shows a very considerable increase over the number received during the preceding year and has involved a vast amount of correspondence. Out of a total of 246 informal complaints received during the year there are but 17 uncompleted and pending. A large percentage of these informal matters have had to do with the failure or refusal of telephone companies to supply telephone service until complaint was made to the Commission, but with the cooperation of the various companies involved prompt relief has been secured except in a very few instances. A great number of informal complaints have also been lodged with the Commission as a result of the practice by various telephone companies requiring cash deposits from applicants for service as a precedent to installing telephones. As referred to elsewhere in this report, these complaints have become so general that the Commission is about to institute proceedings on its own motion calling into question the reasonableness of this practice.

#### Informal Orders.

In many cases where there was apparent necessity, informal orders have been issued authorizing various utilities to publish, file and place in effect schedules of rates and rules and regulations affecting rates on less than the required statutory notice of thirty days. Eighty such orders have been granted to telephone and telegraph companies during the year ending June 30, 1914, of which number twelve of the applications were filed during the previous year. The following is a summary of these informal orders:

Applications to revise rate schedules.....	13
Applications to reduce certain rates.....	3
Applications to introduce new rates.....	12
Applications to quote rates of connecting companies.....	6
Applications to establish toll stations.....	33
Applications to establish exchanges.....	13
Total .....	80

**Formal Applications and Cases Decided.**

During the year ending June 30, 1914, among formal matters considered by the Commission there were 26 involving rates, 15 involving general considerations affecting service, 15 involving the sale and transfer of telephone property and one, which is yet pending, involving physical connection between the systems of competing companies. Of the 26 matters involving rates, 14 were on complaints charging unreasonableness and discrimination. Rate increases have been granted in 4 cases, increases have been denied in 3 cases and in 2, referred to elsewhere in this report, decreases have been ordered.

Following is a brief summary of formal applications and cases decided:

**Application No. 1071.**

Application of the Bay Cities Home Telephone Company to transfer and assign to The Pacific Telephone and Telegraph Company all rights and privileges under a certain franchise granted the former company by the city of Oakland upon condition that the city of Oakland shall pass an ordinance approving the transfer and assignment of such franchise to The Pacific Telephone and Telegraph Company. Granted.

**Application No. 837.**

Application of the California and Oregon Telegraph Company and of the California Northern Telephone and Telegraph Company to sell and transfer their systems to the Nevada, California and Oregon Telegraph and Telephone Company. Granted.

**Application No. 876.**

Application of Nevada, California and Oregon Telegraph and Telephone Company to issue bonds. Granted.

**Application No. 999.**

Application of Coley-Craig Company to sell and transfer to The Pacific Telephone and Telegraph Company a certain portion of its telephone system in the town of Riverbank, San Joaquin County. Granted.

**Application No. 1186.**

Application of Consolidated Utilities Company to issue stock and renew notes. Granted.

**Application No. 879.**

Application of Deer Creek Rural Telephone Company to sell its telephone lines in the town of Terra Bella, Tulare County, and vicinity, to The Pacific Telephone and Telegraph Company. Granted.

**Application No. 638.**

Application of Delano-Linns Valley Telephone Company and of The Pacific Telephone and Telegraph Company, the one to enter and the other to withdraw from certain territory located in Kern County. Granted.

**Application No. 741.**

Application of Delano-Linns Valley Telephone Company to issue notes. Granted.

**Application No. 673.**

Application of Delano-Linns Valley Telephone Company to issue stock. Granted.

**Application No. 772.**

Application of Dos Palos Telephone Company to issue stock. Granted.

**Application No. 637.**

Application of Home Telephone Company of Covina to issue bonds. Granted.

## Application No. 874.

Application of Home Telephone and Telegraph Company of Santa Barbara to issue notes. Granted.

## Application No. 875.

Application of Home Telephone and Telegraph Company of Santa Barbara County for permission to issue notes. Granted.

## Application No. 419.

Application of Honey Lake Valley Mutual Telephone Association for authority to issue promissory notes. Granted.

## Application No. 678.

Application of Kerman Telephone Company for permission to increase its rates and to issue stock. Permission was granted to increase its rates for stockholders, other increases denied. Granted permission to issue stock.

## Application No. 901.

Application of F. E. Laumann for permission to sell and transfer to The Pacific Telephone and Telegraph Company a certain telephone system at Fulton, Sonoma County. Granted.

## Application No. 626.

Application of Lindsay Home Telephone and Telegraph Company to issue stock. Granted.

## Application No. 851.

Application of Lindsay Home Telephone and Telegraph Company to issue notes. Granted.

## Application No. 889.

Application of Charles A. Lorain for a certificate of public convenience and necessity for the operation of telephone lines in El Dorado County. Granted.

## Application No. 792.

Application of McFarland Telephone Company for a certificate of public convenience and necessity and for permission to establish rates for telephone service at McFarland, Kern County. Granted.

## Application No. 788.

Application of W. H. Moffett & Son for permission to sell and transfer to Paul Huneke a telephone plant located at Lemon Cove. Granted.

## Application No. 565.

Application of The Pacific Telephone and Telegraph Company to withdraw and of the Consolidated Utilities Company to enter certain territory in and about Compton and Watts in Los Angeles County. Granted.

## Application No. 618.

Application of The Pacific Telephone and Telegraph Company and the Farmington Telephone Association, the one to withdraw and the other to enter certain territory at Farmington, San Joaquin County. Granted.

## Application No. 763.

Application of The Pacific Telephone and Telegraph Company for authority to issue bonds of the face value of \$3,000,000.00. Granted.

## Application No. 713.

Application of The Pacific Telephone and Telegraph Company to consolidate its exchanges at Pacific Grove and Monterey and to increase its rates for service in Pacific Grove. Granted.

## Application No. 882.

Application of The Pacific Telephone and Telegraph Company for a certificate of public convenience and necessity for the operation of a telephone exchange in the city of Eagle Rock. Granted.



## Application No. 904.

Application of The Pacific Telephone and Telegraph Company to establish rates in the city of Eagle Rock. Granted.

## Application No. 667.

Application of E. Powers for permission to increase rates for telephone service at Manteca, San Joaquin County. Denied.

## Application No. 1078.

Application of Raymond Telephone Company for permission to revise its rules with reference to the collection of its accounts. Granted.

## Application No. 764.

Application of Reedley Telephone Company to issue stock. Granted.

## Application No. 917.

Application of Roseville Home Telephone Company to sell its telephone system in and adjacent to Roseville, Placer County, to Roseville Telephone Company, and of Roseville Telephone Company to issue stock in exchange therefor. Granted.

## Application No. 800.

Application of San Diego Home Telephone Company for permission to issue promissory notes. Granted.

## Application No. 703.

Application of Sanger Telephone Company to sell its telephone system in the town of Sanger, Fresno County, and vicinity to Ross B. Matkims. Granted.

## Application No. 928.

Application of San Joaquin Valley Farm Lands Company and of Louis Evans for authority to sell and transfer to the San Joaquin Valley Telephone Company a certain telephone system located in Fresno County, and of the San Joaquin Valley Telephone Company to issue stock. Granted.

## Application No. 871.

Application of Southwestern Home Telephone Company for authority to issue stock, bonds and notes. Granted.

## Application No. 714.

Application of Sunland Rural Telephone Company to revise its switching rates between Sunland and Los Angeles. Granted.

## Application No. 1052.

Application of Sunset Telephone and Telegraph Company for permission to sell and transfer and of the Tulare Home Telephone and Telegraph Company to purchase a certain telephone exchange in the city of Tulare, Tulare County. Granted.

## Application No. 927.

Application of The Pacific Telephone and Telegraph Company to withdraw and of L. G. Thistle to enter certain territory in the town of Mariposa. Granted.

## Application No. 579.

Application of Western Electric Company to sell and transfer and of The Pacific Telephone and Telegraph Company to purchase a telephone system located at Portola. Granted.

## Application No. 1056.

Application of Yapple & Company for permission to sell and transfer to J. S. Moulton a telephone exchange at Ripon, San Joaquin County. Granted.

## Application No. 799.

Application of Fowler Independent Telephone Company for permission to increase its rates for telephone service at Fowler, Fresno County. Permission with certain modifications granted.

## Application No. 642.

Application of Saratoga Telephone Company to sell and transfer and of The Pacific Telephone and Telegraph Company to purchase the telephone system in the town of Saratoga. Granted.

## Application No. 1083.

Application of Rose L. Burcham for permission to sell and transfer to the Interstate Telegraph Company a certain telephone system in Kern and San Bernardino counties. Granted.

## Application No. 715.

Application of Antelope Valley Telephone Company (O. F. Goodrich) for permission to increase telephone rates in the town of Lancaster and vicinity. Certain modified increases authorized.

## Case No. 465.

Complaint of M. Farrell, *et al.*, alleging certain unjust and unreasonable rates and practices of The Pacific Telephone and Telegraph Company in Santa Clara County. Denied.

## Case No. 515.

Complaint of S. O. Fesler, *et al.*, alleging unjust, unreasonable and discriminatory rates of The Pacific Telephone and Telegraph Company for farmer line service at its Modesto exchange. Defendant required to place all of its farmer line rates at Modesto exchange on a uniform schedule based upon a rate of \$3.00 per year, or within thirty days to make application to the Commission for permission to justify a higher rate.

## Case No. 378.

Supplemental opinion and order in the matter of the complaint of Quincy Chamber of Commerce *vs.* The Western Union Telegraph Company. Complaint alleges inadequate service and asks the Commission to require defendant to establish an agent at Quincy. Defendant made certain improvements in its facilities and service and upon this basis complaint was dismissed.

## Case No. 603.

Complaint of Reedley Telephone Company *vs.* L. O. Clough, *et al.* The complaint alleges the refusal of the defendants to pay authorized schedule of rates for telephone service within the city limits of Reedley. The Commission issued its order requiring the defendants to pay published rates.

## Case No. 407.

Procedure instituted on the Commission's initiative arising out of Application No. 2 of The Pacific Telephone and Telegraph Company for permission to continue in effect its rates for long distance telephone toll service which were in effect on October 10, 1911, until the further order of the Commission. Case No. 407 calls into question the reasonableness of all The Pacific Telephone and Telegraph Company's rates for long distance telephone toll service within the State of California.

## Case No. 387.

Complaint of the city of San Jose alleging unjust and unreasonable rates and practices of The Pacific Telephone and Telegraph Company in the city of San Jose.

**Formal Applications and Complaints Pending June 30, 1914.**

## Application No. 1132.

T. H. Dassel (Morgan Hill Telephone Company) for permission to increase rates at Morgan Hill, Santa Clara County.

## Application No. 1177.

Honey Lake Valley Mutual Telephone Association for permission to increase rates in Lassen County.

## Application No. 1147.

Campbell Telephone Company for permission to issue stock.

## Application No. 1108.

The Pacific Telephone and Telegraph Company for permission to increase its lowest rate, viz, the rate for farmer line telephones, at its Modesto exchange.

## Case No. 581.

Complaint of Associated Chamber of Commerce of Orange County involving physical connection for direct inter-communication between the lines of all telephone companies operating as public utilities in Orange County.

## Case No. 621.

Complaint of the city of Redlands calling into question the reasonableness of all of the rates of the Southwestern Home Telephone Company for exchange service in the city of Redlands.

## Case No. 530.

Complaint by Guglielmetti Telephone Company *vs.* Chileno Valley Telephone Company, both of Petaluma, Sonoma County, alleging invasion of complainant's territory by the defendant.

## Case No. 522.

Complaint by Home Telephone and Telegraph Company of Santa Barbara, alleging unjust and unreasonable rates of The Pacific Telephone and Telegraph Company in Santa Barbara and asking the Commission to fix rates.

## Case No. 559.

Complaint of Montebello Chamber of Commerce *vs.* The Pacific Telephone and Telegraph Company, Home Telephone and Telegraph Company of Los Angeles and the United States Long Distance Telephone and Telegraph Company alleging unjust and unreasonable rates of the first named company in Montebello and asking that the Commission require one side of Whittier boulevard to be vacated by the defendants to enable the Pacific Light and Power Corporation to supply the residents of Montebello with electric light and power.

## Case No. 625.

Complaint of Barelay McCowan, *et al.*, alleging unjust and unreasonable rates charged by Kern Mutual Telephone Company in the cities of Taft, Maricopa, Fellows and McKittrick and throughout the west side oil fields.

## Case No. 293.

In the matter of the application of various public utilities for permission to charge less than published schedules of rates in certain classes of cases, the Commission issued its order in Decision No. 596 on April 19, 1913, calling upon public utilities of the state, other than common carriers, to file all of their deviations, indicating those which it is their desire to continue and the reasons therefor, and to retain in effect both such deviations desired to be retained and the deviations which such utilities desire to eliminate pending the determination by the Commission in each particular case as to the method of removing such discrimination. The Commission's determination of the method to be employed in removing discriminations is still pending. The existence of such discriminations as cannot be removed pending such decision is a constant source of complaint by the patrons of such utilities.

**Formal Investigations Pending and to be Undertaken.**

Investigation of rates for exchange service at exchanges of The Pacific Telephone and Telegraph Company throughout the state.

The Pacific Telephone and Telegraph Company is contending that its exchange service revenues, taking all of its California exchanges as a whole, are and have been insufficient to yield a reasonable or compensatory return on the investment involved in exchange property. In the toll rate investigation, the claim was advanced in support of former toll revenues that a portion of those revenues were utilized by the company to bolster up the exchanges which of themselves were not being profitably operated.

**Rates for Farmer Line Service.**

Formal complaint has been filed with the Commission calling into question the reasonableness of the rates charged by The Pacific Tele-

phone and Telegraph Company for so-called farmer line service. Other complaints calling into question the reasonableness of the rates of other companies for this class of service, as well as applications by other companies for rate revisions, also involve this subject. Such investigation as the Commission has already conducted points to the necessity of considering this branch of telephone service as a part of the general problem involved in the consideration of rates for exchange service on a state-wide basis.

#### **Toll Rate Tariffs.**

The toll rates ordered by the Commission, as previously referred to, became effective March 21, 1914. Their establishment has required that the telephone company file new tariffs with the Commission for every point in the state reached by its lines. There are at present approximately 900 such points in California, each having its separate set of tariffs displaying the rates to each of the others. The checking of these rates by the Commission's forces involves a stupendous amount of work and the necessity for supervision due to changes and additions is constant and unavoidable.

#### **Investigation of Deposit Requirements.**

A consideration of state-wide importance and one which has been one of the chief sources of informal complaints coming before the Commission with reference to the practices of telephone companies is that involving the requirement of cash deposits by prospective patrons as a condition precedent to supplying telephone service. This practice by telephone companies involves other considerations, chief among which is a charge quite commonly made and equally productive of complaint by patrons for the cancellation of contracts upon the discontinuance of service before the expiration of the term for which service was installed. These complaints have become so numerous that the Commission, subsequent to closing this report, has instituted proceedings on its own initiative calling into question the reasonableness of the deposit practice by all public utilities in this state now indulging in it.

#### **Formal Complaints Filed and Awaiting Hearing.**

Formal complaints calling into question the reasonableness of rates for exchange telephone service in Bakersfield, Corona, Redding and Redlands have been filed with the Commission and have been set for future hearing. Investigation of the matters involved in these complaints will necessitate a thorough inquiry into the present rates with reference to their bearing upon revenues and expenses of operation and the investment involved at each of these points.



**RATES OF WATER UTILITIES.****Formal Applications.**

Of the 82 formal applications filed during the fiscal year by public utility water companies, 16 were direct requests for permission to advance rates for water supplied, while a number of others related to charges made for installing meters and making necessary service extensions.

In the majority of instances the Commission found it necessary to send its hydraulic engineers into the field to make valuations in order to check the applicant's estimates and determine what would be just and reasonable rates. It may be stated that as a rule the water company would have but little difficulty in showing that its rate of return upon the investment was inadequate. In such cases it was found that the consumers would readily agree to a reasonable increase in rates, provided the water company would obligate itself to improve the service and guarantee a proper supply. These amicable understandings, based upon the Commission's investigation, were arranged wherever practicable. Although under the facts brought out in the investigations, the Commission found it necessary to grant increases in rates, each patron of the utility involved had the opportunity to be present and to be heard. As an indication of the equity of rates fixed by the Commission under these applications, it is enough to note that, with two exceptions, no protests have been filed by the patrons affected. One of these was promptly adjusted by supplemental order and the other is under investigation.

**Formal Cases.**

Fifty-seven formal complaints were filed, 22 of which alleged exorbitant or discriminatory rates; 6 others related to charges made by water utilities for meters and service pipes. As in the matter of formal applications, a complete analysis of statements submitted by the utility enabled the Commission to establish, in each case finally disposed of, a system of rates and charges concerning which there has been practically no protest.

In cases where irrigation companies have been involved, adjustments brought about by the establishment of rules and regulations, having for an object a more equitable distribution of the water supply, has rendered the matter of rates far less difficult to handle, sometimes completely solving the question of proper charges.

**Charges for Meters and Service Connections.**

In all cases where these charges are within its jurisdiction, after investigation, the Commission has required the utility concerned to make necessary service connections and install meters at its own expense, permitting, in a few instances only, the collection of a deposit, same to be returned in service during the subsequent months. However, in-

terest in the matter has now assumed such proportions that the Commission has found it necessary to undertake a general investigation as to the practices of water companies and certain other public utilities requiring deposits and making advance collections covering meters and service connections, and has set the matter for an early hearing.

### Important Decisions Affecting Rates.

Some of the typical decisions of the Commission involving rates are as follows:

#### Application No. 934.

##### *Excelsior Water and Mining Company.*

Applicant distributes water for irrigation purposes in Nevada and Yuba counties, charging heretofore as follows:

Less than 5 acres (alfalfa or meadow) -----	\$6 00 per acre.
5 acres or more (alfalfa or meadow) -----	5 00 per acre.
Orchards -----	3 00 per acre.

A uniform charge of \$4.00 per acre was established, allowing enough water to cover one acre of land one foot in depth, equal to 20 miner's inch days; additional water at the rate of \$1.25 for 10 miner's inch days.

#### Application No. 756.

##### *Murray & Fletcher. (San Diego County.)*

Application to increase certain rates to cover added expense where the Commission had ordered the installation of a pump. Denied, for the reason that applicants had not complied with the provisions of the previous order.

#### Application No. 1098.

##### *Ben Lomond Water Works. (Santa Cruz County.)*

Permitted to establish a meter rate, applicant to pay for all meters.

#### Application No. 1015.

##### *Garden Grove Water Company.*

Rates previously charged allowed an unlimited supply of water for \$1.00 per month. Applicant found that a number of customers were using extraordinary amounts of water, upon which showing he was permitted to install meters at his own expense and limit the amount of water to 800 cubic feet for \$1.00 and to charge the same rate for each additional 800 cubic feet used.

#### Case No. 437.

##### *O. E. Slinack vs. Inglewood Water Company.*

In this case the defendant was required to eliminate certain discrimination in its rates existing as between patrons who used water for lawns and those who did not.

#### Case No. 476.

##### *Thos. Monahan, Mayor of San Jose vs. San Jose Water Company.*

Minimum monthly rate for general consumption was reduced from \$1.00 per 4,000 gallons to 90 cents for an equal allowance. Other adjustments made involved both increases and reductions, including an increased rate to the city itself, while the company was required to install all meters and service connections without cost to consumer.

#### Case No. 558.

##### *L. E. Cole, et al. vs. South Feather Land and Water Company.*

This company adopted the method of assessing a yearly rate of \$36.50 based upon 10 cents per miner's inch of 24 hours' run, but made no deduction for periods during which no water was needed. The Commission established an annual rate of \$15.00 and an additional 10 cents per miner's inch per 24 hours for water actually used.

**Informal Complaints.**

Because of the number of written and verbal protests presented by patrons of public utilities during the first two years of the Commission's jurisdiction in these matters, the volume of this class of work has increased threefold for the period covered by this report. These complaints, in so far as the water department is concerned, while pertaining largely to overcharges and unsatisfactory service, have nevertheless covered every angle of water service and allege:

- Exorbitant and discriminatory rates;
- Inadequacy of service and impurity of supply;
- Extensions and deposits;
- Meters and service connections;
- Invasion of territory;
- Defective dams;
- Contracts and water rights.

A few of these informal complaints it has been found impossible to adjust by correspondence and personal investigation, in which cases complainants, unless obviously wrong, were advised to file a formal complaint, but in the great majority of instances, involving more than 330 complaints, a satisfactory and prompt adjustment has been reached without resort to formal proceedings. A detailed statement of these complaints is set forth elsewhere in this report.

**WAREHOUSEMEN.****Tariffs Filed.**

Warehousemen have filed tariffs during the year to the number of 79, the majority of which were supplements to schedules on file by San Francisco warehousemen and represented reductions voluntarily made or brought about by the Commission's recommendations. The filing of 30 original tariffs by warehousemen just beginning operations, or by those which had not previously reported, brought the total number of public warehousemen within the jurisdiction of the Commission up to 295.

**Formal Applications and Cases.**

Comparatively few formal applications were made by warehousemen during the year, being a total of 12, and only one formal complaint was filed. These covered such matters as stocks, bonds and notes, sales and leases, and rates, rules, regulations and practices.

Application by Southern Pacific Milling Company to assess a charge of 15 cents per ton for loading grain and to advance rates for the storage of hay in its numerous warehouses throughout Salinas Valley was one of the important matters affecting the storers of farm products, and is still under investigation.

The Commission's inquiry into the rules, regulations and practices of certain San Francisco warehousemen was of particular importance to the storers of general merchandise, and was designed to compel warehousemen to assume full responsibility for their refusal to voluntarily reduce rates.

#### **Informal Complaints.**

About 50 informal complaints were made and investigated. These involved:

- Overcharges for storage and handling;
- Grain shortages in country warehouses;
- Refusal to accept merchandise for storage;
- Reparations due to amended tariffs, etc.

All of these were disposed of without the formality and expense of formal hearings.

In order to bring about a better understanding among warehousemen, patrons of warehouses, and grain buyers, the Commission on June 24th issued an informal order calling grain warehousemen's attention to the causes giving rise to many of these complaints and suggested ways and means for avoiding complaints, such as the deduction of one or more pounds from actual weight of each sack to cover possible shrinkage, failure to deliver actual number of sacks received, as well as actual weight, where possible, etc., in order to promote greater harmony and minimize complaints of this class.

#### **Wharfingers.**

To the 25 tariffs heretofore filed by wharfingers 6 have been added.

Two applications to construct or operate wharves were granted, under chapter 557 of the 1913 statutes.

Five complaints affecting wharfingers were made, and were adjusted informally.



## ENGINEERING DEPARTMENT.

## ORGANIZATION.

In the fall of 1911, the Commission created an engineering department and appointed a chief engineer. By the following June the department had slowly grown to a numerical strength of fifteen. During the following six months there began to come into the office in considerable numbers the inventories and appraisals of their properties which the various steam railroad companies were preparing under order of the Commission dated March 11, 1912, and the department was augmented to handle the increased work until by the first of January, 1913, it had become the largest single department in the organization of the Commission. During the last twelve months the number of employees has fluctuated between a maximum of forty-one and a minimum of thirty-two, averaging thirty-eight.

The department has thus for the last year been large enough to be capable of a thorough and efficient grouping of its members.

An outline of the organization of the engineering department into sections, showing the number of employees as of date June 30, 1914, follows:

## ENGINEERING DEPARTMENT.

Title of employee	Section 1—Transportation, steam, electric and street railways, vessels, pipe lines, etc., service and valuation	Section 2—Water, water supply, irrigation, drains, etc., service, rates	Section 3—Gas and electric utility, gas, electric light and power, telephone and telegraph, etc., service, rates	Section 4—Office, general work, special work	Total
Chief engineer				1	1
Engineer in charge		1	1		2
Assistant engineer	12	3	7		22
Junior assistant engineer	5		1		6
Chief clerk				1	1
Draftsman				1	1
Clerks, stenographers, office boy		1	1	6	8
Totals	17	5	10	9	41

NOTE.—(1) All employees report to the engineer in charge of section, unless otherwise assigned. (2) The chief engineer will, if the work of the department should require such action, transfer or temporarily assign employees to other sections than the one in which their names appear. (3) Section 4 handles the work of the "Joint Committee on Inductive Interference."

NOTE.—No mention is made above of the service bureau which was part of the transportation section above until March 1, 1914, at which date it was incorporated into the rate department of the Commission.

NOTE.—The transportation section appears numerically weak above in proportion to the importance of transportation utilities. This is because of the fact that all rate matters and some service matters in connection with transportation utilities are handled by the rate department. The other sections of the engineering department handle practically all rate and service matters that come up in connection with water, gas and electric utilities.

Such an organization of the department, as is shown above, has naturally resulted in a high type of specialization for the individual mem-

bers and increased the quality of the output of the department as a whole. Thus the most recent large task which has fallen within the province of the section of transportation, for instance, was the valuation of the Los Angeles Railway Corporation, with a mileage of 365.98 miles of main track, and a property value considerably over \$20,000,000.00. Here just ninety calendar days elapsed between the ordering of the valuation and the transmittal by the chief engineer of a complete valuation report with maps, corporate history, financial history, mileage statements, traffic and revenue statistics, comparative tables of earnings, description of physical characteristics and construction standards and analyses of two competing valuations prepared by the company and by the city of Los Angeles, respectively. The cost of this valuation to the state was approximately 40 per cent of the average cost of the other two valuations.

This valuation was made in connection with an application for authority to issue bonds, and if this is granted the fees which are prescribed by section 57 of the Public Utilities Act will reimburse the state for the outlay.

Each section shown in the preceding table is of course further subdivided in practice. The transportation section is most interesting in this regard. It is subdivided in harmony with the fact that the major portion of its activities is devoted to the inventory and appraisal of the properties of the steam and electric roads in the state. Thus, the seventeen assistant engineers and junior assistant engineers shown in the transportation section of the above table are divided, when it comes to the making of an inventory and appraisal of the properties of a steam railroad, for instance, into three essential groups called divisions, and a fourth small group may be drawn from the section of gas and electricity in the case of those few steam roads which operate in part by electrical energy. These divisions are illustrated in the following tables, where it is shown how the forty-eight Interstate Commerce Commission construction accounts for steam roads and electric roads may be handled logically in six divisions, as follows:

- (1) Division of land accounts.
- (2) Division of track accounts.
- (3) Division of building, machinery and miscellaneous accounts.
- (4) Division of electrical accounts.
- (5) Division of equipment accounts.
- (6) Division of overhead, non-physical, etc., accounts.

This matter of the subdivisions of the section of transportation for the purposes of making inventory and appraisal of the property of steam and electric roads is presented in considerable detail here because of the great interest attached to such work since the Interstate Commerce Commission was instructed to make a valuation of all common carriers subject to its jurisdiction.

TABLE NO. 1.

*Showing Division of Construction Accounts for Steam Railroads for Valuation Purposes, as per I. C. C. Classification.*

Division	I. C. C. account number	Class
I. <i>Land Accounts</i> -----	2	Right of way and station grounds.
	3	Real estate.
II. <i>Track Accounts</i> -----	4	Grading.
	5	Tunnels.
	6	Bridges, trestles, and culverts.
	7	Ties.
	8	Rails.
	9	Frogs and switches.
	10	Track fastenings and other material.
	11	Ballast.
	12	Track laying and surfacing.
	13	Roadway tools.
	14	Fencing right of way.
	15	Crossings and signs.
	16	Interlocking and other signal apparatus.
	17	Telegraph and telephone lines.
		Stores and supplies.
	18	Station buildings and fixtures.
	19	General office buildings and fixtures.
III. <i>Building, Machinery and Miscellaneous Accounts.</i>	20	Shops, engine houses, and turn-tables.
	21	Shop machinery and tools.
	22	Water stations.
	23	Fuel stations.
	24	Grain elevators.
	25	Storage warehouses.
	26	Dock and wharf property.
	31	Miscellaneous structures.
IV. <i>Electrical Accounts</i> -----	27	Electric light plants.
	28	Electric power plants.
	29	Electric power transmission.
	30	Gas producing plants.
V. <i>Equipment Accounts</i> -----	37	Steam locomotives.
	38	Electric locomotives.
	39	Passenger train, cars.
	40	Freight train, cars.
	41	Work equipment.
	42	Floating equipment.
VI. <i>Overhead, Non-physical, etc., Accounts.</i>	1	Engineering.
	32	Transportation of men and material.
	33	Rent of equipment.
	34	Repairs of equipment.
	35	Earning and operating expense during construction.
	35½	Injuries to persons.
	36	Cost of road purchased.
	43	Law expenses.
	44	Stationery and printing.
	45	Insurance.
	46	Taxes.
	47	Interest and commissions.
	48	Other expenditures.

TABLE NO. 2.

*Showing Division of Construction Accounts for Electric Railroads for Valuation Purposes, as per I. C. C. Classification.*

Division	I. C. C. account number	Class
I. <i>Land Accounts</i> -----	2	Right of way.
	3	Other land used in electric railway operations.
II. <i>Track Accounts</i> -----	4	Grading.
	5	Ballast.
	6	Ties.
	7	Rails, rail fastenings, and joints.
	8	Special work.
	9	Underground construction.
	10	Paving.
	11	Tracklaying and surfacing.
	12	Roadway tools.
	13	Tunnels.
	14	Elevated structures and foundations.
	15	Bridges, trestles, and culverts.
	16	Crossings, fences, cattle guards, and signs.
	17	Interlocking and other signal apparatus. Stores and supplies.
III. <i>Buildings, Machinery and Miscellaneous Accounts.</i>	23	Dams, canals, and pipe lines.
	24	Power plant buildings.
	25	Substation buildings.
	26	General office buildings.
	27	Shops and carhouses.
	28	Stations, waiting rooms, and miscellaneous buildings.
	29	Docks and wharves.
	32	Shop equipment.
	33	Park and resort property.
IV. <i>Electrical Accounts</i> -----	18	Telegraph and telephone lines.
	19	Poles and fixtures.
	20	Underground conduits.
	21	Transmission system.
	22	Distribution system.
	30	Power plant equipment.
	31	Substation equipment.
V. <i>Equipment Accounts</i> -----	35	Cars.
	36	Locomotives.
	37	Electric equipment of cars.
	38	Other rail equipment.
	39	Miscellaneous equipment.
VI. <i>Overhead, Non-physical, etc., Accounts.</i>	1	Engineering.
	34	Cost of road purchased.
	40	Law expenses.
	41	Interest.
	42	Injuries and damages.
	43	Taxes.
	44	Miscellaneous.



The subdivisions shown in the two preceding tables were definitely established shortly before the beginning of the fiscal year under review, in the spring of 1913, though they had been followed in effect in a tentative way ever since the beginning of the organization. In the spring of 1913, however, the responsibility for all detail work performed by any division was definitely placed upon the expert in charge of that division. There is thorough and sincere cooperation everywhere, and any special knowledge acquired by one is available to all.

Employees in all divisions of the transportation section are constantly being called upon to handle the many varied engineering matters, in addition to the valuation work, that come up in connection with the transportation utilities of the state.

Thus, the engineering or appraisal features of—

Depot cases, go to the division of Buildings, Machinery, etc.

Crossings, etc., go to the division of Track Accounts.

Accidents involving track or roadway structures go to the division of Track Accounts.

New devices usually go to the division of Buildings, Machinery, etc.

In addition to the above, the division of land accounts is called on to make appraisals of watershed lands, water rights, easements and rights of way for various purposes, etc., in order to expedite the work of the sections of water or gas and electricity. Similarly, the division of buildings, machinery, etc., is called upon to fix values on buildings or machine shop layouts which may be desired in appraisals being made by one of the two other sections. Similarly, also, the section of gas and electricity is called upon to handle the electrical accounts involved in the valuation of steam or electric roads and to assist the hydraulic engineer in his occasional encounters of power lines or other electrical units.

#### WORK DONE DURING FISCAL YEAR.

The following main classes of work have occupied the attention of the engineering department during the last fiscal year:

1. Steam road valuations.
2. Electric road valuations.
3. Water utilities (valuations, rates, service, etc.).
4. Gas and electric utilities (valuations, rates, service, etc.).
5. Service bureau (transportation, only).
6. Miscellaneous hearings and investigations (mainly in connection with steam and electric roads).
7. Miscellaneous.

### I. STEAM AND ELECTRIC ROAD VALUATIONS—GENERAL.

In the Commission's last annual report the purposes and methods of this department's valuation work were discussed in some detail and it seems only necessary here to refer to that report. In view of the increasing importance, however, that such work is continually assuming, especially by reason of the Interstate Commerce Commission's activities in the valuation of all common carriers, the definitions of the values which this Commission is attempting to ascertain will again be given. It is understood that the Commission in valuation cases does not make findings of the ultimate or fair value of the properties of public utilities. This value must necessarily take into consideration many factors beyond the value of the mere physical property, such as past and prospective revenues and expenses, condition of franchises, and other things. The Commission rather confines itself to the determination of facts. The three important facts in valuation cases are first, the original book cost; second, the reproduction cost, and third, the reproduction cost less depreciation. This department in ascertaining these values has adhered to the following definitions:

The term "original cost" means the original book cost, and is defined as the actual expenditures chargeable to capital accounts, in accordance with the Interstate Commerce Commission's classifications, in cash or its equivalent in terms of cash, by the public utility for its operative property as of the date of the valuation.

The term "reproduction cost" is defined as the estimated cost in cash of acquiring the operative right of way and other operative real estate and of reproducing, in the condition in which it was acquired, the other physical property of the public utility as of the date of the valuation; to which are added overhead expenditures for engineering, law, interest, and other similar items.

The term "reproduction cost less depreciation" is defined as the reproduction cost less the diminution in the value of the physical elements of the property, due to use, age, obsolescence, inadequacy and other causes, this diminution being called "depreciation," and plus the increase in the value of the physical elements of the property, due to age and other causes, this increase being called "appreciation."

Below is a list of those steam and electric roads on which valuation work was done during the fiscal year ending June 30, 1914. Some of the electric road valuations have been prosecuted as a result of a general notice to the roads to file inventory and appraisal, but the main motive for making the electric road valuations at this time has been that these valuations might serve, each for its own road, as one of the important facts having bearing on an application for authority to issue bonds.

*Steam Road Valuations.*

1. Southern Pacific Company group.
2. Atchison, Topeka and Santa Fe group.
3. Ocean Shore Railroad Company.
4. Yosemite Valley Railroad Company.
5. McCloud River Railroad Company.
6. San Diego and Arizona Railway Company.
7. Mill Valley and Mt. Tamalpais Scenic Railway Company.
8. Crescent City Railway.
9. California Western Railroad and Navigation Company.
10. Nevada County Narrow Gauge Railroad Company.
11. Sugar Pine Railway Company.
12. San Diego and Southeastern Railway Company.
13. Camino, Placerville and Lake Tahoe Railway Company.
14. Ventura County Railway Company.
15. Los Angeles and San Diego Beach Railway Company.
16. Western Pacific Railway Company.
17. South San Francisco Belt Railway Company.
18. Other roads.

*Electric Road Valuations.*

19. Los Angeles Railway Corporation.
20. San Francisco-Oakland Terminal Railways.
21. Petaluma and Santa Rosa Railway Company.
22. San Francisco, Napa and Calistoga Railway Company.

It will be noticed that the service bureau has been mentioned. This bureau has been reporting to the rate department since March 1, 1914. Thus, the engineering department is relieved, with respect to steam and electric roads, of the main portion of rate and service matters. On the other hand, the rate department has no responsibility for rate and service matters covering water, gas and electric utilities, because the section of hydraulics and the section of gas and electricity of the engineering department handle these matters as well as the valuations and other engineering work proper.

The steam road valuations are proceeding in response to an action on the Commission's own initiative, taken on March 11, 1912, in sending to all steam roads in the state a "Notice to prepare and file inventory and appraisal of all physical property." Seventy-two of these notices were originally sent out under authority of section 20 of the Railroad Commission Act of 1911, and each road was assigned a case number. Consolidations either of properties or of case numbers have since then, however, reduced this seventy-two to fifty-two. Of these fifty-two roads there are now but six roads left from whom no valuation report, either partial or complete, has been received, and the total mileage of

these six roads is but 130.92, or approximately  $1\frac{1}{2}$  per cent of the total main track mileage of steam roads in the state. The Commission has been as lenient as possible in the matter of forcing any road to expedite unduly its work of inventory and appraisal.

Previous to the promulgation of these notices, the Commission had, on October 24, 1911, sent out to each road a "Notice of investigation and to produce copies of certain records"; and had followed this by General Order No. 14, approved December 12, 1911, prescribing the specifications to govern the preparation of these "certain records," which covered profiles and alignment maps to be used as a basis for the later work of inventory and appraisal.

As soon as feasible after the compliance on the part of any one steam road with the Commission's notices to produce records and to prepare and file inventory and appraisal, the engineering department proceeds to make a valuation report to the Commission. A copy of this is sent to the company and a date is set for a hearing in order that the Commission may make a finding on "original book cost," "reproduction cost new" and "reproduction cost less depreciation" for the operative property of the road, after the utility has had opportunity to introduce testimony. Later on the Commission hands down a decision.

We believe that the Commission's procedure in these valuation cases, and in fact in all cases where evidence is introduced at hearings by the Commission's departments or experts, is to a certain extent unique in its absolute fairness to all parties concerned. This department's valuation reports, for instance, before the Commission places any weight upon them, are turned over to the utility in question for its fullest scrutiny and criticism. When the hearing is held, the Commission's employees responsible for the work are placed on the stand and turned over to the company's representatives for cross-examination, and only after all the evidence in any case is available will the Commission make its decision. It seems to us difficult to improve upon this method.

The status of any valuation on which work has been started by the engineering department may thus in general be as follows:

1. Submitted to the Commission by the chief engineer, hearing held, decision handed down; or
2. Submitted to the Commission by the chief engineer; or
3. Report of various assistant engineers completed but not yet assembled and transmitted to the Commission by the chief engineer; or
4. Field work done and assistant engineers compiling the results of their inspection; or
5. Field work entered upon by one or more divisions.



Above five groups have next been combined into three and tables have been prepared to show the status of the work of appraising all the steam and electric mileage of the state. These tables will be found to include the following four electric roads, which are the only electric roads upon which any considerable work has been done:

Los Angeles Railway Corporation.

San Francisco-Oakland Terminal Railways.

Petaluma and Santa Rosa Railway Company.

San Francisco, Napa and Calistoga Railway.

The following three tables are made up out of the above five groups as follows:

Table I. Consists of Group No. 1 above.

Table II. Consists of Groups Nos. 2 and 3 above.

Table III. Consists of Groups Nos. 4 and 5 above.

TABLE

*Steam Road Valuations Completed by this Department and*

Date	Decision number	Name of owner	Valuation units
April 30, 1913	618	Stockton Terminal and Eastern Railroad Company	Entire line
May 2, 1913	636	Iron Mountain Railway Company	Entire line
May 2, 1913	637	Yreka Railroad Company	Entire line
May 6, 1913	640	Lake Tahoe Railway and Transportation Company.	Placer County Nevada County Entire line
May 6, 1913	644	Pacific Coast Railway Company	Main line, San Luis Obispo County. Main line, Santa Barbara County. Suey branch, Santa Barbara County Guadalupe branch, Santa Barbara County Entire line
May 7, 1913	646	Pajaro Valley Consolidated Railroad Company.	Main line, Santa Cruz County. Main line, Monterey County. Salinas branch, Monterey County. Buena Vista branch, Monterey Co. Alisal branch, Monterey County. Entire line
May 7, 1913	647	Amador Central Railroad Company	Entire line
Total for fiscal year ending June 30, 1913			
July 29, 1913	836	Tonopah and Tidewater Railroad Company.	Entire line
Sept. 30, 1913	978	Sacramento Valley and Eastern Railway	Entire line
Dec. 27, 1913	1170	Sierra Railway Company of California.	Main line, Stanislaus County. Main line, Tuolumne County. Angels branch, Tuolumne County. Angels branch, Calaveras County. Entire line
Dec. 31, 1913	1185	California Western Railroad and Navigation Company.	Main line Pudding Creek branch Entire line
Jan. 28, 1914	1236	Camino, Placerville and Lake Tahoe Railroad Company	Entire line
March 30, 1914	1382	Los Angeles and San Diego Beach Railway Company	Entire line
April 4, 1914	1406	San Diego and Arizona Railway Company.	San Diego County Imperial County Entire line
April 4, 1914	1400	Ventura County Railway Company	Main line Round Mountain branch Entire line
March 30, 1914	1384	Nevada County Narrow Gauge Railroad Company.	Nevada County Placer County Entire line

1.

*Decisions Handed Down by the Commission, up to June 30, 1914.*

Miles main track	Owner's valuation			Commission's valuation		
	Original cost	Reproduction value	Present value	Original cost	Reproduction value	Present value
15.23	\$259,213 58	\$267,191 42	\$252,950 01	\$213,059 13	\$213,267 46	\$199,717 83
10.65	\$291,000 00	\$301,022 16	\$227,803 77		\$301,022 16	\$227,803 77
7.37	\$129,343 77	\$130,812 80	\$105,787 17		\$133,340 80	\$90,431 07
13.50				\$595,128 69	\$431,882 89	\$301,920 70
1.20				35,664 53	21,838 66	13,109 26
14.70	\$375,074 99	\$378,801 53	\$439,266 92	\$630,793 22	\$453,721 55	\$315,029 96
39.28					\$1,009,116 57	\$805,994 22
36.71					643,618 80	481,986 52
11.20					187,349 37	150,569 24
8.43					130,758 89	91,096 18
95.62		\$2,099,946 77	\$1,880,138 98	\$2,797,351 79	\$1,970,843 63	\$1,529,646 16
.80				\$27,218 48	\$44,243 75	\$35,449 97
26.45				330,582 61	495,809 03	347,268 69
2.25				43,084 05	48,881 37	41,372 32
5.17				63,225 34	82,001 49	62,826 86
6.79				93,344 22	120,513 93	89,314 93
41.45	\$595,808 97	\$724,099 87	\$498,224 14	\$587,434 70	\$791,539 60	\$576,232 77
11.84		\$436,801 58	\$404,629 84		\$389,843 23	\$333,920 94
196.87		\$4,338,676 13	\$3,808,800 83		\$4,253,578 43	\$3,272,782 50
144.60	\$3,573,673 82	\$2,809,146 36	\$2,724,532 36	\$2,772,728 38	\$2,650,143 35	\$2,304,075 63
14.83	\$564,085 18	\$554,009 08	\$498,210 48	\$549,007 17	\$475,092 04	\$424,678 07
19.81					\$322,728 88	\$250,981 92
37.00					1,322,957 79	1,170,554 72
9.90					662,886 87	655,393 46
9.57					389,015 86	355,861 90
76.28		\$4,667,090 76	\$3,940,530 27		\$2,697,589 40	\$2,432,792 00
29.55					\$1,656,661 18	\$1,524,257 60
3.22					68,238 87	60,507 17
42.77		\$1,876,860 23	\$1,759,745 39		\$1,724,900 05	\$1,584,764 77
8.05		\$137,906 58	\$115,074 67		\$173,862 13	\$135,783 83
15.75		\$901,379 16	\$473,474 71		\$554,589 77	\$431,015 91
14.26				\$891,738 65	\$1,281,320 07	\$1,239,300 51
10.19				300,965 75	275,833 40	275,805 98
24.45	\$1,991,243 08	\$3,284,634 20	\$3,251,207 02	\$1,192,704 40	\$1,557,155 47	\$1,535,106 49
10.38					\$208,433 84	\$173,199 78
6.19					99,432 55	77,612 87
16.57	\$222,450 60	\$345,389 00	\$306,802 00		\$307,866 39	\$250,812 65
16.79					\$483,181 14	\$390,382 38
3.62					199,519 53	182,066 85
20.41		\$852,929 00	\$852,929 00		\$682,700 67	\$572,449 24

TABLE

*Steam Road Valuations Completed by this Department and*

Date	Decision number.	Name of owner	Valuation units
March 30, 1914	1383	San Diego and Southeastern Railway Company.	Southern Division, main line..... Southern Division, Coronado branch Southern Division, Sweetwater branch Southern Division, connecting tracks Eastern Division, main line..... Entire line .....
June 22, 1914	1603	South San Francisco Belt Railway..	Entire line .....
June 29, 1914	1619	Santa Maria Valley Railroad Company .....	Entire line .....
June 29, 1914	1620	Ocean Shore Railroad Company ..	Main line, San Francisco County.... Main line, San Mateo County..... Main line, Santa Cruz County..... Entire line .....
		Total for fiscal year ending June 30, 1914 .....	.....
		Grand total to date—June 30, 1914..	.....

NOTE.—"Commission's valuation" is here shown exclusive of non-operative property.

NOTE.—No decision yet handed down by Commission for any electric road.

NOTE.—Reproduction and present value shown on Iron Mountain Railway Company being that the owner made no complete valuation but accepted the engineering department

NOTE.—Mileages are correct as of the date of the engineering department's valuation,



1—Continued.

*Decisions Handed Down by the Commission, up to June 30, 1914.*

Miles main track	Owner's valuation			Commission's valuation		
	Original cost	Reproduction value	Present value	Original cost	Reproduction value	Present value
18.12	-----	\$1,146,428 94	\$970,845 68	-----	\$576,870 37	\$453,189 33
21.00	-----			-----	453,118 21	343,886 89
7.88	-----			-----	151,942 12	112,646 66
1.22	-----			-----	12,733 02	7,856 54
25.32	-----	1,043,174 75	926,810 19	-----	1,091,210 89	965,174 78
73.54	-----	\$2,189,603 69	\$1,807,655 87	-----	\$2,285,874 61	\$1,912,754 20
1.43	\$62,791 40	\$62,791 40	\$47,286 06	-----	\$69,064 42	\$56,208 08
17.80	\$236,194 39	\$236,194 39	\$236,194 39	\$234,966 11	\$232,150 98	\$216,509 07
7.49	-----	-----	-----	\$1,596,464 13	\$1,393,873 34	\$1,346,993 40
30.66	-----	-----	-----	2,944,431 41	2,691,807 46	2,578,560 00
15.55	-----	-----	-----	632,772 30	726,402 99	701,766 00
53.70	\$5,778,403 93	\$6,387,820 75	\$5,041,913 58	\$5,373,667 84	\$4,812,083 79	\$4,627,319 40
510.18	-----	\$21,005,754 60	\$22,145,645 80	-----	\$18,222,984 07	\$16,514,268 77
707.05	-----	\$28,344,430 73	\$25,954,446 63	-----	\$22,476,532 50	\$19,787,051 27

while "owner's valuation" frequently includes non-operative property.

under "owner's valuation" are set at same figure as engineering department; the reason  
ment's figures before the hearing was held.  
generally June 30, 1912.

TABLE II.

*List of Steam and Electric Road Valuations Nearly Completed on June 30, 1914.*

Order No.	Name of owner	Valuation	Miles main tracks
*145	Petaluma and Santa Rosa Ry. Co.	Entire	31.59
153	California, Arizona and Santa Fe Railway Co. (A. T. & S. F. Ry. Co., Parker branch).	San Bernardino County Riverside County Entire line	73.71 9.62 85.33
159	Laton and Western R. R. Co. (A. T. & S. F. Ry. Co., Lanare branch).	Fresno County Kings County Entire line	10.75 6.82 17.57
169	Diamond and Caldor Railway.	Entire line	33.06
176	Mill Valley and Mt. Tamalpais Scenic Railway.	Main line, Marin County Branch line, Marin County Entire line	8.18 2.40 10.58
204	Southern Pacific Company.	El Centro to Seeley	8.74
207	Sugar Pine Railway Co.	Entire line	14.15
411	Crescent City Railway Co.	Entire line	6.49
*894	Los Angeles Railway Corporation.	Entire line	365.98
205	Southern Pacific R. R. Co.	Vol. 1 Eng. Dept. Val., S. J. Division	.527
196	Central Pacific Railway Co.	Vol. 2 Eng. Dept. Val., S. J. Division	26.406
205	Southern Pacific R. R. Co.	Vol. 3 Eng. Dept. Val., S. J. Division	27.689
215	Southern Pacific R. R. Co.	Vol. 4 Eng. Dept. Val., S. J. Division	29.368
205	Southern Pacific R. R. Co.	Vol. 5 Eng. Dept. Val., S. J. Division	25.537
205	Southern Pacific R. R. Co.	Vol. 6 Eng. Dept. Val., S. J. Division	24.139
205	Southern Pacific R. R. Co.	Vol. 7 Eng. Dept. Val., S. J. Division	.034
	Hanford and Summit Lake Ry. Co.	Vol. 8 Eng. Dept. Val., S. J. Division	35.191
200	Central Pacific Ry. Co. (formerly N. & C. Ry.)	Vol. 9 Eng. Dept. Val., S. J. Division	65.324
205	Southern Pacific R. R. Co.	Vol. 10 Eng. Dept. Val., S. J. Division	36.267
205	Southern Pacific R. R. Co.	Vol. 11 Eng. Dept. Val., S. J. Division	82.694
205	Southern Pacific R. R. Co.	Vol. 12 Eng. Dept. Val., S. J. Division	13.372
205	Southern Pacific R. R. Co.	Vol. 13 Eng. Dept. Val., S. J. Division	50.064
205	Southern Pacific R. R. Co.	Vol. 14 Eng. Dept. Val., S. J. Division	8.845
200	Central Pacific Ry. Co. (formerly N. & C. Ry.)	Vol. 15 Eng. Dept. Val., S. J. Division	76.538
205	Southern Pacific R. R. Co.	Vol. 16 Eng. Dept. Val., S. J. Division	20.394
207	Southern Pacific R. R. Co.	Vol. 17 Eng. Dept. Val., S. J. Division	14.948
205	Southern Pacific R. R. Co.	Vol. 18 Eng. Dept. Val., S. J. Division	8.255
	Hanford and Summit Lake Ry. Co.	Vol. 19 Eng. Dept. Val., S. J. Division	7.090
205	Southern Pacific R. R. Co.	Vol. 20 Eng. Dept. Val., S. J. Division	.080
205	Southern Pacific R. R. Co.	Vol. 21 Eng. Dept. Val., S. J. Division	52.845
200	Central Pacific Ry. Co. (formerly N. & C. Ry.)	Vol. 22 Eng. Dept. Val., S. J. Division	1.041
196	Central Pacific Railway Co.	Vol. 23 Eng. Dept. Val., S. J. Division	13.589
205	Southern Pacific R. R. Co.	Vol. 24 Eng. Dept. Val., S. J. Division	43.168
205	Southern Pacific R. R. Co.	Vol. 25 Eng. Dept. Val., S. J. Division	63.684
205	Southern Pacific R. R. Co.	Vol. 26 Eng. Dept. Val., S. J. Division	16.761
184	Porterville Northeastern Ry. Co.	Vol. 27 Eng. Dept. Val., S. J. Division	15.860
		Total of San Joaquin Division	759.750
195	Central Pacific Ry. Co. (formerly C. N. E. Ry. Co.)	Vol. -- Eng. Dept. Val., Shasta Division	67.45
		Grand total	1,512.17

\*Electric roads.

NOTE.—Mileages are correct as of the date of the engineering department's valuation.

TABLE III.

*List of Steam and Electric Road Valuations on which this Department Has Done Some Preliminary Work as of June 30, 1914.*

Case No.	Name of owner	Valuation units	Miles main tracks
152	Atchison, Topeka and Santa Fe Ry. Co.	Vol. 7 Eng. Dept. Val., Valley Division	21.14
152	Atchison, Topeka and Santa Fe Ry. Co.	Vol. 5 Eng. Dept. Val., Valley Division	26.40
152	Atchison, Topeka and Santa Fe Ry. Co.	Vol. 3 Eng. Dept. Val., Valley Division	26.90
152	Atchison, Topeka and Santa Fe Ry. Co.	Vol. 10 Eng. Dept. Val., Valley Division	1.89
152	Atchison, Topeka and Santa Fe Ry. Co.	Vol. 6 Eng. Dept. Val., Valley Division	40.40
152	Atchison, Topeka and Santa Fe Ry. Co.	Vol. 1 Eng. Dept. Val., Valley Division	41.46
152	Atchison, Topeka and Santa Fe Ry. Co.	Vol. 4 Eng. Dept. Val., Valley Division	33.37
152	Atchison, Topeka and Santa Fe Ry. Co.	Vol. 12 Eng. Dept. Val., Valley Division	22.54
152	Atchison, Topeka and Santa Fe Ry. Co.	Vol. 2 Eng. Dept. Val., Valley Division	21.90
152	Atchison, Topeka and Santa Fe Ry. Co.	Vol. 11 Eng. Dept. Val., Valley Division	43.80
153	California, Arizona and Santa Fe Ry. Co. (A. T. & S. F. Ry., Wahtoke branch)		
	(A. T. & S. F. Ry., Oakdale branch)	Reedley to Piedra.....	16.27
		Riverbank to Oakdale.....	6.32
175	McCloud River Railroad Co.	Entire line .....	46.10
212	Yosemite Valley R. R. Co.	Entire line .....	79.17
*321	San Francisco-Oakland Terminal Rys.	Entire line .....	257.50
*322	San Francisco, Napa and Calistoga Ry.	Entire line .....	41.60
211	Western Pacific Railway Co.	Entire line .....	390.62
205	Southern Pacific R. R. Co.	Vol. 28 Eng. Dept. Val., L. A. Division	89.724
205	Southern Pacific R. R. Co.	Vol. 29 Eng. Dept. Val., L. A. Division	12.326
199	Inter-California Railway	Vol. 30 Eng. Dept. Val., L. A. Division	44.407
205	Southern Pacific R. R. Co.	Vol. 31 Eng. Dept. Val., L. A. Division	38.136
205	Southern Pacific R. R. Co.	Vol. 31-A Eng. Dept. Val., L. A. Division	25.056
205	Southern Pacific R. R. Co.	Vol. 31-B Eng. Dept. Val., L. A. Division	27.737
205	Southern Pacific R. R. Co.	Vol. 32 Eng. Dept. Val., L. A. Division	20.644
205	Southern Pacific R. R. Co.	Vol. 33 Eng. Dept. Val., L. A. Division	10.042
205	Southern Pacific R. R. Co.	Vol. 34 Eng. Dept. Val., L. A. Division	2.206
205	Southern Pacific R. R. Co.	Vol. 35 Eng. Dept. Val., L. A. Division	26.649
205	Southern Pacific R. R. Co.	Vol. 36 Eng. Dept. Val., L. A. Division	4.282
205	Southern Pacific R. R. Co.	Vol. 37 Eng. Dept. Val., L. A. Division	14.139
205	Southern Pacific R. R. Co.	Vol. 38 Eng. Dept. Val., L. A. Division	5.914
205	Southern Pacific R. R. Co.	Vol. 39 Eng. Dept. Val., L. A. Division	13.715
205	Southern Pacific R. R. Co.	Vol. 40 Eng. Dept. Val., L. A. Division	4.832
205	Southern Pacific R. R. Co.	Vol. 41 Eng. Dept. Val., L. A. Division	17.399
205	Southern Pacific R. R. Co.	Vol. 43 Eng. Dept. Val., L. A. Division	21.583
205	Southern Pacific R. R. Co.	Vol. 44 Eng. Dept. Val., L. A. Division	14.341
205	Southern Pacific R. R. Co.	Vol. 45 Eng. Dept. Val., L. A. Division	2.952
205	Southern Pacific R. R. Co.	Vol. 46 Eng. Dept. Val., L. A. Division	11.716
205	Southern Pacific R. R. Co.	Vol. 47 Eng. Dept. Val., L. A. Division	15.348
205	Southern Pacific R. R. Co.	Vol. 48 Eng. Dept. Val., L. A. Division	11.703
205	Southern Pacific R. R. Co.	Vol. 49 Eng. Dept. Val., L. A. Division	10.079
205	Southern Pacific R. R. Co.	Vol. 50 Eng. Dept. Val., L. A. Division	93.224
205	Southern Pacific R. R. Co.	Vol. 51 Eng. Dept. Val., L. A. Division	6.079
205	Southern Pacific R. R. Co.	Vol. 52 Eng. Dept. Val., L. A. Division	33.068
205	Southern Pacific R. R. Co.	Vol. 53 Eng. Dept. Val., L. A. Division	10.763
205	Southern Pacific R. R. Co.	Vol. 54 Eng. Dept. Val., L. A. Division	10.698
205	Southern Pacific R. R. Co.	Vol. 55 Eng. Dept. Val., L. A. Division	2.552
205	Southern Pacific R. R. Co.	Vol. 56 Eng. Dept. Val., L. A. Division	6.522
205	San Bernardino and Redlands R. R. Co.	Vol. 57 Eng. Dept. Val., L. A. Division	7.203
205	Southern Pacific R. R. Co.	Vol. 58 Eng. Dept. Val., L. A. Division	17.825
205	Southern Pacific R. R. Co.	Vol. 59 Eng. Dept. Val., L. A. Division	57.785
205	Southern Pacific R. R. Co.	Vol. 60 Eng. Dept. Val., L. A. Division	35.349
205	Southern Pacific R. R. Co.	Vol. 61 Eng. Dept. Val., L. A. Division	15.130
		Total for Los Angeles division.....	741.128
		Grand total .....	1,858.51

\*Electric roads.

Mileages above subject to revision to correspond to the date of the valuation which has not yet been fixed in all cases.

## RESUME.

A resume of the foregoing three tables follows:

TABLE I.

List of valuations of transportation companies completed by this department in which a decision has been handed down by the Commission:

Steam roads, 707.05 miles main track, involving, as far as the Commission's figures are concerned, a total reproduction value of \$22,430,843.76 and a total present value of \$19,735,685.02. This table shows that since June 30, 1913, 510.18 miles of road valuation has been entirely disposed of, with a total reproduction value of \$18,177,265.33 and a total present value of \$16,462,902.22 (Commission's figures).

Electric roads, none.

TABLE II.

List of valuations of transportation companies on which the work has been completed or practically completed by this department, but in which a decision has not been handed down by the Commission:

Steam roads, 1,114.60 miles main track.

Electric roads, 397.57 miles main track.

TABLE III.

List of valuations of transportation companies on which the work has been started by this department, but which are not yet very far along:

Steam roads, 1,559.41 miles main track.

Electric roads, 299.10 miles main track.

	Miles main track
Grand total Tables I, II and III (1914) .....	4,077.73
Grand total Tables I, II and III (1913) .....	2,466.83
Progress during year .....	1,610.90
<i>Total Mileage in California June 30, 1913.</i>	
Steam roads (approximately) .....	8,410.00
Electric roads (approximately) .....	2,560.00
Total (approximately) .....	10,970.00

It is not considered that a detailed discussion of the work done by this department in connection with the valuation of each of the individual roads enumerated in the foregoing tables lies within the scope of this report. In all cases where the Commission has handed down its findings the substantial facts will be found in the printed decisions, the numbers of which we give in Table I.

Since, however, the lines of the Southern Pacific Company, with its 4,193 miles of road in California, constitute by far the largest single unit of this department's valuation activities, it seems appropriate to state shortly what has been done on that property.



In last year's annual report there appears a very complete statement of the Southern Pacific Company mileage, operating divisions, corporate affiliations, etc. At that time there was in course of preparation in this department a detail index to the valuation units which would ultimately include the entire operated mileage of the Pacific system of the Southern Pacific Company in the State of California. This detail index was completed in July, 1913, and reveals the fact that there will ultimately be some 230 volumes of valuations, distributed as follows:

Operating division	Miles main track	Approximate number of volumes
San Joaquin division -----	759.750	27
Los Angeles division -----	741.128	34
Western division -----	635.424	55
Sacramento division -----	612.191	45
Coast division -----	600.296	39
Stockton division -----	487.875	24
Salt Lake division -----	108.049	2
Shasta division -----	247.994	4
Totals -----	4,192.707	230

The index was so prepared that no one valuation includes within its limits a mileage lying in more than one operating division, or in more than one county, or owned by more than one of the ten affiliated corporations not common to both main and branch lines. The object which was kept in mind in planning this index was to reduce to the simplest possible procedure the task of grouping the valuations. Each unit will be plainly labeled to show corporate ownership, county, main or branch line, first or second track and operating division. Totals can then be struck off for any conceivable purpose which may develop in the future without any further apportionment.

The mileages shown are of course correct, as of one date only, namely, June 30, 1912. If the valuations of the succeeding operating divisions of the Southern Pacific Company are to be made as of succeeding June 30ths it will be necessary to make such changes as will bring these mileages up to date. There are constantly being made line changes which involve new equations of engineer stations; line changes and resurveys which involve equations of mileage, etc., as well as extensions, etc.

Thus far valuation forms have been received from the Southern Pacific Company covering four of its eight operating divisions in California. These four divisions are, San Joaquin, Los Angeles, Sacramento and Western. On the San Joaquin division there were submitted three inventories and appraisals complete as to original cost but not touched as to reproduction value and present value further

than is done by the statement that all three values are identical for roads constructed as recently as these three have been.

None of the valuation units of the Southern Pacific Company's lines have as yet definitely been passed upon by the Commission. A number of serious and important questions are involved in these valuations, and since the first of the Commission's decisions in a Southern Pacific valuation case will set a precedent, both the company and the Commission are anxious to have the problems considered from all possible angles.

The valuation of the Nevada and California Railway, a Southern Pacific branch line from Mojave to Owenyo, is now awaiting the Commission's decision.

The valuation of this road is perhaps the most important one which the engineering department has made at this time. This work opened up at once practically all of the moot points of importance which will come up in valuation work on transportation companies in this state. These points had to be settled first tentatively by the engineering department before it could proceed with its valuation. They will have to be settled again by the Commission between the date of the hearing and the date on which the decision is finally handed down, and it is quite probable that they will have to be settled again by the courts. Until they are settled, at least by the Commission, it will not be economical for the engineering department to proceed to the finishing up completely of appraisals of any other units of the Southern Pacific Company's property. The main point under dispute is in connection with the charges for transportation of men and material; other points involving large amounts of money come up in connection with the charges for interest during construction and with the earnings and operating expenses during construction.

The Commission is also face to face in this case with such fundamental questions as the proper treatment of depreciation, abandoned property, operative and non-operative property, actual cost versus book charges, "railroad value" of rights of way and other items.

This department has also taken up during the past year the valuation of the Atchison, Topeka and Santa Fe California lines. What valuation work has been done on other and smaller systems of steam roads will be evident from an inspection of the tables given heretofore.

The electric road valuations are proceeding mainly in connection with applications for authority to issue securities. However, the Commission, on October 17, 1912, sent a notice to prepare and file inventory and appraisal of all physical property to eighteen electric roads in the state. These were mainly roads which were not confined in their operations within the boundaries of a single municipality. Two additional roads received these notices, making a total of twenty val-

uation cases. Consolidations either of properties or of case numbers have reduced these twenty cases to fifteen. Of these fifteen, six roads have filed copies of a complete inventory and appraisal. On the three roads on which the engineering department did practically all of its work for the year on electric road valuations, the motive for the valuations was an application for authority to issue securities.

The most important of these valuations, and, in fact, one of the most important pieces of work yet handled by this department, was the appraisal of the Los Angeles Street Railway system.

On January 9, 1914, a hearing was held in Los Angeles on Application No. 894, being the application of the Los Angeles Railway Corporation and the City Railway of Los Angeles for authority to transfer property and issue stocks and bonds. At this hearing the company introduced in support of its contentions as to the value of its property, a valuation report which had been prepared for it. The city of Los Angeles intervened and presented a valuation report which had been prepared under the direction of its department of public works some time before. The Commission instructed its engineering department to make an independent valuation. This at once became the most important single valuation case which had come before the Commission up to that time, save for the Nevada and California Railway, upon the decision in which case much other work will hinge.

The engineering department commenced work on this valuation on January 30, 1914, in a strenuous attempt to get the valuation completed and transmitted in time for an examination by the Los Angeles Railway Corporation before the hearing which had been set for May 1, 1914. The company's valuation totaled \$26,030,865.00 at the time of the first hearing. This was later revised to a total of \$26,350,843.00. The valuation presented by the city of Los Angeles totaled \$19,762,389.00. The valuation prepared by this department totaled \$22,109,700.00. Above figures all refer to reproduction cost, new. The differences in reproduction cost less depreciation were even greater since the city's valuation, which was already the lowest, showed a condition per cent very much lower than that applied either by the company or by this department. At the hearing held in Los Angeles on May 1, 1914, the Commission's engineers were put on the stand in order to make clear the methods which had been followed in this work. It was admitted at the hearing by both the company's and the city's representatives that the department's valuation appeared to be absolutely fair and unbiased, but nevertheless there might have crept into the work either small omissions of quantities or unit prices unreasonably low. As a result of the investigation which the company made into this department's work a conference was held and certain small



changes were agreed upon, modifying in their total the original figures by almost exactly one per cent.

The San Francisco-Oakland Terminal Railway also has come before the Commission for authority to issue bonds. A valuation of this property was ordered by the Commission and this department is now engaged in this work.

The Petaluma and Santa Rosa Railway Company submitted its valuation to the Commission on May 1, 1913. Work was commenced on October 6, 1913, and finished in the spring of 1914. The engineering department will shortly transmit a complete valuation report.

The San Francisco, Napa and Calistoga Railway Company submitted its valuation on October 6, 1913, and the engineering department started work on May 18, 1914. The work on this road is complete save for the electrical accounts.

Other electric roads which have received some little attention in connection with valuation matters by this department are—

Northern Electric Railway Company.

Oakland, Antioch and Eastern Railway Company.

Pacific Electric Railway Company.

Visalia Electric Railway Company.

United Railroads of San Francisco.

## II. WATER UTILITIES.

The section of hydraulics of the engineering department handles the detail of all matters which come before the Commission in connection with water utilities save those which involve financial history and status in connection with bond applications.

The work of this section may be divided into the following three groups:

- (1) Valuations.
- (2) Rates.
- (3) Service.

Valuations are in general being made in connection with rate cases or in connection with applications to issue securities or to sell or make other transfer of property.

Rate matters may come up through formal or informal complaints or through applications.

Service matters may similarly come up through formal or informal complaints or through applications. With these are classed matters dealing with rules and regulations, practices, etc.

The work of the section of hydraulics during the year may be tabulated along the lines suggested above and this has been done.

Table 1 takes up those water utilities in connection with which conclusions as to value were formulated. These number 54 corporations,



and the values involved reached the surprising grand total of over \$12,000,000.00, and with but two small exceptions, amounting to but \$30,770.00, all of this value was based on detailed field inspection and inventory. One valuation involves nearly three million and three others involved over one million dollars each. All values shown are based on figures of reproduction value new compiled by this section for the reason that the decisions generally contain no findings as to fact in reference to "cost to reproduce new" or so-called "present value." This is because correct findings as to rates, service, etc., may be reached without reducing to a specific amount of dollars and cents the gist of all testimony as to value which may have been introduced at the hearing. In the valuation cases which are handled by the transportation section, on the other hand, the Commission makes definite findings of fact with respect to the above elements of value, consequently the figures of that section are never final till the decision is handed down by the Commission.

Table 2 takes up those water utilities in connection with which investigation was made into service, practices, rules and regulations, etc.

Table 3 takes up those water utilities in connection with which investigation was made into hydraulic yields or into service capacities.

Table 4 takes up those water utilities in connection with which rate computations were prepared.

Above four tables take up all matters which required formal attention, *i. e.*, in which hearing before a commissioner was held and a formal decision rendered or is to be rendered. In many of these cases testimony had to be given at the hearings and the figures which had been compiled had to be defended from the attacks of interested parties. In most of them formal report was made to the Commission. Field inspection was required in many cases, and in matters of field and service capacity complicated and extremely technical computations were made.

## WATER

## TABLE

## Valuations Made by Section of Hydraulics

Name of owner	Application or case
Santa Clara Water and Irrigation Co.....	Application 136.....
Palermo Land and Water Co.....	Application 337.....
J. F. Jackson and Ida H. Jackson.....	Application 385.....
Hugh A. Boyle.....	Application 404.....
Covina City Water Co.....	Application 417.....
Conservative Realty Co.....	Application 494.....
City of San Diego.....	Application 547.....
Campbell Water Co.....	Application 588.....
Schmeiser Manufacturing Co.....	Application 594.....
North Coast Water Co.....	Application 624.....
Ventura County Power Co.....	Application 635.....
C. Edgar Smith, Sunnyside Heights.....	Application 650.....
J. M. Vincent, Town of Ceres.....	Application 671.....
Baldwin Park Domestic Water Co.....	Application 747 and Case 423.....
J. A. Murray and Ed Fletcher.....	Application 756.....
Huntington Beach Company.....	Application 791.....
Percy J. Cook.....	Application 811.....
Backus Water Plant.....	Application 813.....
Los Vergels Land and Water Co.....	Application 819.....
San Dimas Water Co.....	Application 835.....
Eureka Water Company.....	Application 843.....
J. A. Gun and F. G. Gun.....	Application 888.....
Bolinas Water and Power Co.....	Application 896.....
Wilmington Water Co.....	Application 1035 and 903.....
Reedley Water Works.....	Application 909.....
Excelsior Water and Mining Co.....	Application 934.....
Various Glendale Water Companies.....	Application 936.....
J. W. Bloom.....	Application 953.....
Monterey County Water Works.....	Application 950 and Case 500.....
Fort Bragg Water Co.....	Application 958.....
Los Altos Water Co.....	Application 976.....
Garden Grove Water Co.....	Application 1015.....
Sanger Water Works.....	Application 1041.....
Santa Monica Water Co.....	Application 1047.....
Sawtelle Water Co.....	Application 1050.....
Pacific Building Co.....	Application 1060.....
Sunnyvale Water Co.....	Application 1064.....
Campbell Water Co.....	Application 1065.....
Crocker Land Co.....	Application 1085.....
Ben Lomond Water Works.....	Application 1098.....
Sierra Madre Water Co.....	Application 1101.....
Claremont Domestic Water Co.....	Application 1144.....
Crocker Estate.....	Application 1203.....
Crocker-Huffman Land and Water Co.....	Cases 299, 310, 330, 332, 340 and 427.....
San Geronio Water Co. and Beaumont Land and Water Co.....	Application 1264 and Case 308.....
Petaluma Power and Water Co.....	Case 368.....
Eagle Rock Water Co.....	Case 435.....
Sweetwater Water Co. (portion of system).....	Case 472.....
San Jose Water Co.....	Case 476.....
Madera Canal and Irrigation Co.....	Case 498.....
San Jose Water Co. at Saratoga.....	Case 535.....
Encanto Mutual Water Co.....	Case 547.....
South Feather Land and Water Co.....	Case 558.....

NOTE.—Reproduction value, new, of above table shows the estimates made by the hydraulic section of the engineering department and as such are not yet official.

NOTE.—Above table covers formal matters only. For list of informal complaints handled by hydraulic section of engineering department, see Table No. 5.

## UTILITIES.

No. 1:

and Reported During Fiscal Year 1914.

Purpose	Reproduction value, new	Decision
Rates -----	\$242,783 00	April 22, 1914
Rates -----	327,170 00	December 31, 1913.
Rates -----	6,252 00	October 8, 1913.
Rates -----	10,471 00	September 22, 1913.
Rates -----	101,012 00	December 31, 1913.
Rates -----	72,857 00	October 14, 1913.
Rates -----	2,993,049 00	April 28, 1914.
Stock issue -----	18,297 00	October 31, 1913.
Sale -----	5,407 00	August 15, 1913.
Rates -----	131,800 00	December 3, 1913.
Rates -----	55,736 00	April 6, 1914.
Rates -----	9,242 00	February 24, 1914.
Rates -----	7,625 00	October 16, 1913.
Rates -----	19,996 00	Pending.
Rates -----	25,447 00	December 31, 1913.
Rates -----	93,336 00	Pending.
Sale -----	7,505 00	November 11, 1913.
Sale -----	8,388 00	November 21, 1913.
Mortgage and stock issue -----	90,780 00	November 21, 1913.
Bonds -----	233,357 00	December 13, 1913.
Sale -----	286,815 00	March 23, 1914.
Mortgage -----	17,270 00	February 17, 1914.
Rates -----	8,768 00	April 28, 1914.
Stock issue—public convenience -----	13,500 00	January 22, 1914.
Sale -----	19,240 00	January 27, 1914.
Rates -----	512,721 00	March 19, 1914.
Sale -----	239,152 00	May 18, 1914.
Stock issue—sale -----	30,024 00	February 17, 1914.
Rates -----	1,420,000 00	Pending.
Valuation -----	47,470 00	Pending.
Rates -----	35,735 00	March 28, 1914.
Rates -----	4,860 00	Pending.
Sale -----	11,558 00	April 15, 1914.
Bond issue -----	374,955 00	May 23, 1914.
Bond issue -----	35,000 00	April 11, 1914.
Sale -----	74,730 00	April 15, 1914.
Sale -----	11,595 00	April 25, 1914.
Sale and stock issue -----	18,297 00	May 5, 1914.
Rates -----	17,639 00	Pending.
Service and rates -----	7,535 00	June 2, 1914.
Sale -----	114,397 00	Pending.
Rates -----	45,964 00	Pending.
Appraisalment -----	36,043 00	Pending.
Rates and practices -----	1,470,316 00	Pending.
Rates and practices -----	204,937 00	Aug. 15, 1913, and pending.
Service -----	272,000 00	November 5, 1913.
Rates -----	132,898 00	December 13, 1913.
Rates and service -----	7,300 00	January 30, 1914.
Rates -----	1,639,527 00	May 22, 1914.
Facilities, service and equipment -----	157,710 00	December 5, 1913.
Service -----	24,210 00	June 17, 1914.
Rates and service -----	37,754 00	March 28, 1914.
Rates and service -----	330,186 00	June 30, 1914.
Total -----	\$12,120,616 00	

## WATER

## TABLE

*Service, Practices, Rules and Regulations, etc.,*

Name of owner	Application or case
San Geronio Water Co. and Beaumont Land and Water Co.	Cases 275, 280 and 308
Crocker-Huffman Land and Water Co.	Cases 299, 310, 330, 332, 340 and 427
East Side Canal and Irrigation Co.	Cases 298 and 309
Soledad Land and Water Co.	Case 361
Petaluma Power and Water Co.	Case 363
Hugh A. Boyle	Case 373
Madera Canal and Irrigation Co.	Cases 418 and 498
Bear Gulch Water Co.	Case 419
Baldwin Park Domestic Water Co.	Case 423
Sutter Butte Canal Co.	Case 426
Inglewood Water Co.	Cases 437 and 553
Peoples Water Co.	Case 442
San Lorenzo Water Co.	Case 445
H. Brockmeyer	Case 446
Del Mar Water, Light and Power Co.	Case 447
Janss Co.	Case 454
Hermosa Beach Water Co.	Cases 470 and 487
San Jose Water Co.	Case 476
Huntington Beach Co.	Case 489
Bolinas Water and Power Co.	Case 491
Empire Water Co. (Fresno County)	Case 494
Los Angeles and Arizona Land Co.	Case 511
Encanto Mutual Water Co.	Cases 505, 521 and 547
Diamond Ridge Ditch Co.	Case 528
San Jose Water Co. at Saratoga	Case 535
Laurel Canyon Land Co.	Case 541
Consolidated Securities Co.	Case 548
California Development Co.	Cases 553 and 573
South Feather Land and Water Co.	Case 558
Tujunga Water and Power Co.	Case 561
J. M. Sharp	Case 568
Union Water Co.	Case 572
Napa City Water Co.	Case 575
Murphy Water, Ice and Light Co.	Case 579
Yorba Linda Water Co.	Case 582
Sweetwater Water Co.	Case 598
Ocean Park Heights Land and Water Co.	Case 601
Northern Water and Power Co.	Case 642
N. C. Kelley	Case 647
Palermo Land and Water Co.	Application 337
Covina City Water Co.	Application 417
Davis Water Co.	Application 593
C. Edgar Smith	Application 650
Pasadena Consolidated Water Co.	Application 717
J. A. Murray and Ed Fletcher	Application 756
J. F. Jackson and Ida H. Jackson	Application 784
A. R. Pedder	Application 798
Wilmington Water Co.	Application 903
Hermosa Beach Water Co.	Application 919
Excelsior Water and Mining Co.	Application 934
John Hanlon	Application 941
P. T. Durby	Application 942
Western Water Co.	Application 958
Hermosa Beach Water Co.	Application 993
Garden Grove Water Co.	Application 1015
Ventura County Power Co.	Application 1028
Crocker Land Co.	Application 1085
Modoc County Irrigation Co.	Application 1089

NOTE.—Above table covers formal matters only. For list of informal complaints handled by hydraulic section of engineering department see Table No. 5.



## UTILITIES.

## No 2.

*Section of Hydraulics, Fiscal Year 1914.*

Scope	Decision
Rules and regulations, practices and service.....	Pending, August 15, 1913.
Practices, service extensions.....	Pending.
Rules and regulations, service practice and extensions.....	Pending.
Rules and regulations.....	February 9, 1914.
Extension and service.....	November 5, 1913.
Service and practices.....	July 2, 1913.
Service and rules and regulations.....	December 5, 1913.
Service and practices.....	Pending.
Service, rules and regulations.....	Pending.
Practices and service.....	Pending.
Service and practices.....	Oct. 16, 1913, May 1, 1914.
Service and practices.....	December 3, 1913.
Rules and regulations.....	Pending.
Extension and service.....	March 11, 1914.
Service connections and meters.....	Pending.
Extensions and service connections.....	Pending.
Service connections and meters.....	February 27, 1914.
Service and rules and regulations.....	May 22, 1914.
Service.....	Pending.
Service and practices.....	May 7, 1914.
Service.....	Pending.
Service connections and meters, service, rules and regulations.....	Pending.
Practices and service.....	Jan. 5, 1914, Mar. 28, 1914.
Practices and service.....	February 28, 1914.
Service and extensions.....	June 17, 1914.
Service.....	Pending.
Practices and service.....	April 13, 1914.
Service.....	Pending.
Practices and service.....	June 30, 1914.
Extension.....	Pending.
Practices and service.....	Pending.
Practices and service.....	May 18, 1914.
Practices and service.....	May 28, 1914.
Electrolysis.....	May 1, 1914.
Extensions.....	Pending.
Service.....	Pending.
Service and practices.....	Pending.
Service and practices.....	Pending.
Practices and service.....	Pending.
Service, rules and regulations and service connections.....	December 31, 1913.
Extensions and service.....	December 31, 1913.
Service connections and meters.....	August 15, 1913.
Service connections and meters.....	February 24, 1914.
Service.....	Pending.
Rules and regulations.....	December 31, 1913.
Public convenience and necessity.....	October 17, 1913.
Public convenience and necessity.....	October 30, 1913.
Rules and regulations.....	January 22, 1914.
Service and rules and regulations.....	February 27, 1914.
Sale.....	March 19, 1914.
Sale.....	March 23, 1914.
Public convenience and necessity.....	March 23, 1914.
Service.....	Pending.
Service.....	March 23, 1914.
Note issue.....	Pending.
Service.....	April 3, 1914.
Stock and bonds \$500,000.00.....	Pending.
	May 16, 1914.

## WATER

## TABLE

*Hydraulic Yield and Capacity of Systems—*

Name of owner	Application or case
East Side Canal and Irrigation Co.....	Cases 298 and 309 .....
Crocker-Huffman Land and Water Co.....	Cases 299, 310, 330, 332, 340 and 427 .....
California Development Co.....	Cases 355 and 573 .....
Petaluma Power and Water Co.....	Case 368 .....
Bear Gulch Water Co.....	Case 419 .....
Tujunga Water and Power Co.....	Cases 433, 434 and 441 .....
Eagle Rock Water Co.....	Case 435 .....
San Lorenzo Water Co.....	Case 445 .....
H. Brockmeier .....	Case 446 .....
Sweetwater Water Co.....	Case 472 and 598 .....
San Jose Water Co.....	Case 476 and 575 .....
Empire Water Co. (Fresno County).....	Case 494 .....
Madera Canal and Irrigation Co.....	Case 498 .....
Los Angeles and Arizona Land Co.....	Case 511 .....
Laurel Canyon Land Co.....	Case 541 .....
Spring Valley Water Co.....	Case 545 .....
Encanto Mutual Water Co.....	Case 547 .....
South Feather Land and Water Co.....	Case 558 .....
Napa City Water Co.....	Case 575 .....
Murphy Water, Ice and Light Co.....	Case 579 .....
Ocean Park Heights Land and Water Co.....	Case 601 .....
N. C. Kelly .....	Case 647 .....
Santa Clara Water and Irrigation Co.....	Application 136 .....
Empire Water Co.....	Application 170 .....
Palermo Land and Water Co.....	Application 337 .....
Covina City Water Co.....	Application 417 .....
San Diego Water Co.....	Application 547 .....
North Coast Water Co.....	Application 624 .....
Baldwin Park Domestic Water Co.....	Application 747 and Case 423 .....
Huntington Beach Water Co.....	Application 791 .....
San Dimas Water Co.....	Application 835 .....
Eureka Water Co.....	Application 843 .....
Bolinas Water and Power Co.....	Application 896 .....
Monterey County Water Works.....	Application 950 and Case 500 .....
Fort Bragg Water Co.....	Application 958 .....
Crocker Land Co.....	Application 1085 .....
San Geronio Water Co. and Beaumont Land and Water Co.....	Application 1264 and Case 307 .....
Sawtelle Water Co.....	Application 1050 .....
Excelsior Water and Mining Co.....	Application 934 .....

NOTE.—Above table covers formal matters only. For a list of informal complaints handled by hydraulic section of engineering department, see Table No. 5.

## UTILITIES.

No. 3.

*Section of Hydraulics—Fiscal Year 1914.*

Purpose	Decision
Duty of water and safe yield.....	Pending.
Capacity of system and safe yield.....	Pending
Duty of water and capacity of system.....	January 22, 1914
Capacity of system.....	November 5, 1913.
Hydraulic yield .....	Pending.
Capacity of system .....	October 16, 1913.
Hydraulic study .....	December 13, 1913.
Capacity of system.....	January 22, 1914.
Capacity of system.....	March 11, 1914.
Capacity of system and safe yield.....	January 30, 1914.
Capacity of system.....	May 22, 1914.
Duty of water and safe yield.....	Pending.
Capacity of system .....	December 5, 1913.
Capacity of system .....	Pending.
Capacity of system .....	Pending.
Capacity of system .....	Pending.
Hydraulic study .....	March 28, 1914.
Duty of water and safe yield.....	June 30, 1914.
Capacity of system.....	May 28, 1914.
Capacity of system.....	May 1, 1914.
Capacity of system.....	Pending.
Capacity of system.....	Pending.
Duty of water and capacity of system.....	April 22, 1914.
Study of safe yield.....	October 2, 1913.
Duty of water and safe yield.....	December 31, 1913.
Capacity of system and safe yield.....	December 31, 1913.
Capacity of system and safe yield.....	April 28, 1914.
Hydraulic yield .....	December 3, 1913.
Hydraulic study .....	Pending.
Capacity of system.....	Pending.
Capacity of system and safe yield.....	December 13, 1913.
Capacity of system and safe yield.....	March 23, 1914.
Capacity of system and safe yield.....	April 28, 1914.
Capacity of system.....	Pending.
Hydraulic study .....	Pending.
Hydraulic yield .....	Pending.
Capacity of system .....	August 15, 1913.
Hydraulic study .....	April 11, 1914.
Duty of water and capacity of system.....	March 19, 1914.

## WATER UTILITIES.

TABLE No. 4.

*Rate Computations and Reports Made by Section of Hydraulics During Fiscal Year 1914.*

Name of owner	Application or case	Decisions
Covina City Water Co.....	Application 417	December 31, 1913.
Santa Clara Water and Irrigation Co.	Application 136	April 22, 1914.
Palermo Land and Water Co.....	Application 337	December 31, 1913.
J. F. Jackson and Ida H. Jackson.....	Application 385	October 8, 1913.
Hugh A. Boyle.....	Application 401	September 22, 1913.
Maillard Estate.....	Application 435	November 25, 1913.
Conservative Realty Co.....	Application 491	October 14, 1913.
City of San Diego.....	Application 517	April 28, 1914.
North Coast Water Co.....	Application 624	December 3, 1913.
Ventura County Power Co.....	Application 635	April 6, 1914.
C. Edgar Smith.....	Application 650	February 24, 1914
J. M. Vincent.....	Application 671	October 16, 1913
Baldwin Park Domestic Water Co.....	Application 717 and Case 423.	Pending.
J. A. Murray and Ed Fletcher.....	Application 756	December 31, 1913
Huntington Beach Co.....	Application 791 and Case 480.	Pending.
Bolinas Water and Power Co.....	Application 896	April 28, 1914.
Excelsior Water and Mining Co.....	Application 934	March 19, 1914.
Los Altos Water Co.....	Application 976	March 28, 1914.
Garden Grove Water Co.....	Application 1015	Pending.
Crocker Land Co.....	Application 1085	Pending.
Ben Lomond Water Works.....	Application 1698	June 2, 1914.
Claremont Domestic Water Co.....	Application 1144	Pending.
San Geronio Water Co. and Beaumont Land and Water Co.....	Application 1261 and Case 308.	August 15, 1913. pending.
Eastside Canal and Irrigation Co.....	Cases 298-309	March 31, 1914.
Crocker-Huffman Land and Water Co.	Cases 299, 310, 330, 332, 340 and 427.	Pending.
Soledad Land and Water Co.....	Case 361	February 9, 1914.
Eagle Rock Water Co.....	Case 435	December 13, 1913.
H. Brockmeier.....	Case 446	March 11, 1914.
Sweetwater Water Co.....	Case 472	January 30, 1914.
San Jose Water Co.....	Case 476	May 22, 1914.
Madera Canal and Irrigation Co.....	Case 498	December 5, 1913.
Encanto Mutual Water Co.....	Case 547	March 28, 1914.
South Feather Land and Water Co....	Case 558	June 30, 1914.

NOTE.—Above table covers formal matters only. For list of informal complaints handled by hydraulic section of engineering department see Table No. 5.



In addition to the formal matters listed above, there were 174 matters adjudicated informally. It is not considered necessary to take up in detail and in this place these informal complaints. An abstract of the proceedings in each of these cases will be found elsewhere in the annual report under Informal Complaints, sub-title Informal Water Complaints.

Those matters involving water utilities in which the generation or sale of power is involved are not handled by this section.

Considerable constructive work has been done by the section of hydraulics in connection with rates. Apart from the mere establishment of fair and equitable rates for all classes of water use, excepting for power purposes, a particular effort has been made to establish a logical method to be used in charging for water for irrigation purposes in the foothill regions and interior valleys of the state where the charge in the past has generally been by the acre and has resulted in great waste. In establishing rates for a domestic service, the endeavor has been to promote the full metering of the system and then to establish a block system of rates which will automatically fix, for the water used by each individual, a payment which will be reasonable for his class of use and which will properly balance the payments each user should make to the utility in accordance with the service rendered.

Considerable time has been necessary in the consideration of rules and regulations upon which approval has been required by the Commission or the preparation of which have been demanded of water utility companies. It has been found necessary to make these rules and regulations flexible lest the rules established in one case be not applicable in another.

The work of this section has grown so much during the past year that the employment of at least one additional assistant engineer and possibly also a junior assistant engineer or computer will soon become imperative. One thing which has added considerably to the work of this section was the revision by the last legislature of section 47 of the Public Utilities Act in such a manner as to empower the Railroad Commission to fix, upon application filed by any one of certain governmental agencies, the compensation to be paid by such agencies to a public utility for all, or any designated portion, of its property whose acquisition was contemplated.

Three cases of considerable moment have already come up as a result of the above act.

The city of Eureka was the first to avail itself of the offices of the Commission under this enactment. Application for valuation of the property of the Eureka Water Company was filed with the Commission November 24, 1913. The hydraulic engineers obtained from the water

company a detailed inventory, and made field examination of the property during the period between December 26th and February 4th. The information so obtained was incorporated in a full and detailed appraisal of all the properties of the company. The valuation determined by the Commission was as follows: Reproduction cost, \$305,052.00; accrued depreciation, \$76,595.00; present value, \$228,457.00. The company contended for a present value of the physical elements amounting to \$239,706.00. The city had expressed a willingness to pay \$25,000.00 above the value of physical property for the so-called water rights of the company, and thereby justified the consideration of this item. The company contended for a valuation of the water right based upon the probable cost of development of an equal water supply from the next available source, and arrived at about \$100,000.00 as the value of these rights. The Commission also took into consideration the various other intangible elements, and decided upon \$270,000.00 as the proper amount to be paid for the property, including all rights.

The city of Glendale made application on January 13, 1914, for a valuation of the properties of the Glendale Consolidated Water Company, the Verdugo Springs Water Company, the Miradero Water Company and the Verdugo Pipe and Reservoir Company. The valuations placed upon these various properties by the engineers for the Commission were \$67,304.00, \$28,794.00, \$23,945.00 and \$14,241.00, respectively. In this action the possible value of water rights received particular attention and a number of engineers testified to water value per miner's inch of flow ranging between \$300.00 and \$3,800.00. There was considerable testimony by other engineers during the hearing and many decided variations developed. The largest one of these arose between the Commission's engineer and F. C. Finkle in the matter of value of the Verdugo Springs Water Company. Mr. Finkle testified to a value of the physical property of \$54,324.00 as compared with \$28,794.00 shown above.

The Commission accepted the physical valuation prepared by the Commission's engineers excepting that the valuation for the Verdugo Springs Water Company was increased by \$1,206.00. A further sum of \$20,060.00 was allowed for water right, not included above, for the same company. The final valuations placed were as follows:

The Glendale Consolidated Water Company-----	\$69,783 00
The Verdugo Springs Water Company-----	50,292 00
The Miradero Water Company-----	24,919 00
The Verdugo Pipe and Reservoir Company-----	14,241 00

The Marin Municipal Water District made application on May 20, 1914, for the ascertainment by the Commission of the value of the property of the Marin Water and Power Company, and on June 6, 1914,

made further application for the ascertainment of the value of the property of the North Coast Water Company.

#### **GAS AND ELECTRICAL UTILITIES, TELEPHONE AND TELEGRAPH UTILITIES.**

The section of gas and electricity of the engineering department at present handles the detail of all matters which come before the Commission in connection with the utilities shown above save those matters which involve financial history and status in connection with bond applications.

The work of this section is, therefore, now exactly analogous to the work of the section of hydraulics and is made up here, as there also, mainly of matters occurring in connection with valuations, rates and service. This status is the result of a change in the organization made during the year. Thus at the beginning of the year the work on valuations, rates and service in connection with electric, gas and telephone utilities was divided between the rate department and the engineering department. The electrical engineer and his assistants of the rate department handled rates for gas utilities and rates and service for electric utilities, while the engineers in the section of gas and electricity of the engineering department handled valuations in connection with electric, gas and telephone utilities, service matters in connection with gas and telephone utilities, and also valuations of electrical properties of steam and electric roads.

This report will include under this department the work done by both sections during the entire year. During this time investigations made in connection with valuations, rates and service have consisted mainly of the following:

##### **I. Valuation—**

(a) Of gas and electrical properties in connection with rate investigations, condemnation proceedings and the issuance of securities.

(b) Of electrical rolling stock, transmission and distribution systems and generating and transforming plants owned by the steam and electric roads on which the main valuation is being prosecuted by the section of transportation.

(c) Of telephone, telegraph and other communication properties.

##### **II. Rates—**

(a) Gas and electrical rate investigations and reports.

(b) Rate investigations involving telephone and other communication properties.

### III. *Service* —

- (a) Quality, regulation and adequacy of electric light and power service and of gas service.
- (b) Imposition and collection of deposits and service charges for meters and for extensions.
- (c) Safety of operation of gas and electrical properties.
- (d) Inductive and other interferences.
- (e) Electrolysis.

Many of the matters mentioned above have occurred in connection with both formal and informal complaints. Formal cases and applications will be discussed first.

In the following tables listing valuations, rate matters and service matters, there will be such duplication as occurs for instance when a decision in a rate matter is predicated in part on a valuation of the properties involved.

There are presented herewith twelve tables and tabular statements covering the work of this section during the preceding fiscal year.

Tables I and II cover valuations made in connection with electric rates and list respectively those valuations which were based on inventory and appraisal made by this section and those which were based either on original cost or on inventory and appraisal made by others, or on both.

Most of the money involved in conclusions as to value falls in the latter general category. This is precisely the opposite condition from that which maintains in the valuations made by the section of transportation where practically all work is based on field inventory made by members of the section.

Tables III and IV are exactly analogous to Tables I and II and cover valuations made in connection with gas rates.

Table V covers valuations made in connection with telephone rates and is analogous to Tables I and III.

Table VI covers partial valuations made in connection with steam and electric roads involving the items of transmission and distribution systems, generating and transforming plants and electrical rolling stock.

A resume of the valuations which have been included in Tables I to VI is presented after Table VI.

Tables VII, VIII and IX will list the formal cases and applications which involve electric rates, gas rates and telephone rates respectively on which work has been done during the last fiscal year by this section.

Tables X and XI list the cases in which service reports were made and cover electric service and gas service respectively.

Table XII lists the miscellaneous reports which were made by this section in various matters.



## SECTION OF GAS AND ELECTRICITY.

TABLE I.

*Valuations made in connection with Electric Rates—Conclusions as to value based on Inventory and Appraisal made by this section.*

	Estimated reproduction value new
Case 372—Involving rates charged by the Tuolumne County Electric Power and Light Company in Jamestown, Quartz, Stent, Columbia and other Tuolumne County points.....	\$38,022 00
Case 400—Involving rates charged by the Pacific Gas and Electric Company for electric energy supplied consumers in the town of Antioch.....	47,387 63
Case 483—Involving rates charged by the Snow Mountain Water and Power Company for electrical energy sold to the town of Ukiah and to certain other customers.....	12,758 74
Cases 508 and 538—Involving general rates charged by the Napa Valley Electric Company for electrical energy sold to all of its customers.....	51,396 98
Application 672—Involving rates charged by Half Moon Bay Light and Power Company for electric power service.....	59,094 65
Cases 477 and 550—Involving rates, service and extensions of the Pacific Gas and Electric Company covering electrical energy supplied in its San Jose district.....	1,274,541 31
Case 495—Involving rates charged by the Coast Valleys Gas and Electric Company for electrical energy sold Salinas City and its inhabitants.....	638,668 19
Total .....	\$2,121,869 50

## SECTION OF GAS AND ELECTRICITY—Continued.

TABLE II.

*Valuations made in connection with Electric Rates—Conclusions as to value based on Original Cost or on Inventory and Appraisal made by others or on both.*

	Estimated reproduction value new
Case 400—Valuations presented in evidence in connection with the town of Antioch case.	
<i>Pacific Gas and Electric Company.</i>	
Hydroelectric plants .....	\$14,675,174 26
Steam plants .....	5,455,282 16
Transmission lines .....	5,930,529 10
Total .....	\$26,060,985 52

## SECTION OF GAS AND ELECTRICITY—Continued.

TABLE III.

*Valuations made in connection with Gas Rates—Conclusions as to value based on Inventory and Appraisal made by this section.*

	Estimated reproduction value new
Case 556—Involving retail rates charged by the Bakersfield Gas and Electric Company for natural gas bought for distribution from the California Natural Gas Company.....	\$297,856 70
Case 458—Involving the rates charged for gas supplied by Ontario-Upland Gas Company to the inhabitants of the City of Ontario.....	64,931 00
Case 499—Involving the rates charged for gas supplied by Coast Valleys Gas and Electric Company to the city of Monterey...	113,704 51
Case 516—Involving the rates for natural gas charged by West Side Gas Company in the city of Taft.....	23,960 00
Case 478—Involving the rates charged by the Pacific Gas and Electric Company to the city of San Jose and its inhabitants for gas.....	831,492 00
Total.....	\$1,331,944 24

## SECTION OF GAS AND ELECTRICITY—Continued.

TABLE IV.

*Valuations made in connection with Gas Rates—Conclusions as to value based on Original Cost or on Inventory and Appraisal made by others or on both.*

	Estimated reproduction value new
Case 357—Involving wholesale rates for gas sold by the California Natural Gas Company for distribution in Bakersfield and vicinity.....	\$374,463 25
Case 464—Involving wholesale rates for natural gas charged by the Southern California Gas Company in Los Angeles County outside the limits of incorporated cities and towns:	
Wells.....	\$379,051 04
Drilling equipment.....	70,000 00
Gathering lines.....	67,337 06
Compressor station.....	401,593 10
Transmission main.....	1,518,876 58
Intangible.....	1,086 45
Sub-total.....	2,437,944 23
Application 359—Involving reorganization of the gas properties owned by the Citrus Belt Gas Company.....	584,267 00
Total.....	\$3,396,674 48

## SECTION OF GAS AND ELECTRICITY—Continued.

TABLE V.

*Valuations made in connection with Telephone Rates—Conclusions as to value based on Inventory and Appraisal made by this section.*

	Estimated reproduction value new
Case 387—Involving rates and service within what is known as the San Jose Exchange area of the Pacific Telephone and Telegraph Company -----	\$877,207 73

## SECTION OF GAS AND ELECTRICITY—Continued.

TABLE VI.

*Partial Valuations made in connection with Steam and Electric Roads involving the items of Transmission and Distribution Systems, Generating and Transforming Plants and Electrical Rolling Stock. Inventory and appraisal by this section.*

	Estimated reproduction value new
Application 894—Los Angeles Railway Corporation-----	\$2,001,092 00
Case 411—Crescent City Railway Company-----	16,727 91
Case 145—Petaluma and Santa Rosa Railway Company-----	251,592 30
Total -----	\$2,269,412 21

## SECTION OF GAS AND ELECTRICITY—Continued.

*Resume of Conclusions as to Value Formulated by the Section of Gas and Electricity of the Engineering Department during the fiscal year.*

	Based on detail inventory and appraisal made by this section	Based on original cost or on inventory and appraisal made by others or on both
Electric properties -----	\$2,121,869 50	\$26,060,985 52
Gas properties -----	1,331,944 24	3,396,674 48
Telephone properties -----	877,207 73	-----
Electrical equipment of transportation properties -----	2,269,412 21	-----
Totals -----	\$6,600,433 68	\$29,457,660 00

## SECTION OF GAS AND ELECTRICITY—Continued.

TABLE VII.

*Electric Rate Computations and Reports made by this Section during fiscal year 1914.*

Case or application	Complainants, applicants, respondents	Decision number
Case 372	Solari et al. vs. Tuolumne County Light and Power Co.	834
Case 400	Town of Antioch vs. Pacific Gas and Electric Co.	1655
Case 477	City of San Jose vs. Pacific Gas and Electric Co.	Pending
Case 483	Town of Ukiah vs. Snow Mountain Water and Power Co.	1309
Case 495	Salinas City vs. Coast Valleys Gas and Electric Co.	Pending
Case 497	Woodworth et al. vs. Western States Gas and Electric Co.	1315
Case 508	Calistoga Electric Co. vs. Napa Valley Electric Co.	1530
Case 533	City of Monterey vs. Coast Valleys Gas and Electric Co.	Pending
Case 538	Commission's investigation of rates of the Napa Valley Electric Co.	1530
Case 550	Commission's investigation of electric rates in San Jose District (Pacific Gas and Electric Co.)	Pending
Case 565	Western States Gas and Electric Co. vs. Sierra and San Francisco Power Co.	Pending
Case 569	Faulkner et al. vs. Ventura County Power Co.	Pending
Case 577	Reclamation District No. 551 vs. Great Western Power Co.	Complaint withdrawn
Case 586	Seamen vs. Mt. Whitney Power and Electric Co.	Informal adjustment
Case 590	Commission's investigation of rates of Western States Gas and Electric Co.	Pending
Case 608	Rosenberg Company vs. Pacific Gas and Electric Co.	Pending
Case 618	East Bakersfield Improvement Association vs. San Joaquin Light and Power Corporation	Pending
Appl. 672	Half Moon Bay Light and Power Co.—To increase rates	915
Appl. 734	Pacific Gas and Electric Co.—Rates to Oro Electric Corporation	958
Appl. 794	West Coast Gas Co.—To change rates	1171
Appl. 795	California-Oregon Power Co.—To fix rates	1177
Appl. 796	California-Oregon Power Co.—To fix rates	1189

## SECTION OF GAS AND ELECTRICITY—Continued.

TABLE VIII.

*Gas Rate Computations and Reports made by this Section during fiscal year 1914.*

Case number	Complainants, applicants, respondents	Decision number
357	Kern County Merchants' Association vs. California Natural Gas Company	1458
458	City of Ontario vs. Ontario Upland Gas Co.	1189
464	Commission's investigation of wholesale rates for natural gas at Los Angeles	1145-1213
478	City of San Jose vs. Pacific Gas and Electric Co.	Pending
499	City of Monterey vs. Coast Valleys Gas and Electric Co.	1630
516	City of Taft vs. West Side Gas Co.	1533
544	Sirard et al. vs. Pacific Gas and Electric Co.	Pending
549	Commission's investigation of wholesale rate for natural gas at Long Beach	Pending
556	Commission's investigation of gas rates in Bakersfield.	1458
562	Commission's investigation of wholesale rate for natural gas at Taft	1532
604	City of Redlands vs. Citrus Belt Gas Co.	Pending
624	City of Coalinga vs. Coalinga Gas and Power Co.	Pending



## SECTION OF GAS AND ELECTRICITY—Continued.

TABLE IX.

*Telephone Rate Computations and Reports made by this Section during fiscal year 1914.*

Case number	Complainant and respondent	Decision number
387	City of San Jose vs. The Pacific Telephone and Telegraph Company -----	1008-1254

## SECTION OF GAS AND ELECTRICITY—Continued.

TABLE X.

*Electric Service Reports made by this Section during fiscal year 1914.*

Case number	Title of case	Nature of investigation	Action by Commission
438	Southwestern Home Telephone Company vs. Southern Sierras Power Company -----	Inductive interference.	Informal adjustment
456	Sawdy et al. vs. Yosemite Power Company -----	Service extension ----	Dec. No. 974
466	Junkin vs. Pacific Gas and Electric Company -----	Safety of operation---	Pending
479	E. L. Stewart vs. Great Western Power Company -----	Service extension ----	Dec. No. 1164-1291
480	City of Huntington Beach vs. Huntington Beach Company---	Electric service -----	Pending
501	Hornbuckle vs. Crescent City Light and Power Company---	Adequacy of service---	Pending
502	Stewart & Stewart vs. Great Western Power Company-----	Service extension ----	Pending
513	Burnes et al. vs. Southern California Edison Company-----	Electric service -----	Dec. No. 1163
520	City of Crescent City vs. Crescent City Light and Power Co.	Electric service -----	Pending
531	McDermott vs. Great Western Power Company -----	Service extension ----	Pending
540	Vallejo Trade and Labor Council vs. Vallejo Electric Light and Power Company -----	Electric service -----	Pending
543	Gordon vs. Pacific Light and Power Corporation -----	Invasion of territory.	Pending
546	Union Hollywood Water Company vs. Pacific Electric Railway Company -----	Electrolysis -----	Pending
555	Doons vs. Calistoga Electric Co.	Service extension ----	Dec. No. 1392
570	Brakey et al. vs. Ventura County Power Company -----	Electric service -----	Pending
578	Rainey et al. vs. San Joaquin Light and Power Corporation.	Service extension ----	Pending
582	Yorba Linda Water Company vs. Pacific Electric Railway Co.---	Electrolysis -----	Pending
602	Crescent City Light and Power Company vs. Keller & Hobbs Nail Company -----	Invasion of territory.	Pending

## SECTION OF GAS AND ELECTRICITY—Continued.

TABLE XI.

*Gas Service Reports made by this Section during fiscal year 1914.*

Case number	Title of case	Nature of investigation	Action by Commission
451	Butler vs. Pacific Gas and Electric Company .....	Service extension .....	Dec. No. 974
469	Denman, Jr., et al. vs. West Coast Gas Company .....	Quality of service .....	Dec. No. 1149
481	City of Huntington Beach vs. West Coast Gas Company .....	Quality of service .....	Dec. No. 1148
544	Sirard et al. vs. Pacific Gas and Electric Company .....	Quality of service .....	Pending
585	Paine et al. vs. Southern California Gas Company .....	Gas service .....	Dec. No. 585
594	City of Los Angeles vs. Southern California Gas Company et al.	Adequacy .....	Pending

## SECTION OF GAS AND ELECTRICITY—Continued.

TABLE XII.

*Miscellaneous Reports made by this Section during fiscal year 1914.*

Appli- cation number	Company	Remarks	Decision number
166	Half Moon Bay Light and Power Co.	To increase capitaliza- tion.	927
350	Southern California Edison Co.	To issue bonds.....	908 and 1225
357	Great Western Power Co.....	To issue bonds.....	931 and 1176
359	Citrus Belt Gas Co.....	To issue bonds.....	837
470	Pitt River Power and Elec. Co...	To issue bonds.....	1120 and 1192
500	Economic Gas Co.....	Approval of bonds.....	783 and 1238
526	Southern California Edison Co...	To issue stock.....	770 and 960
586	Pacific Gas and Electric Co.....	For exch. of property..	794
590	San Diego Con. Gas and Elec. Co.	To issue bonds.....	348, 903, 970, 1051, 1058, 1081, 1151, 1232, 1301, 1389
591	San Diego Con. Gas and Elec. Co.	To issue stock.....	785
604	Southern California Edison Co...	Franchise .....	850
605	Southern California Edison Co...	Franchise .....	851
606	Central California Gas Co.....	Modification of order..	788
611	Burbank Elec. L. and P. Co.....	To sell plant.....	868
616	Western States G. and E. Co.....	To issue bonds.....	914, 950, 987
619	Pacific Light and Power Corp...	To issue stock.....	839
627	Santa Barbara G. and E. Co.....	To issue bonds.....	789
629	San Joaquin Lt. and Power Co.	To issue bonds.....	790, 946, 990
630	Pacific Gas and Electric Co.....	To renew notes.....	814
647	Pacific Gas and Electric Co.....	To renew notes.....	832
668	Southern Counties Gas Co.....	To issue bonds.....	852, 929, 1143, 1267, 1622 862, 1014
675	Ventura County Power Co.....	To sell plant.....	873
694, 695	Tulare County Power Co.....	To issue notes.....	1011
725	Napa Valley Electric Co.....	To issue bonds.....	985
729	Geo. W. Ketchen.....	To sell plant.....	993, 994, 1009, 1013, 1074, 1077, 1078, 1084
736	Tulare County Power Co.....	Deed of trust.....	967
746	Pacific Gas and Electric Co.....	To issue notes.....	1124
750	Coast Counties G. and E. Co.....	To issue stock.....	961
757	A. A. Weber.....	To exercise franchise..	1020, 1102
768	Pacific Light and Power Corp...	To exercise franchise..	1019
777	United Light and Power Co.....	To issue notes.....	989
779	Oro Electric Corporation.....	To furnish current.....	1118
812	Mt. Whitney Power and E. Co...	To issue bonds.....	1141
848	Great Western Power Co.....	To exercise franchise..	1161
872	Northern Cal. Power Co., Con...	To issue notes.....	1180
890	California Power and Mfg. Co...	To exercise franchise..	1166
893	Los Angeles Gas and Elec. Co...	To exercise franchise..	1184
908	Florin Bros. ....	To sell plant.....	

**INFORMAL COMPLAINTS.**

In addition to the various formal matters which are listed in the preceding twelve tables as having been reported upon in connection with formal proceedings before the Commission, investigations were also made by this section in connection with numerous informal complaints the nature of which will be indicated by the tabulation following:

Electric rates .....	134
Electric service .....	249
Gas rates .....	24
Gas service .....	70
Total for year .....	477

An abstract of the action taken in each of these complaints will be found elsewhere in the annual report under Informal Complaints, subtitles Informal Telephone Complaints and Informal Gas and Electric Complaints.

**SERVICE BUREAU (DIVISION OF TRANSPORTATION).**

A record is here presented of the work done on transportation service matters by this department up to March 1, 1914. On this date the three members of the service bureau of the division of transportation were transferred to the rate department. The other two divisions of the engineering department, however, continued to handle all service matters as well as appraisal and rate matters in connection with water utilities and gas and electric utilities respectively. Service matters which do not involve train or car operation, etc., such as depot cases, are still handled by this department and will be discussed under Miscellaneous Hearings and Investigations. Of course many engineering features come up in service matters and investigations and reports are still made on the engineering features involved in such complaints, applications and cases as may be referred to it.

There follows a list which shows such formal applications as required investigation and report by the service bureau during the eight months of the year within which it was a part of the division of transportation of the engineering department.

Application No. 682 filed August 6, 1913, by the Atchison, Topeka and Santa Fe Railway Company to discontinue service between Barnwell and Ivanpah in San Bernardino County.

Application No. 738 filed September 12, 1913, by the Glendale and Eagle Rock Railway Company to discontinue 20-ride commutation tickets, between Glendale and Eagle Rock.

Application No. 759 filed September 23, 1913, by the Southern Pacific Company to abandon during winter months agency at Brookdale Station, Brookdale, Santa Cruz County.

Application No. 841 filed November 24, 1913, by the Boca and Loyalton Railroad Company for order exempting it from complying with the



provisions of chapter 284, Statutes of California, 1913, entitled "An act regulating headlights on all locomotives, and providing a penalty for violation of the provisions of this act."

Application No. 842 filed November 24, 1913, by the Western Pacific Railroad Company for order extending time within which to comply with the provisions of chapter 284, Statutes of California, 1913, known as the "Headlight Act."

Application No. 852 filed November 29, 1913, by the San Pedro, Los Angeles and Salt Lake Railroad Company for authority under section 63 of the Public Utilities Act to cancel its 8-day round-trip fare from Los Angeles to Pomona, etc.

Application No. 853 filed November 29, 1913, by the Atchison, Topeka and Santa Fe Railway Company to cancel its 8-day round-trip fares from Los Angeles to Riverside, etc.

Application No. 854 filed November 29, 1913, by the Southern Pacific Company to cancel its 8-day round-trip fares from Los Angeles to Redlands, etc.

Application No. 880 filed December 9, 1913, by the Southern Pacific Company for additional time to comply with the provisions of the headlight act.

Application No. 910 filed December 26, 1913, by the Point Loma Railroad Company and the San Diego Electric Railway Company for order to amend order in Case 402 and to reduce service.

Application No. 915 filed December 29, 1913, by the Northwestern Pacific Railroad Company for extension of time relative to its locomotive headlights as required by the headlight act.

Application No. 926 filed January 3, 1914, by the Los Angeles and San Diego Beach Railway Company to put in effect time tables superseding previous time tables.

Application No. 961 filed January 24, 1914, by the Northern Electric Railway Company to suspend operation of its Hamilton branch between Chico, Butte County, and Hamilton, Glenn County.

Application No. 975 filed February 5, 1914, by the Quincy Western Railway Company for order exempting it from complying with provisions of the headlight act.

Application No. 1007 filed February 20, 1914, by the Southern Pacific Company, the Atchison, Topeka and Santa Fe Railway Company, Coast Lines, the San Pedro, Los Angeles and Salt Lake Railroad Company, and the Western Pacific Railway Company in regard to drawing rooms and compartments in Standard Pullman sleeping cars.

Application No. 1066 filed April 3, 1914, by the Nevada-California-Oregon Railway for order exempting it from complying with the provisions of the headlight act.

Application No. 1111 filed May 2, 1914, by the Southern Pacific Company to abandon agency maintained at Mt. Hebron, Siskiyou County, until such time as traffic would warrant its re-establishment.

In addition to the applications listed above there were several complaints and actions on the Commission's own initiative which were referred for attention to the service bureau of the division of transportation.

Case No. 425 was a complaint filed July 11, 1913, by A. M. Buchanan against the Southern Pacific Company protesting the removal of the station agent at Traver, Tulare County.

Case No. 431 was filed July 18, 1913, on the Commission's own initiative against the Pacific Electric Railway Company, and consisted of an investigation into the methods and equipment of the Pacific Electric Railway Company. This investigation followed the rear-end collision on the Venice Short Line of the Pacific Electric Railway Company at Vineyard Junction July 13, 1913, which resulted in the death of fourteen people.

Case No. 452 was a complaint filed August 18, 1913, by A. Richard Thompson et al., against the San Diego Electric Railway Company and the San Diego and Southeastern Railway Company. Complainants petitioned Commission to require above roads to exchange transfers at points of intersection of their respective lines.

Case No. 455 was a complaint filed August 25, 1913, by B. B. Harlan et al., against the Los Angeles and San Diego Beach Railway Company in regard to inadequate passenger service between La Jolla, Pacific Beach and San Diego.

Case No. 492 was filed October 31, 1913, by the Commission on its own initiative against the Northwestern Pacific Railroad Company in regard to service between San Francisco and Belvedere in connection particularly with the operation of the small steamer "Marin," between Sausalito and Belvedere.

#### MISCELLANEOUS HEARINGS AND INVESTIGATIONS.

These cover a wide range of subjects and number nearly a thousand matters under the subhead of informal complaints alone. They are here divided into the following eleven groups:

1. Railroad Crossings.
2. Interlocking Plants.
3. Depot and Station Cases, Sidings, Spurs, etc.
4. Investigation of Safety Devices.
5. Clearances.
6. Joint Use or Transfer of Facilities.
7. Issues of Securities, Certificates of Public Convenience and Necessity (investigations into engineering features involved).

8. Inspection of Roadbed and Operation.
9. Accidents. Investigations (track, roadway and other engineering structures). (Other accident investigations.)
10. Informal Complaints.
11. Miscellaneous.

#### RAILROAD CROSSINGS.

Section 43 of the Public Utilities Act forbids the construction, unless permission shall first have been obtained from the Railroad Commission, of the following classes of crossings:

- a. The track of any railroad corporation at grade by a public road, highway or street or vice versa.
- b. The track of any railroad or street railway corporation at grade by the track of any other railroad corporation or vice versa.

Paragraph (b) gives the following jurisdiction to the Commission in crossing cases:

“The commission shall have the exclusive power to determine and prescribe the manner, including the particular point of crossing, and the terms of installation, operation, maintenance, use and protection of each crossing of one railroad by another railroad or street railroad, and of a street railroad by a railroad, and of each crossing of a public road or highway by a railroad or street railroad and of a street by a railroad or vice versa, subject to the provisions of section 2694 of the Political Code, so far as applicable, and to alter or abolish any such crossing, and to require where, in its judgment, it would be practicable, a separation of grades at any such crossing heretofore or hereafter established and to prescribe the terms upon which such separation shall be made and the proportions in which the expense of the alteration or abolition of such crossings or the separation of such grades shall be divided between the railroad or street railroad corporations affected or between such corporations and the state, county, municipality or other public authority in interest.”

The Commission's Rules of Procedure covering railroad crossings read as follows:

“When application is made for the construction, alteration or abolition of crossings (1) of public roads, highways or streets by railroads, or (2) of railroads by public roads, highways or streets, or (3) of railroads by railroads, or (4) of railroads by street railroads, or (5) of street railroads by railroads, or (6) of public roads or highways by street railroads, or (7) of street railroads by public roads or highways, under the provisions of section 43 of the Public Utilities Act, applicant, in addition to complying with the provisions of Rule III, shall submit the following data either in the application or as exhibits attached thereto:

1. Copy of articles of incorporation (Rule III-5).
2. If the crossing is to be constructed by a railroad within the limits of an incorporated city or town, there shall be attached to



the application a certified copy of the franchise or portion thereof, which gives to the railroad the right to cross the highway in question.

3. Map on scale of not less than 200 feet per inch, showing accurately the location of all tracks, buildings, structures, property lines, streets and roads in the vicinity of the proposed crossing; also profiles showing ground lines and proposed grade lines of approaches on such public roads, highways or streets, railroads or street railroads as may be affected by the proposed crossing. In case of a contemplated crossing of a railroad by a railroad, the profile of each railroad shall show the customary information for not less than one (1) mile on each side of the proposed crossing.

4. Such safety device or other protection, if any, as the applicant may believe should be installed, with detailed information concerning the same.

5. If the crossing is a grade, a statement should be made showing why a separation of grades is not practicable under the circumstances.

6. If the crossing is constructed over the tracks of another railroad, the contract between the two companies covering the crossing shall be filed.

7. If the proposed crossing is over a state highway that fact should be stated in the petition and shown on the map.

When application is made for permission to construct a public highway over a railroad crossing, the application must be made by the proper municipal or county authorities. If, in addition to the information above specified, there is attached to the application a copy of an easement granted by the railroad to the proper public authority covering the crossing in question, or some other evidence which shows that the railroad company is willing that the crossing shall be constructed, the Commission may possibly be in a position to grant the application *ex parte* without the necessity of a hearing."

It is the desire of the Commission to dispose without a formal hearing of as many as possible of these crossing cases. They are all referred to this department for handling, and whenever the application is accompanied by evidence that the other party at interest, as a city in the case of an application from a railroad to cross a street at grade has consented to the crossing, this department can decide from the exhibits submitted and its knowledge of conditions whether or not an inspection is necessary or a hearing after the inspection.

Numerous applications for spur tracks to cross county highways or city streets are granted without an inspection or a hearing, but all cases where a crossing of a street or highway by a main or branch line of a railroad or vice versa is applied for an investigation is made on the ground. A very careful investigation is always made in the case of the main line of a railroad crossing a railroad.



Whenever a railroad opposes the construction of a crossing which has been applied for by a city or county this department makes an investigation and reports to the Commission, and the case is then set for a hearing.

In crossing investigations, the following factors are carefully considered: the need for the crossing, the number of people it will serve, the proximity of crossings in either direction along the track, the number of trains in both directions, and their speed, obstructions to the view of approaching trains and vehicles, grades of approach, and the possibility of taking advantage of any physical condition in the vicinity which would permit the crossing to be made by a separation of grades at a justifiable expense.

Whenever the report of this department in regard to a proposed crossing is unfavorable the applicant is notified that the application can not be granted *ex parte*, and frequently such applications are withdrawn. In other cases this department's favorable recommendations are based on the closing of an adjacent crossing or are contingent on removing trees or other obstructions to the view.

The following table will show the number of applications which have been received during the year and will reveal in a general way the nature of these applications:

Number of applications	Number of crossings	Application made by—	To cross—
22	29	Railroad -----	Railroad at grade
2	2	Railroad -----	Railroad over grade.
44	226	Railroad -----	County road at grade.
76	167	Railroad -----	City street at grade.
1	1	Railroad -----	State highway at grade.
39	56	County -----	Railroad at grade.
2	2	County -----	Railroad over grade.
17	23	City -----	Railroad at grade.
1	1	City -----	Railroad over grade.
1	1	State Highway Commission	Railroad under grade.
206	509		

The principles by which this department is guided in treating applications to cross railroad tracks by streets or highways are laid down in the opinion rendered by the Commission in Application No. 1226.

This was an application made by the city of Santa Cruz for permission to construct a street crossing at grade across the tracks of the Southern Pacific Company at Cottonwood street, Santa Cruz. The crossing was desired for the benefit of a tract of land on which there were no residents as yet and to which access to town might already be had by shorter and more convenient routes. The application was denied without prejudice to its renewal in case the city would close Coral street

in consideration of getting an opening on Cottonwood street. A portion of the opinion in the words of the Commission follows:

"The Commission, in grade crossing cases, has many times held that it would not grant permission for a highway to cross the tracks of a railroad at grade solely for the sake of developing any subdivision projects, promoting real estate, or increasing the price of property. It has held that it will grant such permission only when it is clearly shown that some real need for the crossing exists. It seems a fitting opportunity to again state the reasons that have led the Commission to take this position. Interstate Commerce Commissioner McChord recently stated that in a five-year period ending in 1909, 4,621 people were killed at grade crossings in the United States, and during the same period 8,830 were injured. The record since 1909 has undoubtedly been worse rather than better. It must, therefore, be recognized that the construction of each grade crossing carries with it a certain hazard to human life. Grade crossings can not now be entirely abolished since neither the people nor the railroads have sufficient funds to do so, consequently, this hazard must be assumed and the Commission must take it into consideration and balance it with the need of the public for the crossing in each case which comes under its consideration. It has been often argued that with a given amount of traffic across the track from one side to the other no additional hazard would be incurred by opening a few additional crossings. To show the fallacy of this argument it is necessary only to consider the case of a city where all the traffic crosses on one street and the same city with the track through it an open highway where vehicles and pedestrians can cross at will. In the first case, by having traffic concentrated at one point, the engine driver can and will use a certain amount of caution when crossing this street, and the users of the crossing will be induced to properly safeguard their own approach. Where the track is open or where many crossings exist close together it is impossible for an engine driver to take the same pains to avoid an accident and the people who cross the track become careless and forgetful of the risk they incur and cross the track many times when it is not necessary to do so. There is still another phase of the matter to be considered.

New Jersey has recently passed a law prohibiting grade crossings under any circumstances. New York is making a comprehensive effort to secure the abolishment of all grade crossings within the state and nearly every state has awakened to the danger of grade crossings and is making an effort to limit their number and to safeguard those which are installed. The larger cities are spending millions of dollars, in connection with the railroads, to secure the separation of grades within their boundaries. It is common knowledge that when a street is once opened and property along the street has changed hands partly on account of this fact, it is almost impossible to have that street closed. This means, then, that ultimately a vast amount of money will have to be spent to construct either overhead or underground crossings at most of the streets which are open previous to under-

taking grade separation. Based on past experience, each separation will cost in the neighborhood of \$30,000.00. With this fact in view it is very apparent that it is an injustice to the railroad company and to the people from whom the railroad company secures its revenue and who eventually pays its bills, to grant permission for any unnecessary grade crossings to be constructed. If the expense for such grade separations is to be borne either wholly or in part by the city or county in which the crossing is located, it is certainly no kindness to the city or county government to permit one to be built unless there is an absolute need for it."

#### INTERLOCKING PLANTS.

On June 20, 1913, the Commission approved its General Order No. 33, covering interlocking plants. This general order became effective on August 1, 1913, and was issued under authority of section 42 of the Public Utilities Act, which section is here reprinted in full:

"The Commission shall have power, after a hearing had upon its own motion or upon complaint, by general or special orders, rules or regulations or otherwise, to require every public utility to construct, maintain and operate its line, plant, system, equipment, apparatus, tracks and premises in such manner as to promote and safeguard the health and safety of its employees, passengers, customers, and the public, and to this end to prescribe, among other things, the installation, use, maintenance and operation of appropriate safety or other devices or appliances, including interlocking and other protective devices at grade crossings or junctions and block or other systems of signalling, to establish uniform or other standards of construction and equipment, and to require the performance of any other act which the health or safety of its employees, passengers, customers or the public may demand."

General Order No. 33 laid down the rules and regulations which were to govern the construction, reconstruction, maintenance and operation of interlocking plants at crossings and junctions and in yards of railroads or street railroads.

This general order has added considerably to the work of the engineering department, since all matters connected with interlocking plants are now being assigned to it.

Under the provisions of section 1 of this order the engineering department checks over all plans for new or reconstructed interlocking plants and sees that such plans conform to the conditions set forth in the order and to the specifications of the Railway Signal Association as referred to in section 33 of the order.

Afterward, when the plant is ready for operation, but before it is placed in service, this department makes an inspection on the ground to see the plant in actual operation, and checks it as it exists against the plans and specifications. If this inspection develops the fact that the



plant is satisfactory. this department at once grants permission for it to go into service. This permission is followed later by official confirmation by the Commission.

There follows in tabular form a list of all plans approved and all plants inspected and put into operation during the fiscal year.

#### INTERLOCKING PLANTS.

##### *Plans Approved and Inspections Made.*

	Plans approved	Plant inspected on ground and approved
Atehison, Topeka and Santa Fe Railway Company— Crossing San Pedro, Los Angeles and Salt Lake Railroad at Redondo Junction.....	Feb. 7, 1914	June 2, 1914
Northern Electric Railway Company— Crossing Southern Pacific Company at Mikon....	Mar. 2, 1914	May 1, 1914
Northern Electric Railway Company— Interlocking plant at Meridian drawbridge.....		Feb. 25, 1914
Northwestern Pacific Railroad Company— Interlocking plant in Sausalito yards.....	May 11, 1914	July 1, 1914
Interlocking plant in San Rafael yards.....		Aug. 19, 1913
Pacific Electric Railway Company— Crossing Southern Pacific Company at Raymer..	Feb. 4, 1913	Dec. 22, 1913
Crossing Southern Pacific Company at Watts....	June 2, 1914	-----
San Francisco-Oakland Terminal Railways— Revision to interlocking tower No. 1 on Key Route Mole .....	Apr. 13, 1914	-----
Southern Pacific Company— Crossing San Francisco-Oakland Terminal Rail- ways at Eighteenth and Poplar, Oakland.....	Mar. 7, 1914	Apr. 28, 1914

The checking over and filing of the quarterly reports on interlocking plants which are called for by section 38 of this general order has also been done by this department. Section 38 provides that:

“Quarterly reports shall be made to the Commission by the company having charge of the maintenance and operation of the interlocking plant on the first days of January, April, July and October of each year. Such reports shall be filed within thirty days after the end of the quarter for which they are made and shall be prepared in the manner prescribed and upon the forms provided by the Commission.”

Any plant failures reported therein are carefully scrutinized to determine whether they are due to a condition of the plant which militates against its performing its proper function and its safe operation, or are due, as most of them are, to such causes as rocks in derails, high water, and breaks in wires.



All changes in plan, after the original plans have been approved (Sec. 11), and all deviations from the general order (Sec. 39), are handled informally by this department, subject to the approval of the Commission, and these two sections have been productive of much correspondence.

In crossing cases of one railroad with another, where the Commission's orders require that such crossings be protected by interlocking plants to be installed within a given time after the order goes into effect, this department follows up the order and sees to it that the interested railroads use reasonable diligence in carrying out such requirements and also investigates and reports on such delays as may occur.

During this year strikes which have occurred at the plants of Eastern manufacturers of signal and interlocking devices have made it almost impossible for the railroads to secure the necessary materials for the plants ordered by the Commission. They have consequently been unable to construct their plants in the usual time or in the time allowed them by the orders and have been obliged to apply for extensions of time. All such applications are investigated by this department and recommendation is made to the Commission covering the reasonableness of the extension of time asked for.

There follows a list of interlocking plants in this state, taken from the engineering department's records, showing the salient features of each plant:



[illegible]

## STATEMENT.

Showing Certain Information in Connection with all Interlocking Plants in the State of California.  
TABLE 2.—OPERATED BY ATCHISON, TOPEKA AND SANTA FE RAILWAY COMPANY.

Other roads using plant	Location of plant	Type of plant	No. of levers operated	Av. No. of train movements per day
None	Fullerton	Electric	36	202
None	Highland Junction	Electric	10	88
None	San Bernardino Yard	Electric	46	604
None	Stockton Wye	Mech.—2d class	4	
None	Topock	Electric	9	56
Southern Pacific Company	Calwa City	Electro-Mechanical	17	61
Southern Pacific Company	Fresno No. 1.	Mechanical	30	142
Southern Pacific Company	Fresno No. 2	Mechanical	16	56
Southern Pacific Company	Hanford	Mechanical	20	56
Southern Pacific Company	Kern Junction	Mechanical	12	92
Southern Pacific Company	Merced No. 1	Mechanical	9	18
Southern Pacific Company	Miller	Mechanical	12	14
Southern Pacific Company	Nadeau Park	Mechanical	9	20
Southern Pacific Company	Tulare	Mechanical	8	35
Lake Railroad Company	Colton	Mechanical	32	152
Southern Pacific Company and San Pedro, Los Angeles and Salt Lake Railroad Company	Mission Tower	Mechanical	47	365
Southern Pacific Company and San Francisco-Oakland Terminal Railways	Oakland	Electric	16	458
Southern Pacific Company and Western Pacific Railway Company	Stockton No. 2	Electric	56	255
San Pedro, Los Angeles and Salt Lake Railroad Company	Daggett	Electric	16	114
San Pedro, Los Angeles and Salt Lake Railroad Company	Redondo Junction	Electric	32	108
Pacific Electric Railway Company	San Dimas	Electric	24	81
Western Pacific Railway Company	Stockton No. 1.	Mech.—2d class	3	Out of service
Yosemite Valley Railroad Company	Merced No. 2	Mechanical	9	25



TABLE 3.—OPERATED BY PACIFIC ELECTRIC RAILWAY COMPANY.

Other roads using plant	Location of plant	Type of plant	No. of levers operated	Av. No. of train movements per day
None	Amoco	Electric	38	900
None	Oncosta Park	Electric	41	620
None	Los Angeles No. 2	Pneumatic	8	950
Southern Pacific Company	Dominguez Junction	Mechanical	28	265
Southern Pacific Company	El Monte	Electric	17	90
Southern Pacific Company	Marengo	Mechanical	15	392
Atchison, Topeka and Santa Fe Railway Company	Claremont	Electric	14	105
Atchison, Topeka and Santa Fe Railway Company	Slauson Junction	Electric	43	812
Los Angeles Railway Corporation	Los Angeles No. 1	Pneumatic	8	4,300

## STATEMENT.

Showing Certain Information in Connection with all Interlocking Plants in the State of California.

TABLE 4.—OPERATED BY ALL OTHER ROADS.

Other roads using plant	Location of plant	Type of plant	No. of levers operated per day	Av. No. of train movements per day
<i>Operated by Northwestern Pacific Railroad Company.</i>				
None	Sausalito No. 1	Electric	45	412
None	Almonte No. 2	Mechanical	12	190
None	Baltimore Park No. 3	Mechanical	12	130
None	San Anselmo No. 4	Electro-Pneumatic	5	145
None	San Rafael No. 5	Electro-Pneumatic	7	120
<i>Operated by San Pedro, Los Angeles and Salt Lake Railroad Company.</i>				
Southern Pacific Company	Cudahy	Manual	8	28
Southern Pacific Company	Ontario	Manual	12	28
Southern Pacific Company	Pomona	Manual	14	30
Atchison, Topeka and Santa Fe Railway Company	Hobart	Manual	18	60
Tonopah and Tidewater Railroad Company	Crucero	Manual	8	4
<i>Operated by San Francisco-Oakland Terminal Railways.</i>				
None	Key System Pier No. 1	Mechanical	28	700
None	Louise street and Yerba Buena avenue, No. 2	Mechanical	51	558
None	Spring and Adeline streets, No. 3	Electric	33	506
None	53d and Adeline streets, No. 4	Electric	21	448

<i>Operated by Western Pacific Railway Company.</i>				
Southern Pacific Company	Niles M. P. 30.3 No. 8	Mechanical	18	48
Southern Pacific Company	Oakland M. P. 5.2 No. 13	Electric	26	186
Southern Pacific Company	Oakland M. P. 10.4 No. 9	Mechanical	16	152
Southern Pacific Company	Stockton M. P. 93.8 No. 3	Electric	14	72
<i>Operated by Northern Electric Railway Company.</i>				
None	Meridian Bridge	Mechanical	10	16
Oakland, Antioch and Eastern Railway Company	Sacramento—M street	Mechanical	17	142
<i>Operated by Oakland, Antioch and Eastern Railway Company.</i>				
San Francisco-Oakland Terminal Railways	Oakland—40th street	Electro-Pneumatic	11	256

**DEPOT AND STATION CASES—SIDINGS, SPURS, ETC.**

Section 37 of the Public Utilities Act provides, among other things, that the Commission may make any order which it may determine "to be reasonably necessary to accommodate and transport the traffic, passenger or freight, transported or offered for transportation."

The Commission on August 7, 1914, approved its General Order No. 36, which became effective on the same date. This is an order on the railroads for information in detail on the following subjects:

Construction of any new depot buildings.

Establishment of any new agency.

Construction of any new siding, spur or other track for the reception or delivery of freight.

This general order further forbids the abandonment of any station building, agency or siding, spur or other track without the consent of the Commission.

In connection with above section and above order, the engineering department is called on by the Commission to investigate and report in all cases which involve the removal or relocation of depots and stations, and an investigation is similarly made in those cases in which municipalities have claimed inadequate facilities and have sought relief through the Commission. These reports differ a great deal in scope and purpose, and some of them require but little work, while others have necessitated extensive investigations. At the hearings in most of these cases this department is represented. The establishment or abandonment of an agency is considered a matter for the service bureau to investigate and make report.

The following list of depot and station cases which have received case numbers during the fiscal year and in which this department has taken an active interest will reveal the nature of work done and reports made by this department:

Case 461.

Filed September 4, 1913, by *San Mateo and Burlingame Merchants' Association* against the *Southern Pacific Company* in order to obtain additional facilities for handling freight shipments at Burlingame.

Case 507.

Filed November 17, 1913, by the *Town of Sisson* against the *Southern Pacific Company* in order to obtain a new and adequate passenger depot in the town of Sisson.

Case 557.

Filed March 7, 1914, by the *Modesto Chamber of Commerce* against the *Southern Pacific Company* in order to obtain a new passenger depot for the city of Modesto.

Case 589.

Filed April 27, 1914, by *George W. French, et al.*, against the *Oakland, Antioch and Eastern Railway* in order to obtain a station nearer the village of Lafayette than the present stopping place, which is 3,550 feet from the post office of the village of Lafayette by the nearest and most practicable routes.



## Case 605.

Filed May 22, 1914, by the *City of Richmond* against the *Southern Pacific Company* in order to obtain a new passenger depot in the city of Richmond, of such size and character as will best serve the interest, needs and convenience of the city of Richmond and its inhabitants.

## Case 609.

Filed May 28, 1914, by the *Richmond Club* against the *Southern Pacific Railroad Company* in order to obtain new and separate freight and passenger depots, of such size, character and value and with such conveniences as the Commission may deem meet and proper.

## Case 616.

Filed June 19, 1914, by the *Fourth Street District Improvement Club* against the *Southern Pacific Company*, alleging that the proposed new depot to be constructed at Third and Townsend streets, San Francisco, will be inadequate to properly serve the needs of its patrons, is not properly situated, and if constructed, will block Fourth street, and asking that depot be built according to plans submitted by Fourth Street District Improvement Club.

## Application 793.

Filed October 13, 1913, by the *Southern Pacific Company* for the approval of plans and specifications covering the construction of a new passenger depot at Los Angeles.

## Application 818.

Filed November 6, 1913, by the *Southern Pacific Company* to remove station building from Middle Creek to Hilt.

## Application 957.

Filed January 22, 1914, by the *Los Angeles and San Diego Beach Railway Company*, to move agency and freight and passenger station from present terminal grounds, San Diego.

## Application 1027.

Filed March 10, 1914, by the *Southern Pacific Company* to move station at New England Mills to a point approximately 2,000 feet east and abandon the present station of New England Mills.

## Application 1086.

Filed April 14, 1914, by *R. R. Fowler, H. C. Huskins and D. F. Lane*, to obtain a new depot for the city of Turlock.

As a result of the hearings held on the cases and applications listed above, the Commission ordered the construction of the following station buildings:

Case 461. Freight depot at Burlingame.

Case 507. New passenger depot at Sisson.

Application 557. New passenger depot at Modesto.

Case 589. Flag stop and shelter shed on condition that complainant construct wagon road at Lafayette.

Application 1086. New passenger depot at Turlock, on condition.

Detail plans and specifications have been presented by the transportation utilities affected by the orders referred to above, and these have been checked by the department.

The information demanded of the transportation utilities as to the construction of any new siding, spur or other track, for the reception or delivery of freight has resulted in the receipt of 132 maps and letters which have been checked and filed. These show changes in and additions to station and yard tracks and the location of spurs to serve specific industries.

### INVESTIGATION OF SAFETY DEVICES.

This department's investigations into safety devices have so far generally been made at the request of the parties interested in promoting the various devices, although it has upon occasion investigated appliances which have been recommended as tending to increase safety in operation. Investigations have been sometimes made in the field of appliances already installed; others have been confined to an examination of plans and specifications; and others have included both field inspection and a careful analysis of plans as well as correspondence with officials of carriers who have made a test of the device under various conditions.

Crossing protection devices have been of particular interest to this department, as the Commission, in many orders covering grade crossing cases, has required the installation of automatic crossing guards of a type to meet its approval; and this department is called upon to express its opinion regarding the type proposed by the carrier.

Several new types of automatic crossing flagmen have been placed on the market during this year and all of those investigated have merit.

A new low-water boiler alarm, worked out in the southern district of the Southern Pacific Company as a result of a series of fatal boiler explosions has been investigated. This alarm is now being installed on all the locomotives of the entire Pacific system of the Southern Pacific Company as fast as they come into the shops for general repairs, and meets with the approval of this department. It is as yet too early to urge upon the Commission the promulgation of an order for all roads to adopt this device, and this is particularly true in view of the Commission's policy of not recommending or forcing any particular make of device.

### CLEARANCES.

On January 1, 1913, the Commission made effective its General Order No. 26, in regard to clearances. This order was published in full in the report of the Commission for the fiscal year ending June 30, 1913.

The work of the engineering department in connection with this general order has been mainly correspondence and has consisted in answering questions and passing on special cases which have not been, and can not be, covered in a general order.

There have also been many requests for permission to deviate from the order, and these requests have been referred to this department and have resulted in investigations and recommendations, but few of these cases have necessitated field inspections. Most of them have been of such a nature that it was apparent, from data furnished with the request, that a strict application of the order would work a hardship on the utility without in any way affecting the safety of the employees or of the public, and recommendations favorable to the applicant have been made in all such cases.

**JOINT USE OR TRANSFER OF FACILITIES.**

Most of the work in connection with applications for approval of leases and agreements covering joint use or transfer of facilities is handled by other departments. Most of the applications of this character which come up for action are made by a utility for permission to use a facility jointly with or transfer a facility to a related company, and the Commission's interest in such cases is to see that the welfare of the public is looked after. In cases where the companies interested are not of the same financial family, the Commission also sees that the interests of the minor company are safeguarded. This department's reports cover the engineering features involved, and the following list of applications filed during the last fiscal year will give an idea of the nature of the field covered by these applications:

**Application 698.**

Filed August 14, 1913, by *Pajaro Valley Consolidated Railroad Company*, for permit to execute a lease covering the operation of its trains over the lines of the Watsonville Railway and Navigation Company from the junction of these two roads near Watsonville to a point three miles toward the coast from Watsonville, the purpose of the lease being mainly to facilitate the shipment of beets.

**Application 805.**

Filed October 23, 1913, by the *Ventura County Railway Company* to lease to the *Southern Pacific Company* right to operate engines and trains over its "Y" track at Oxnard Station.

**Application 959.**

Filed January 24, 1914, by the *Peninsular Railway Company* and *San Jose Railways* in re joint use of street railway lines in the county of Santa Clara.

**Application 1005.**

Filed February 20, 1914, by the *Colusa and Hamilton Railroad Company*, *Southern Pacific Railroad Company* and *Southern Pacific Company* for order approving lease by Colusa and Hamilton Railroad Company to Southern Pacific Railroad Company and by latter to Southern Pacific Company of its line of railway now under course of construction between Harrington and Hamilton, California, a distance of 61.257 miles.

**Application 1145.**

Filed May 21, 1914, by the *Northern Electric Railway Company*, *Marysville-Colusa Branch*, and by the *Northern Electric Railway Company* for the approval of an operating agreement involving the operation by the latter of lines owned by the former between Colusa and Heyman.

**ISSUES OF SECURITIES, AND CERTIFICATES OF PUBLIC CONVENIENCE AND NECESSITY.**

(Investigations into engineering features involved.)

These two matters are considered together because the construction work contemplated by an application for certificate of public convenience and necessity is usually financed by an issue of securities.

This work is quite separate from the making of valuations of such property as is to be considered as security underlying proposed issues, and has consisted of making examinations on the ground into the conditions surrounding the work contemplated under the certificate of public convenience and necessity, and of checking over the estimates of proposed expenditures submitted in the application for permission



to issue securities. The final examination is made with such maps, profiles, specifications and estimates as are available, and upon the completion of the estimates they are checked against the records of actual costs of similar work which are in the department's files. If the application is in connection with a transportation utility, the inspection covers not only the physical conditions under which the proposed line will be constructed, but an estimate is made of the traffic possibilities of the country traversed. The reports then made to the Commission are intended to visualize the physical situation and to present a statement of the probable cost of the line. Such reports enable the Commission readily to see the reasonableness or unreasonableness of the estimate and of the application for securities based thereon and to develop the facts at the ensuing hearing. In all, some twenty-three applications have come in during the year which required investigations of this nature.

Whenever the Commission makes the granting of an application contingent upon the previous performance of any matter which is of an engineering nature this department checks up the compliance by the utility with the requirements in the Commission's order.

That the entire state has been covered in this connection by the activities of this department is clearly shown by the names of utilities which have appeared before the Commission with applications of this nature. These names follow, together with the application number and the date of filing:

Application number	Date of filing	Utility making application
651	July 23, 1913	Clear Lake Railroad Company.
770	Sept. 29, 1913	San Rafael and San Anselmo Valley Railway Company.
773	Sept. 30, 1913	Fresno-Hanford and Summit Lake Interurban Railway company.
808	Oct. 23, 1913	San Diego and Arizona Railway Company.
836	Nov. 20, 1913	Tonopah and Tidewater Railroad Company.
885	Dec. 10, 1913	Fresno Traction Company.
894	Dec. 12, 1913	Los Angeles Railway Corporation and City Railway.
899	Dec. 16, 1913	San Francisco, Napa and Calistoga Railway.
939	Jan. 15, 1914	Oakland, Antioch and Eastern Railway.
947	Jan. 17, 1914	Marin County Electric Railways.
985	Feb. 10, 1914	Ocean Shore Railroad Company.
990	Feb. 13, 1914	San Francisco-Oakland Terminal Railways.
1044	Mar. 19, 1914	Northwestern Pacific Railroad Company.
1046	Mar. 20, 1914	Glendale and Eagle Rock Railway Company.
1080	Apr. 10, 1914	Big Four Railway Company.
1084	Apr. 14, 1914	Fresno Interurban Railway Company.
1093	Apr. 17, 1914	Minkler-Southern Railway Company.
1142	May 20, 1914	Trona Railway Company.
1152	May 23, 1914	San Francisco-Oakland Terminal Railways.
1162	June 1, 1914	Glendale and Montrose Railway.
1167	June 4, 1914	Ocean Shore Railroad Company.
1190	June 18, 1914	Modesto Interurban Railway.
1206	June 29, 1914	San Diego Electric Railway Company.



By far the heaviest work which has devolved upon the engineering department as a result of the filing of applications for permission to issue securities has been the making of detailed inventory and appraisal of all the property of the company which will be security on the indebtedness. Practically all valuations made on electric roads have been made because of this type of applications. The Commission on its own initiative later directs a valuation case against the utility and definite findings of fact as to value of property are then made.

No additional valuation work on steam roads is caused by these applications, because there is already a valuation case against every steam road in the state. The whole matter has already been discussed under Steam and Electric Road Valuations.

#### INSPECTION OF ROADBED AND OPERATIONS.

The Commission has undertaken the matter of making a complete inspection of the physical and operating conditions of all railroads, both steam and electric, in the state. This is a large and important work and one which will necessarily take a long time to complete, since it must be done during such intervals as occur in current work. Until March, 1913, this entire subject was under the jurisdiction of the engineering department. Since that time the service bureau has been transferred to another department and only the engineering features of these inspections are handled by the engineering department.

There have been, in this connection, several cases where facilities which have been alleged to be unsafe have been investigated independently of the complete inspection. When conditions are found to be normal the complainant is notified that such is the case. When the inspection discloses a condition which is not unsafe at the time but is likely to become so, the carrier is notified informally and requested to give the matter attention. When unsafe and dangerous conditions are disclosed these are called to the attention of the Commission for it to take such action as it may see fit.

There have been brought about by suggestion or through recommendation on the part of the Commission many reforms and improvements in operating and maintenance conditions which have tended to increase the safety of employees and the safety and convenience of the traveling public. The fact that such inspections are being made has had a tendency to stiffen discipline and promote higher maintenance standards on all roads throughout the state, and especially on those roads whose financial condition is such that the apparent economy of spending little money in training trainmen and other employees, and of deferring annual maintenance, has led them to put other considerations ahead of that of safety first. Such inspections as have been made into conditions responsible for accidents are treated under accident investigations.

## ACCIDENT INVESTIGATIONS.

(Tracks, Roadway and Other Engineering Structures.)

## OTHER ACCIDENT INVESTIGATIONS.

The work involved in investigating and reporting on all accidents on common carriers which were caused by failures of engineering structures is not extensive, but it is by no means the least important of the duties of this department. It has been the aim of the department to make these investigations, not with a view of finding the officials or employees who have been responsible for the accidents nor the precise reason which caused any particular one of them, but to seek out the underlying causes which have brought them about. Since the Commission exercises no police power in this connection, a discussion and detailed report on the minor features of an accident would be more or less perfunctory, while a report and recommendation made along general lines may be very useful.

From the first of the fiscal year to the first of March, 1914, the Commission's service bureau formed a part of the engineering department, and in the following list of investigations made by this bureau are many accidents which were caused by reasons other than the failure of engineering structures.

The service bureau is now connected with the rate department.

*Accident Investigations.*

- Derailment of Santa Fe passenger train, Los Nietos.
- Collision between Santa Fe train and street car, Richmond.
- Rear-end collision, Santa Fe, at Storey.
- Accident, Central California Traction Company.
- Accident, Northern Electric Railway Company at American River bridge, Sacramento.
- Accident, Northwestern Pacific Railroad Company, Mill Valley.
- Head-on collision, Ocean Shore Railroad Company.
- Accident at Vineyard, Pacific Electric Railway Company.
- Accident, Venice line, Pacific Electric Railway Company.
- Automobile accident, Peninsular Railway.
- Automobile accident, Petaluma and Santa Rosa Railway Company.
- Accident, San Francisco, Napa and Calistoga Railway Company.
- Accident, San Francisco, Napa and Calistoga Railway Company.
- Accident, San Francisco, Napa and Calistoga Railway Company.
- Automobile accident, Southern Pacific Company, at San Lorenzo.
- Automobile accident, Southern Pacific Company, on Placerville branch.
- Rear-end collision, Southern Pacific Company, Oakland.
- Automobile accident, Southern Pacific Company, San Jose.
- Automobile accident, Southern Pacific Company, Berkeley.
- Derailment, Southern Pacific Company, between Gorge and Midas.
- Grade crossing accident, Southern Pacific Company, Redwood City.
- Rear-end collision, Southern Pacific Company, Elk Grove.
- Automobile accident, Southern Pacific Company, Fresno.
- Grade crossing accident, Southern Pacific Company, Richmond.
- Automobile accident, Southern Pacific Company, Sacramento.
- Grade crossing accident, Southern Pacific Company, Woodland.
- Automobile accident, Southern Pacific Company, Berkeley.
- Derailment and wreck,\* Yosemite Valley Railroad, near Bagley.

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\*Report on this made July 2, 1914.

## INFORMAL COMPLAINTS.

These may cover nearly any one of the groups or sub-groups already discussed, or may not logically fall into any group. During the year the Commission has referred a total of 873 informal complaints to the engineering department. These complaints do not make up the really important work of the Commission, yet without doubt they are the means of affording direct and tangible relief to the largest number of people. Many of them have been disposed of gladly and at once by the utility complained against as soon as it was notified by letter of the subject matter of the complaint; others have necessitated considerable correspondence and even some field investigation. Some of them have led to cases on the Commission's own initiative, others to formal proceedings on the part of the complainant.

All of them have been given prompt attention and wound up in short order. Whenever the complainant felt that he had not received the relief to which he was entitled, he has been advised that he still had recourse to formal proceedings.

In the engineering department these 873 informal complaints have been distributed as follows:

Section of transportation-----	223
Section of hydraulics-----	173
Section of gas and electricity-----	477
Total -----	873

A brief resume will be given of the subjects covered by the above 873 informal complaints.

## Section of Transportation.

	No.
1. <i>Station facilities</i> —Toilet, lighting, removal of, shelter stations required, re-establishing of stations, new stations desired, etc.-----	44
2. <i>Grade crossings</i> —New crossings desired installed, dangerous, protective devices, etc.-----	21
3. <i>Hours of service, grievances of employees</i> —Full Crew Act, violation of, etc.-----	7
4. <i>Freight and baggage service</i> —Insufficient equipment, delay in transit, delay in furnishing equipment-----	12
5. <i>Passenger service</i> —Failure to maintain schedules, poorly arranged schedules, inadequate service, failure of agents to give proper information regarding revisions in time-tables, uncivil treatment by employees, discontinuance of trains, unnecessary delay en route, poor ventilation in coaches, handling wooden cars between steel cars, etc.-----	87
6. <i>Operation</i> —Dangerous, nuisances, safety appliances, use of incorrect official name of stations, annoyance caused by whistling locomotives, flag stops desired, handling of explosives on passenger trains, etc.-----	33
7. <i>Defective track and equipment</i> —Inadequate and insufficient equipment, track not properly protected nor surfaced, defective ties and roadbed, etc.-----	10
8. <i>Spurs and sidings</i> —Need of—objections to their being installed-----	6
9. <i>Drainage</i> —Defective culverts, etc.-----	3
Total -----	223



Section of Hydraulics.	
Service .....	86
Rates and disputed bills .....	43
Installation charges (meters, connections, mains, etc.) .....	57
Dangerous dams .....	2
Various .....	3
Total .....	191
Less duplications .....	17
Net total .....	174
Section of Gas and Electricity.	
Electric rates .....	134
Electric service .....	249
Gas rates .....	24
Gas service .....	70
Total .....	477

### MISCELLANEOUS.

A large amount of miscellaneous work which does not belong to any one of the ten subdivisions above has been transacted during the year. Only the more important matters will be mentioned here.

I. C. No. 3365 brought before the Commission a petition signed by nearly four hundred citizens of Rivera and Downey and the surrounding country on the Rio Honda River in Los Angeles County for an order to compel the Pacific Electric Railway Company to replace its present pile trestle across this stream by a permanent and wide span steel structure. The serious floods of last winter had washed this trestle away and done considerable damage to the surrounding country, endangering the population of that territory. This matter and another complaint which is now under investigation opened up the entire question of flood control in Los Angeles County as far as the Railroad Commission is interested in this control. There is a widespread feeling on the part of the public that the railroads crossing these streams should abandon their pile structures and put in wide span permanent bridges. The Commission is asked to compel such action. The board of supervisors of Los Angeles County on April 3, 1914, appointed a board of engineers to study this question and charged it with the task of formulating plans for works to control and render harmless the floods in Los Angeles County.

The scope of this problem is very great. This board has recently made a preliminary report in which it is stated that the magnitude of the problem in a measure is portrayed when it is said that the territory to be critically examined extends over an area from 1,500 to 2,000 square miles and the value of the affected lands exceeds five hundred million dollars. The Commission has taken up the problem with the interested railroads in the Los Angeles territory with a view to getting concerted action in its study of the situation and in devising plans for possible future flood control. Considerable work has been done along those lines by this department but the subject is such a large one that



the best results can only be secured through joint action by the municipalities, the county, the railroads, the state and the national government. The investigation will be continued during the coming year.

In connection with Case 450, which is the investigation of the oil pipe line companies in the state, this department made a thorough search through all available records in the attempt definitely to locate all the pipe lines in the state and the status of the companies which operate them. The county officials of all counties in the state were asked to furnish such information as could be gathered from their records. All maps known to possess pertinent information were examined, and the charters and articles of incorporation of all oil companies operating in the state were scrutinized at the capitol. A large map was made showing the location of the pipe lines of the most important companies.

In connection with Case 431, already referred to under the work of the service bureau, a start has been made in investigating all the grade crossings on the Pacific Electric Railway, with the view of locating those where grades will eventually have to be separated or the crossings protected. An investigation has also been started, on the same road, for the purpose of reporting to the Commission the operating conditions in regard to the need of this company for additional block signals and of making a recommendation as to where these signals should be installed.

The records of the department are consulted daily in person by inhabitants of San Francisco and bay counties who desire information regarding carriers, and the department, as far as is consistent, places its records at their disposal and cooperates with them in searching for the data desired. Considerable correspondence is had with those living at a distance, who wish to secure information which can be taken from the department's records.

Usually the carriers, following accidents on their roads, hold inquiries to determine their cause and a representative from this department attends such of them as are of importance or interest to it.

In those cases of applications from shippers for spur track privilege in which the carrier resists the application, a representative of the department makes an examination of the site and reports to the Commission, previous to the hearing, the physical and operating features involved in the case.

During the last year the Commission has undertaken the compilation and issuance of a *railroad map* of this state. This map is now in process of preparation and this department is assisting the map maker in the work of compiling all necessary information and data. Several proof readings have already been made and this department will be responsible for the final check and proof reading. It is expected that the result will be a map that is first class in every respect, as well as

in reliability and accuracy in compilation as in excellence of drafting, printing and binding. Particular attention is being given to transportation utilities. These operate approximately 10,970 miles of main track in the state, of which 8,410 are of steam roads and 2,560 are of electric roads.

The map is to be on a scale of fifteen miles to the inch, which is the largest scale which will permit printing on one sheet. It will be printed in ten colors, and will show forest reserves, boundaries for state and counties and other subdivisions. Colors will also be employed to show the different railroad lines, oil fields and pipe lines, telephone and telegraph lines, boat routes, highways and important stage roads. Different characters will be used to designate incorporated cities, county seats, railroad stations, post offices, towns and villages; the location of lighthouses and buoys will be indicated; topographical data will be shown, covering mountains with their elevations, valleys, deserts, islands, rivers, etc.

Besides the main body of the map there will be four insert maps showing on a larger scale and in as much detail as possible the cities of San Francisco, Los Angeles and vicinity, San Diego and vicinity, and the San Francisco bay region. In the upper right hand corner will be an appropriate title with a complete index of all railroads and their mileages. On the reverse side of the map will appear a complete list and index of all cities and towns within the state.

It is the intention to issue this map in three sizes, *i. e.*, on paper in a pocket size folder; on muslin, in sections in a cloth binder, and on vellum with a rod at either end for wall purposes.

The map when completed will be the first official railroad map ever issued of the State of California, and will be sold directly by the Commission at a moderate price. Judging from the large number of requests received to date, it will have a wide distribution.

#### JOINT COMMITTEE ON INDUCTIVE INTERFERENCE.

In the Commission's annual report for last year the purpose and scope of this committee's work was discussed. It is sufficient to say here that the investigations and deliberations of the committee continued during the fiscal year and that the committee recently rendered a very complete report to the Commission, together with recommendations for rules to prevent or mitigate inductive interference. This report has been approved by the Commission and a general order has been issued embodying the rules and recommendations made by this committee. Both the report and rules were published by the Commission and it is only proper to say that the report has aroused a widespread interest in the technical world of not only the United States but beyond its boundaries.

The report and the order are printed under separate covers and will be available to the public on request.

## STOCKS, BONDS, NOTES AND CERTIFICATES.

The records of the Railroad Commission of the State of California show that during the fiscal year ending June 30, 1914, public utilities have made application for authority to issue stocks, bonds, notes and certificates amounting to \$298,679,194.87. The Commission has authorized the issuance of \$217,564,768.00 and denied \$14,749,912.63. Applications involving the sum of \$3,780,110.68 have been dismissed, while applications which call for the issuance of securities amounting to \$67,601,271.57 were pending at the close of the year.

Among the pending applications are those of "The Los Angeles Railway" for authority to issue stocks and bonds to the amount of \$43,544,000.00 and of the San Francisco-Oakland Terminal Railways for authority to issue bonds to the face value of \$10,000,000.00.

Final action on these applications awaits the submission of data by these utilities.

In several instances applicants have modified their applications during the hearing or the Commission has exercised its prerogative and authorized a different class of security than that for which application was made. Any such variations are shown in footnotes on the following tables, as amounts authorized but not applied for in the formal application.

Table "A" shows the grand total of stocks, bonds, notes and certificates applied for, authorized, denied, dismissed and pending.

TABLE "A,"  
Showing Summary of Stocks, Bonds, Notes and Certificates Applied for, Authorized, Dismissed and Pending.

Class of Utility	Applied	Authorized	Denied	Dismissed	Pending
Steam railroads-----	\$136,396,988 49	\$132,889,135 25 <sup>1</sup>	\$5,621,000 00	-----	\$1,023,553 24
Electric railroads-----	66,589,859 97	6,309,828 27 <sup>2</sup>	268,600 00	-----	60,161,431 70
Gas and electric companies-----	68,738,023 56	56,885,055 61 <sup>4</sup>	4,780,200 00	2,829,218 82	5,751,539 13
Water companies-----	17,393,116 72	12,487,602 87 <sup>3</sup>	4,037,090 00	941,891 86	148,700 00
Telephone and telegraph companies-----	3,597,801 13	3,529,732 00	43,021 63	9,000 00	16,047 50
Warehouse companies-----	965,015 00	715,015 00	-----	-----	250,000 00
Pipe line companies-----	4,748,400 00	4,748,400 00	-----	-----	-----
Steamship companies-----	250,000 00	-----	-----	-----	250,000 00
Totals-----	\$298,679,194 87	\$217,564,768 00 <sup>5</sup>	\$14,749,912 63	\$3,780,110 68	\$67,601,271 57

<sup>1</sup>Includes \$3,136,700.00 more authorized than applied for in formal application.

<sup>2</sup>Includes \$150,000.00 more authorized than applied for in formal application.

<sup>3</sup>Includes \$222,168.01 more authorized than applied for in formal application.

<sup>4</sup>Includes \$1,508,000.00 more authorized than applied for in formal application.

<sup>5</sup>Includes \$5,016,868.01 more authorized than applied for in formal application.

The amounts shown in the preceding table have been segregated into four classes shown by the following tables:

Table "B" showing amounts for additions and betterments.

Table "C" showing amounts for refunding.

Table "D" showing amounts for collateral.

Table "E" showing amounts for miscellaneous purposes.



TABLE "B."  
Showing Stocks, Bonds, Notes and Certificates Authorized, Denied, Dismissed and Pending, for Additions and Betterments.

Class of Utility	Applied	Authorized	Denied	Dismissed	Pending
Steam railroad companies.....	\$50,583,988 49	\$47,076,135 25 <sup>1</sup>	\$5,621,000 00	-----	\$1,023,553 24
Electric railway companies.....	60,421,234 97	4,063,828 27 <sup>2</sup>	268,600 00	-----	56,238,856 70
Gas and electric companies.....	39,708,434 66	28,693,290 66 <sup>3</sup>	2,772,200 00	2,704,650 00	5,546,294 00
Water companies.....	4,970,480 29	2,688,148 86 <sup>3</sup>	1,422,807 44	932,992 00	148,700 00
Telephone and telegraph companies.....	1,679,301 13	1,613,532 00	40,721 63	9,000 00	16,047 50
Warehouse companies.....	947,015 00	697,015 00	-----	-----	250,000 00
Pipe line companies.....	4,748,400 00	4,748,400 00	-----	-----	-----
Steamship companies.....	250,000 00	-----	-----	-----	250,000 00
Totals.....	\$163,308,904 54	\$89,580,350 04 <sup>5</sup>	\$10,125,329 07	\$3,646,642 00	\$63,473,451 44

<sup>1</sup>Includes \$3,136,700.00 more authorized than applied for in formal application.

<sup>2</sup>Includes \$150,000.00 more authorized than applied for in formal application.

<sup>3</sup>Includes \$222,168.01 more authorized than applied for in formal application.

<sup>4</sup>Includes \$8,000.00 more authorized than applied for in formal application.

<sup>5</sup>Includes \$5,016,868.01 more authorized than applied for in formal application.

TABLE "C."  
Showing Stocks, Bonds, Notes and Certificates Authorized, Denied, Dismissed and Pending, for Refunding Purposes.

Class of Utility	Applied	Authorized	Denied	Dismissed	Pending
Steam railroad companies.....	\$85,813,000 00	\$85,813,000 00	-----	-----	-----
Electric railway companies.....	4,145,575 00	223,000 00	-----	-----	\$3,922,575 00
Gas and electric companies.....	24,190,810 00	24,001,564 95	-----	-----	189,245 13
Water companies.....	3,743,408 87	3,722,759 01	11,750 00	8,899 86	-----
Telephone and telegraph companies.....	1,909,300 00	1,907,000 00	2,300 00	-----	-----
Warehouse companies.....	-----	-----	-----	-----	-----
Pipe line companies.....	-----	-----	-----	-----	-----
Steamship companies.....	-----	-----	-----	-----	-----
Totals.....	\$119,802,093 95	\$115,667,323 96	\$14,050 00	\$8,899 86	\$4,111,820 13

**TABLE "D."**  
*Showing Stocks, Bonds, Notes and Certificates, Authorized, Denied, Dismissed and Pending for Collateral.*

Class of Utility	Applied	Authorized	Denied	Dismissed	Pending
Steam railroad companies-----	\$1,533,000 00	\$1,533,000 00			
Electric railway companies-----	2,520,000 00	1,796,000 00	\$724,000 00		
Gas and electric companies-----	8,650,000 00	6,070,000 00	2,580,000 00		
Water companies-----					
Telephone and telegraph companies-----					
Warehouse companies-----					
Pipe line companies-----					
Steamship companies-----					
<b>Totals-----</b>	<b>\$12,703,000 00</b>	<b>\$9,399,000 00</b>	<b>\$3,304,000 00</b>		

**TABLE "E."**  
*Showing Stocks, Bonds, Notes and Certificates Authorized, Denied, Dismissed and Pending, for Miscellaneous Purposes.*

Class of Utility	Applied	Authorized	Denied	Dismissed	Pending
Steamship company-----					
Steam railroad companies-----	\$490,000 00	\$490,000 00			
Electric railway companies-----	2,318,768 82	2,394,200 00	\$1,284,000 00	\$124,568 82	\$16,000 00
Gas and electric companies-----	29,227 56	6,695 00	22,532 56		
Water companies-----	9,200 00	9,200 00			
Telephone and telegraph companies-----	18,000 00	18,000 00			
Warehouse companies-----					
Pipe line companies-----					
<b>Totals-----</b>	<b>\$2,865,196 38</b>	<b>\$2,918,095 00</b>	<b>\$1,306,532 56</b>	<b>\$124,568 82</b>	<b>\$16,000 00</b>

<sup>a</sup>Includes \$1,500,000.00 more authorized than applied for in formal application.

On June 30, 1914, applications were pending for authority to issue securities amounting to \$67,602,271.57.

Tables Nos. 1 to 8, inclusive, show the individual applications pending as well as the nature and amount of stocks, bonds or notes which applicants desire to issue. Among these are: Application (No. 985) of the Ocean Shore Railroad Company for authority to issue bonds to the face value of \$200,000.00; the application (No. 1142) of the Trona Railway Company for authority to issue stock to the par value of \$150,000.00 and bonds to the face value of \$550,000.00; application (No. 894) of the Los Angeles Railway for authority to issue stock to the par value of \$20,000,000.00 and bonds to the face value of \$23,544,000.00; application (No. 1059) of the Northern Electric Railway Company for authority to renew notes not exceeding \$2,116,575.00; application (No. 1152) of the San Francisco-Oakland Terminal Railways for authority to issue bonds to the face value of \$10,000,000.00; application (No. 1206) of the San Diego Electric Railway Company for authority to issue bonds to the face value of \$1,484,000.00; application (No. 1057) of the Southern California Edison Company for authority to issue stock to the par value of \$3,000,000.00 and application (No. 1153) of the Midland Counties Public Service Corporation for authority to issue stock to the par value of \$650,000.00.

In most instances the Commission's decisions on the pending applications have been delayed either at the request of the applicant, for additional data, or because of the necessity of making a valuation of the property of the respective applicants.

On the following pages will be found a brief synopsis of each decision. For detailed and specific information, reference is made to volumes 3 and 4 of the "Opinions and Orders of the Railroad Commission of the State of California."

Application No. 418. Decision No. 766.

SUSANVILLE WATER WORKS.

By this order Frank P. Cady and Rilla E. Cady, copartners and owners of the Susanville Water Works, were authorized to issue a note of the face value of \$10,000.00.

Application No. 419. Decision No. 767.

HONEY LAKE VALLEY MUTUAL TELEPHONE ASSOCIATION.

The Honey Lake Valley Mutual Telephone Association, operating in Lassen County, was permitted by this order to issue a note of \$10,000.00, to refund outstanding indebtedness.

Application No. 479. Decision No. 768.

BEAUMONT GAS AND POWER COMPANY.

By the order of the Commission applicant was permitted to issue for the purpose of discharging its indebtedness a note in the principal sum of \$5,000.00.

Application No. 526. Decision No. 770.

THE SOUTHERN CALIFORNIA EDISON COMPANY.

The Southern California Edison Company, under the terms of this order, was authorized to issue at 80, \$3,000,000.00 of its common capital stock. The proceeds derived from the sale thereof were to be applied as follows:

- (1) To pay outstanding notes of the amount of \$1,010,000.00;
- (2) To the payment of outstanding accounts to the amount of \$279,511.52.
- (3) To the payment of debentures to the amount of \$332,000.00.
- (4) The balance to the payment of expenses incurred in making additions and betterments to the plant of the applicant.

Application No. 608. Decision No. 771.

OAKLAND, ANTIOCH AND EASTERN RAILWAY.

The Oakland, Antioch and Eastern Railway, operating a standard gauge electric railway between Oakland and Sacramento, was permitted to issue \$1,000,000.00 of its 5 per cent thirty-year bonds.

Application No. 607. Decision No. 786.

SAN DIEGO AND SOUTHEASTERN RAILWAY COMPANY.

Applicant asked for authority to issue \$600,000.00 of its 5 per cent thirty-year gold bonds. Of this amount the company was allowed to issue \$343,000.00, the balance to be issued only upon filing supplementary applications.

Application No. 606. Decision No. 788.

CENTRAL CALIFORNIA GAS COMPANY.

By this order the Commission modified a former decision, permitting the Central California Gas Company to apply \$10,000.00 derived from the sale of its preferred stock to improvements in the city of Visalia instead of in the city of Porterville, as specified in the Commission's order *in re* Application No. 204.

Application No. 627. Decision No. 789.

SANTA BARBARA GAS AND ELECTRIC COMPANY.

By this order the Santa Barbara Gas and Electric Company was authorized to issue \$100,000.00 of its 6 per cent bonds. The proceeds from the sale or pledge of said bonds were to be applied to additions and betterments.

Application No. 629. Decision No. 790.

SAN JOAQUIN LIGHT AND POWER CORPORATION.

By this order the San Joaquin Light and Power Corporation was given authority to issue \$1,766,000.00 of its Series "B" first and refunding mortgage forty-year 5 per cent bonds. At the time the order was issued the company was permitted to dispose of \$1,626,000.00 of the said bonds; the balance to be issued only after this Commission had entered its supplemental order.



Application No. 630. Decision No. 814.

PACIFIC GAS AND ELECTRIC COMPANY.

In this application the Pacific Gas and Electric Company desired an interpretation of the provision of section 52 of the Public Utilities Act reading:

"A public utility may issue notes for proper purposes and not in violation of any provision of this act or any other act payable at a period of not more than twelve months after the date of issuance of same, without the consent of the Commission, but no such notes shall, in whole or in part, be refunded by any issue of stocks or stock certificates, or of bonds, notes of any term or character, or any other evidence of indebtedness, without the consent of the Commission."

The Commission held that while a public utility may issue one note payable at a period of not more than twelve months after the date of the issuance of the same, it may not issue another note to refund or take up the first note without having drawn the matter to the attention of the Commission and secured the usual order of authorization. The Commission further held that a note to which this Commission's authorization is necessary is absolutely void unless such authorization has been secured. It also held that it had no power to make valid an act which is absolutely void, but that it could direct the applicant to cancel such notes as may have been issued without authority and authorize it to execute new notes in lieu thereof. The Commission thus authorized the Pacific Gas and Electric Company to issue notes of the face value of \$319,106.08.

Application No. 623. Decision No. 829.

HANFORD WATER COMPANY.

The stockholders of the Hanford Water Company in September, 1912, advanced \$47,000.00 to retire the company's indebtedness. In this application, the petitioner requests permission to issue to said stockholders 5,875 shares (par value \$10.00 a share) of stock at 80. The Commission in its order authorized the company to issue in lieu of the 5,875 shares of stock at 80, 4,700 shares at par.

Application No. 647. Decision No. 832.

PACIFIC GAS AND ELECTRIC COMPANY.

The Pacific Gas and Electric Company by this order was authorized to renew notes of the face value of \$250,774.95.

Application No. 590. Decision No. 848.

SAN DIEGO CONSOLIDATED GAS AND ELECTRIC COMPANY.

This is a supplemental order authorizing the San Diego Consolidated Gas and Electric Company to issue bonds of the amount of \$102,000.00.

Application No. 668. Decision No. 852.

SOUTHERN COUNTIES GAS COMPANY OF CALIFORNIA.

The Southern Counties Gas Company of California, owning and operating gas plants and distributing systems in Santa Ana, Whittier, Monrovia, Covina and Orange, asked for authority to issue \$100,000.00 of its 6 per cent thirty-year first mortgage bonds. The Commission

held that the company might issue \$75,000.00, of which amount \$7,000.00 could be issued immediately and the remainder (\$68,000.00), upon stated conditions.

Application No. 341. Decision No. 854.

TORRANCE WATER, LIGHT AND POWER COMPANY.

By this order, the Dominguez Land Corporation, Ralph Bennett and others, were permitted to transfer to the Torrance Water, Light and Power Company a water distributing system located in the town of Torrance, Los Angeles County. Applicant was permitted to issue in payment for said property \$34,000.00 of its common capital stock and \$115,000.00 of its bonds.

Application No. 626. Decision No. 855.

LINDSAY HOME TELEPHONE AND TELEGRAPH COMPANY.

The Lindsay Home Telephone and Telegraph Company was authorized to issue 644 shares of its capital stock at the par value of \$1.00 per share.

Application No. 676. Decision No. 864.

PACIFIC GAS AND ELECTRIC COMPANY.

Modification of orders *in re* Applications No. 552 and No. 603.

Application No. 38. Decision No. 872.

TIDEWATER SOUTHERN RAILWAY COMPANY.

Supplemental order *in re* Application No. 38.

Applications Nos. 694 and 659. Decision No. 875.

TULARE COUNTY POWER COMPANY.

The Tulare County Power Company was authorized to issue promissory notes aggregating \$50,000.00 to Thomas C. Job, pledging as security \$66,500.00 of its first mortgage bonds. The company was denied permission to issue a note for interest in the sum of \$3,243.82 and to pledge bonds of the face value of \$4,000.00 as security for the same.

Application No. 676. Decision No. 874.

PACIFIC GAS AND ELECTRIC COMPANY.

Order amending previous order of the Commission and permitting variation in terms of general lien mortgage of applicant.

Application No. 593. Decision No. 876.

DAVIS WATER COMPANY.

Applicant was permitted to issue at par for purchase of property \$6,500.00 of its common capital stock. Also to issue \$29,700.00 of its common capital stock, or \$25,000.00 of its 6 per cent refunding coupon certificates, to defray the cost of additions and betterments. Four hundred and fifty dollars instead of \$1,000.00 was allowed A. B. Roberts for organizing and incorporating the Davis Water Company. Applicant's request for authority to issue 5,000 shares of its capital stock, having a par value of \$12,500.00 as "promotion stock"—the same to be

used in the language of the application "in the promotion and furtherance of the business of the company"—was denied on the ground that said stock was to be issued to the incorporators for a purpose not authorized by the Public Utilities Act.

Application No. 666. Decision No. 891.

OAKLAND, ANTIOCH AND EASTERN RAILWAY.

In passing on this application, the Commission held that it has jurisdiction over \$500,000.00 of bonds of the Oakland, Antioch and Eastern Railway sold under a contract dated March 20, 1912, with H. C. Breeden and placed by him in escrow with the Union Trust Company. To quote from the decision:

"This Commission has heretofore held that bonds would not be regarded as having been issued prior to the effective date of the Public Utilities Act unless before that time they had actually been delivered for value. This value must not be merely colorable, and it must appear that delivery was made in good faith for the purpose of actually passing title under an agreement which the parties did not expect thereafter to cancel. It is evident that the bonds now referred to were delivered on payment of the most nominal consideration to bind the bargain, under an agreement under which either party could cancel the contract under the payment of another nominal consideration, which consideration might be waived by consent of the other party. It should also be remembered that the application was consummated only three days prior to the effective date of the Public Utilities Act.

Taking into consideration all the facts of the case, I am of the opinion that these bonds have not been *issued* as that word is used in the Public Utilities Act. Mere delivery to a bank or trust company in escrow does not necessarily constitute delivery. Whatever the intention may have been, the jurisdiction of this Commission still attaches to these bonds and they will be regarded in this opinion as though they had never been issued."

Applicant was authorized to issue the bonds in question and to pledge or sell the same.

Application No. 673. Decision No. 892.

DELANO-LINNS VALLEY TELEPHONE COMPANY.

The Delano-Linns Valley Telephone Company was ordered to cancel 10 shares of stock (par value \$25.00), illegally issued, and substitute a like number of shares authorized by the Commission.

Application No. 637. Decision No. 896.

HOME TELEPHONE COMPANY OF COVINA.

In this application the Home Telephone Company of Covina asked permission to create a bonded indebtedness of \$200,000.00 and issue \$50,000.00 to retire underlying bonds and \$40,000.00 to defray the cost of additions and betterments. In passing on this application, the Commission held that its authority was not required for the initial authorization of the bond issue, but merely for the actual issue of the bonds so authorized. The company was allowed to issue \$47,000.00 of its first mortgage bonds to retire underlying bonds and \$40,000.00 to refund notes and pay for the costs of additions and betterments to its plant. Applicant was also permitted to issue \$9,300.00 of bonds in lieu of bonds illegally issued.

Application No. 702. Decision No. 899.

MIDWAY GAS COMPANY.

The Midway Gas Company, owning a natural gas transmission line extending from the Midway-Sunset Oil Fields, near Taft, to within a few miles of the city limits of Los Angeles, was allowed to refund notes to the amount of \$210,000.00.

Application No. 590. Decision No. 903.

SAN DIEGO CONSOLIDATED GAS AND ELECTRIC COMPANY.

Supplemental order authorizing applicant to issue and sell \$33,000.00 of its first mortgage 5 per cent bonds.

Application No. 350. Decision No. 908.

SOUTHERN CALIFORNIA EDISON COMPANY.

Applicant permitted to pledge a certain portion of bonds heretofore authorized as security for notes, on the condition that the proceeds of the said notes are to be used solely for purposes specified in the order dated January 27, 1913.

Application No. 374. Decision No. 912.

FRESNO, HANFORD AND SUMMIT LAKE INTERURBAN RAILWAY COMPANY.

The Fresno, Hanford and Summit Lake Interurban Railway Company was authorized to sell \$358,000.00 of its 6 per cent forty-year bonds on the condition that the \$1,250,000.00 of its capital stock heretofore issued be deposited with J. H. Summers, who shall file with the Commission a stipulation that no stock shall be sold to the public until the first unit of the road is completed and put in operation.

Application No. 616. Decision No. 914.

WESTERN STATES GAS AND ELECTRIC COMPANY.

The Western States Gas and Electric Company was authorized to issue \$354,000.00 of its mortgage bonds, the proceeds of which were to be used in the refunding of obligations incurred in the construction of additions and betterments.

Application No. 704. Decision No. 916.

FINNELL WAREHOUSE COMPANY.

Applicant was permitted to issue 15 shares of stock (par value \$1.00) to replace a loan of like amount.

Application No. 668. Decision No. 929.

SOUTHERN COUNTIES GAS COMPANY OF CALIFORNIA.

Supplemental order authorizing the Southern Counties Gas Company of California to issue and sell \$6,500.00 worth of bonds.

Application No. 699. Decision No. 930.

HUMBOLDT TRANSIT COMPANY.

Applicant was permitted to issue a \$20,000.00 demand note to refund a promissory note of like amount.



Application No. 357. Decision No. 931.

GREAT WESTERN POWER COMPANY.

Supplemental application for the modification of the original order in the matter of expenditures of the proceeds of bonds heretofore authorized, granted.

Application No. 629. Decision No. 946.

SAN JOAQUIN LIGHT AND POWER CORPORATION.

Supplemental order permitting applicant to amend agreement under which it intends to pledge bonds heretofore authorized.

Application No. 666. Decision No. 950.

WESTERN STATES GAS AND ELECTRIC COMPANY.

Modification of order dated August 30, 1913.

Application No. 515. Decision No. 956.

MIDLAND COUNTIES PUBLIC SERVICE COMPANY.

At the request of applicant, the Commission dismissed this application.

Application No. 526. Decision No. 960.

SOUTHERN CALIFORNIA EDISON COMPANY.

Modification of order dated July 2, 1913, permitting the Southern California Edison Company to pay \$5.00 instead of \$2.50 per share as commission.

Application No. 742. Decision No. 966.

MIDLAND COUNTIES PUBLIC SERVICE CORPORATION.

Applicant permitted to purchase 700 shares of the Midland Counties Gas and Electric Company, also to issue bonds of the face value of \$1,159,000.00. Of this amount \$275,000.00 was to be used to retire bonds of a like amount of the Midland Counties Gas and Electric Company; \$546,000.00 to retire a like amount of bonds of the Coalinga Water and Electric Company, and \$338,000.00 to be issued only under supplemental orders to defray the cost of additions and betterments.

Application No. 746. Decision No. 967.

PACIFIC GAS AND ELECTRIC COMPANY.

Applicant permitted to issue 6 per cent gold notes in the sum of \$7,000,000.00; \$4,500,000.00 of said notes were to be used to refund demand notes of like amount; the balance (\$2,500,000) were to be sold under a trust agreement. Applicant was also authorized to pledge \$5,000,000.00 of its general lien bond and \$5,000,000.00 of its general and refunding mortgage bonds as security for said 6 per cent gold notes.

Application No. 590. Decision No. 970.

SAN DIEGO CONSOLIDATED GAS AND ELECTRIC COMPANY.

Supplemental order authorizing applicant to issue and sell \$25,000.00 worth of bonds as per terms of general order dated June 30, 1913.

Application No. 75. Decision No. 971.

SACRAMENTO VALLEY ELECTRIC RAILROAD COMPANY.

Supplemental decision changing the terms of the original order relative to the conditions under which applicant may sell its stock.

Application No. 663. Decision No. 972.

ALTA DISTRICT GAS COMPANY.

Alta District Gas Company was authorized to issue to A. A. Weber, in exchange for property, \$35,000.00 par value of its capital stock. Applicant was also permitted to issue its promissory note in the principal sum of not more than \$20,000.00.

Application No. 741. Decision No. 973.

DELANO-LINNS VALLEY TELEPHONE COMPANY.

Applicant permitted to issue its promissory note in the sum of \$700.00 in lieu of a note previously issued without the Commission's authorization.

Application No. 755. Decision No. 975.

SONOMA VALLEY WATER, LIGHT AND POWER COMPANY.

Applicant permitted to issue bonds of the face value of \$30,000.00, the proceeds to be used partly to refund outstanding indebtedness and partly to defray the cost of additions and betterments to applicant's plant.

Application No. 719. Decision No. 976.

SANTA MARIA GAS AND POWER COMPANY.

Applicant permitted to issue its 6 per cent promissory notes in the aggregate sum of \$1,000.00.

Application No. 731. Decision No. 981.

AMADOR ELECTRIC LIGHT AND POWER COMPANY.

Applicant permitted to issue \$12,000.00 face value of bonds, the proceeds of which were to be applied to discharge present outstanding indebtedness and to refund the treasury for money previously expended for additions to plant. Applicant was also authorized to issue 3,000 shares of its capital stock to the estate of Mary A. Deacon.

Application No. 737. Decision No. 982.

HUNTINGTON BEACH WAREHOUSE COMPANY.

SAWTELLE WAREHOUSE COMPANY.

HUENEME WHARF AND WAREHOUSE COMPANY.

The Huntington Beach Warehouse Company was authorized to issue \$18,000.00 of its capital stock at par to the Farmers' Warehouse Company in exchange for property. The Sawtelle Warehouse Company was authorized to issue to the Farmers' Warehouse Company \$18,000.00 of its capital stock in exchange for property. Each of these companies were authorized to issue, in addition to the above, \$7,000.00 of their capital stock. The Hueneme Wharf and Warehouse Company was authorized to issue \$60,000.00 of its capital stock and execute a

promissory note to the face value of \$40,000.00. The funds derived from these sources were to be applied to the purchase of property from the Farmers' Warehouse Company. The said wharf and warehouse company was also allowed to issue 500 shares of its capital stock at par.

Application No. 170. Decision No. 984.

EMPIRE WATER COMPANY.

The Empire Water Company applied for authority to issue bonds to the face value of \$200,000.00 for the purpose of constructing a hydroelectric plant. This application was dismissed without prejudice on the ground that insufficient information as to the financing of said plant had been submitted.

Application No. 729. Decision No. 985.

MADERA GAS COMPANY.

The Madera Gas Company was permitted to issue to George W. Kitchen for a certain gas plant situated in the city of Madera \$25,000.00 face value of bonds and \$14,000.00 par value of stock.

Application No. 616. Decision No. 987.

WESTERN STATES GAS AND ELECTRIC COMPANY.

This is a supplemental order permitting applicant to dispose of the balance of certain bonds heretofore authorized, said balance amounting to \$75,000.00 face value, at  $82\frac{1}{2}$  instead of  $88\frac{1}{2}$ , or to hypothecate the same at not less than 80.

Application No. 629. Decision No. 990.

SAN JOAQUIN LIGHT AND POWER CORPORATION.

Modification of Decision No. 790.

Application No. 773. Decision No. 992.

FRESNO, HANFORD AND SUMMIT LAKE INTERURBAN RAILWAY COMPANY.

Applicant was authorized to issue \$225,000.00 par value of its preferred stock for the following purposes:

- (1) To retire bonds of the face value of \$98,000.00 heretofore authorized;
- (2) For the payment of current indebtedness;
- (3) For the completion of a portion of applicant's road from Fresno to Selma.

Application No. 736. Decision No. 993.

TULARE COUNTY POWER COMPANY.

The Tulare County Power Company was authorized by this order to issue 22 promissory notes aggregating \$250,000.00 to Charles W. Wrightsman for a cash loan of \$200,000.00—the notes maturing serially must all be paid within eighteen months. The difference between the cash loan and the aggregate face value of the notes represents interest and payment for services to Messrs. Wrightsman, Bush

and Hughes. The authority granted was based on the condition that the company recall, cancel and destroy an issue of 600 first mortgage bonds heretofore authorized. The applicant was permitted to issue 3,330 shares of stock at par to liquidate current indebtedness.

Application No. 769. Decision No. 1005.

HEMET-SAN JACINTO GAS COMPANY.

Applicant was authorized to issue bonds of the face value of \$3,000.00 at not less than 82½.

Application No. 725. Decision No. 1011.

NAPA VALLEY ELECTRIC COMPANY.

The Commission authorized the Napa Valley Electric Company to issue bonds of the face value of \$20,500.00 stock of the par value of \$15,300.00 and one-day promissory note of the face value of \$5,000.00 for purposes enumerated in the order.

Application No. 736. Decision No. 1013.

TULARE COUNTY POWER COMPANY.

This is an order vacating second supplemental order dated October 13, 1913, etc.

Application No. 777. Decision No. 1019.

UNITED LIGHT AND POWER COMPANY OF CALIFORNIA.

Applicant was authorized to issue its promissory notes in the sum of \$6,000.00.

Application No. 718. Decision No. 1026.

SOUTHERN SIERRAS POWER COMPANY.

Authority granted to renew two promissory notes for \$5,000.00 each.

Application No. 764. Decision No. 1027.

REEDLEY TELEPHONE COMPANY.

Authority granted to issue 2,500 shares (par value \$1.00) of capital stock for purposes of new construction and necessary extensions.

Application No. 763. Decision No. 1034.

THE PACIFIC TELEPHONE AND TELEGRAPH COMPANY.

By this order The Pacific Telephone and Telegraph Company was authorized to issue bonds of the face value of \$3,000,000.00 at not less than 96.3. Of this amount \$1,850,000.00 was to be used to retire a like amount of bonds of the Sunset Telephone and Telegraph Company; \$242,000.00 to retire notes, and the balance for additions and betterments.

Application No. 721. Decision No. 1035.

PACIFIC LIGHT AND POWER CORPORATION.

The application of the Pacific Light and Power Corporation to issue \$1,730,000.00 face value of bonds was dismissed without prejudice on the ground that an insufficient showing had been made by applicant.



Application No. 723. Decision No. 1036.

PACIFIC LIGHT AND POWER CORPORATION.

By this order the Pacific Light and Power Corporation was authorized to issue 523 shares (par value \$100.00) of its second preferred stock, said stock to be exchanged for a like number of shares of the capital stock of the Pacific Light and Power Company.

Application No. 743. Decision No. 1043.

CONSOLIDATED WATER COMPANY OF POMONA.

Applicant was permitted to execute a promissory note of the face value of \$16,000.00.

Application No. 651. Decision No. 1046.

CLEAR LAKE RAILROAD COMPANY.

By this order the Clear Lake Railroad Company was authorized to issue 2,617 shares (par value \$100.00) of stock and bonds of the face value of \$500,000.00. The former was to be sold at par and the latter at not less than 80. The funds derived from these sources are to be applied to the construction of a standard gauge railroad extending from Hopland, Mendocino County, to Lakeport, Lake County.

Application No. 801. Decision No. 1047.

SPRING VALLEY WATER COMPANY.

The Commission authorized the Spring Valley Water Company to execute promissory notes to the amount of \$300,000.00 and to issue and pledge bonds of the face value of \$400,000.00 as security therefor. The proceeds were to be applied—

- (1) To partial payment of certain mortgages.
- (2) For the construction of the Calaveras dam.

Application No. 446. Decision No. 1052.

SACRAMENTO NATURAL GAS COMPANY.

Modification of order dated April 24, 1913.

Application No. 772. Decision No. 1053.

DOS PALOS TELEPHONE COMPANY.

Applicant was authorized to issue 1,273 shares (par value \$1.00) of its capital stock to pay for additions and betterments to its plant.

Application No. 789. Decision No. 1054.

COAST VALLEYS GAS AND ELECTRIC COMPANY.

Applicant was authorized to issue bonds of the face value of \$114,000.00 to be sold at not less than 90, or pledged at not less than 75, as security for certain promissory notes.

Application No. 800. Decision No. 1057.

SAN DIEGO HOME TELEPHONE COMPANY.

The Commission authorized this company to execute promissory notes in the aggregate sum of \$150,000.00, or to pledge bonds in an amount not to exceed the ratio of 2 to 1, as security therefor.

Application No. 590. Decision No. 1058.

SAN DIEGO CONSOLIDATED GAS AND ELECTRIC COMPANY.

Modification of order dated September 25, 1913.

Application No. 588. Decision No. 1060.

CAMPBELL WATER COMPANY.

The Campbell Water Company was authorized to issue 19 shares (par value \$25.00) for improvements. Because of lack of power in the Public Utilities Act, the company was denied the right to issue 240 shares of stock to the present stockholders as a bonus against surplus reinvested in plant.

Application No. 593. Decision No. 1062.

DAVIS WATER COMPANY.

Supplemental order authorizing applicant to issue capital stock of the par value of \$37,125.00 at 80 in lieu of stock of the par value of \$29,700.00 previously authorized to be issued at par.

Application No. 51. Decision No. 1066.

STOCKTON TERMINAL AND EASTERN RAILWAY COMPANY.

Expiration of order *in re* Application No. 366 extended to April 1, 1914.

Application No. 336. Decision No. 1067.

STOCKTON TERMINAL AND EASTERN RAILWAY COMPANY.

Modification of order dated March 20, 1913.

Application No. 736. Decision No. 1074.

TULARE COUNTY POWER COMPANY.

Modification of supplemental order dated October 8, 1913.

Application No. 770. Decision No. 1075.

SAN RAFAEL AND SAN ANSELMO VALLEY RAILWAY COMPANY.

Applicant asked for authority to issue \$100,000.00 par value of its capital stock and bonds of the face value of \$100,000.00. The company was authorized to issue \$55,000.00 of its capital stock and \$45,000.00 of its bonds.

Application No. 736. Decision No. 1077.

TULARE COUNTY POWER COMPANY.

Modification of order dated October 8, 1913.

Application No. 590. Decision No. 1081.

SAN DIEGO CONSOLIDATED GAS AND ELECTRIC COMPANY.

Supplemental order authorizing the San Diego Consolidated Gas and Electric Company to issue \$41,000.00 of bonds.

Application No. 819. Decision No. 1085.

LOS VERJELS LAND AND WATER COMPANY.

The applicant in this case was permitted to mortgage 2,575 acres of land to secure a loan of \$25,000.00 and to issue 65,780 shares (par value \$1.00) of its capital stock.

Application No. 803. Decision No. 1086.

CALIFORNIA TELEPHONE AND LIGHT COMPANY.

By this order the California Telephone and Light Company was permitted to issue its 6 per cent bonds of the face value of \$100,000.00 and its preferred stock of the par value of \$50,000.00. The bonds were to be sold for not less than 95 and the stock for not less than 80.

Application No. 828. Decision No. 1089.

MOKELUMNE RIVER POWER AND WATER COMPANY.

The application of the Mokelumne River Power and Water Company was dismissed on the ground that the exercise of any authority which the Commission might have was unnecessary.

Application No. 830. Decision No. 1092.

SPRING VALLEY WATER COMPANY.

By this order the Spring Valley Water Company was authorized to execute its promissory notes aggregating \$1,000,000.00 and to issue and pledge as security therefor \$1,334,000.00 of its bonds.

Application No. 559. Decision No. 1108.

SAN JOSE WATER COMPANY.

Modification of order dated June 6, 1913.

Application No. 767. Decision No. 1112.

GRIFFIN'S TRANSFER AND STORAGE COMPANY.

Applicant in this case was authorized to issue, subject to certain conditions, stock of the par value of \$72,000.00 and bonds aggregating \$50,000.00.

Application No. 807. Decision No. 1113.

WINTERS GAS COMPANY.

The Winters Gas Company was authorized to issue \$21,300.00 of its capital stock at not less than par. Of this amount the Commission allowed \$500.00 for promotion services.

Application No. 812. Decision No. 1118.

MT. WHITNEY POWER AND ELECTRIC COMPANY.

Applicant in this case was authorized to issue bonds of the face value of \$250,000.00.

Application No. 750. Decision No. 1124.

COAST COUNTIES GAS AND ELECTRIC COMPANY.

The Coast Counties Gas and Electric Company applied for authority to issue \$200,000.00 par value of its preferred stock to refund indebted-

ness and defray cost of additions and betterments. The application was denied without prejudice.

Application No. 814. Decision No. 1131.

SANTA CLARA WATER COMPANY.

The Santa Clara Water Company applied for permission to issue its notes in the sum of \$4,150.00 in lieu of notes outstanding. The application was granted as regards \$2,655.00 and denied as to \$1,495.00.

Application No. 836. Decision No. 1134.

TONOPAH AND TIDEWATER RAILROAD COMPANY.

The application of the Tonopah and Tidewater Railroad Company to issue \$364,000.00 of bonds was denied by the Commission.

Application No. 839. Decision No. 1135.

COACHELLA VALLEY ICE AND ELECTRIC COMPANY.

The applicant was authorized to issue bonds of the face value of \$300,000.00 for the purpose of constructing a transmission line from Banning to El Centro. The payment of these bonds has been guaranteed, both as to principal and interest, by the Holton Power Company.

Application No. 835. Decision No. 1136.

SAN DIMAS WATER COMPANY.

The San Dimas Water Company was authorized to issue bonds of the face value of \$15,000.00.

Application No. 767. Decision No. 1137.

GRIFFIN'S TRANSFER AND STORAGE COMPANY.

Modification of order dated December 5, 1913.

Application No. 668. Decision No. 1143.

SOUTHERN COUNTIES GAS COMPANY OF CALIFORNIA.

Supplemental order authorizing the applicant to issue bonds of the face value of \$9,000.00.

Application No. 830. Decision No. 1144.

SPRING VALLEY WATER COMPANY.

Modification of order dated November 27, 1913.

Application No. 306. Decision No. 1152.

ANGELS FLIGHT RAILWAY COMPANY.

The decision in this application modifies the order dated April 25, 1913, and authorizes applicant to issue \$25,000.00 par value of its capital stock in lieu of bonds heretofore authorized.

Application No. 742. Decision No. 1158.

MIDLAND COUNTIES PUBLIC SERVICE CORPORATION.

Supplemental order authorizing applicant to issue additional bonds of the face value of \$79,000.00.



Application No. 568. Decision No. 1159.

SOUTHERN CALIFORNIA GAS COMPANY.

Modification of order dated May 22, 1913.

Application No. 862. Decision No. 1160.

TULARE COUNTY POWER COMPANY.

The applicant in this case was authorized to issue stock of the par value of \$80,000.00 at par and to use the proceeds derived therefrom for extensions and betterments.

Application No. 872. Decision No. 1161.

NORTHERN CALIFORNIA POWER COMPANY, CONSOLIDATED.

By this order the Northern California Power Company, Consolidated, was permitted to issue promissory notes in the sum of \$12,000.00 to refund notes of like amount.

Application No. 884. Decision No. 1165.

PASADENA CONSOLIDATED WATER COMPANY.

Under this order the Pasadena Consolidated Water Company was authorized to issue 129 shares (par value \$100.00) of its capital stock in lieu of stock issued without the authority of the Commission and deliver the same to J. B. Coulston in payment for water pipes and appurtenances. Applicant was also permitted to issue three promissory notes aggregating \$7,700.00.

Application No. 75. Decision No. 1172.

SACRAMENTO VALLEY ELECTRIC RAILROAD COMPANY.

Modification of order dated August 13, 1913.

Application No. 428. Decision No. 1179.

UNITED LIGHT, FUEL AND POWER COMPANY.

Under this order the company was permitted to issue stock at par to the amount of \$197,000.00.

Application No. 693. Decision No. 1191.

PITT RIVER POWER COMPANY.

The Pitt River Power Company asked for authority to issue \$132,500.00 of its 7 per cent noncumulative preferred stock. The Commission gave it authority to issue but \$90,000.00 of this amount. Of the authorized stock \$30,000.00 was allowed to be issued in payment for water rights and the balance—\$60,000.00—was to be issued only after the company had filed a statement showing in detail the proposed expenditures in the construction of the plant.

Application No. 920. Decision No. 1198.

COAST COUNTIES GAS AND ELECTRIC COMPANY.

The company in these proceedings was allowed to issue \$150,000.00 face value of debentures to be sold at not less than 93.

Application No. 874. Decision No. 1204.

HOME TELEPHONE AND TELEGRAPH COMPANY OF SANTA BARBARA.

The applicant was authorized to issue three notes in the aggregate amount of \$20,000.00, said notes to be issued for refunding notes of like amount.

Application No. 829. Decision No. 1205.

OAKDALE GAS COMPANY.

Oakdale Gas Company asked authority to issue capital stock of the par value of \$42,000.00 and bonds to the face value of \$30,000.00. The Commission granted the applicant authority to issue \$25,000.00 of bonds and \$15,000.00 of stock, and to purchase the gas plant formerly owned by J. R. Anderson.

Application No. 899. Decision No. 1210.

SAN FRANCISCO, NAPA AND CALISTOGA RAILWAY COMPANY.

The applicant in this case was permitted to issue bonds of the face value of \$33,000.00, the same to be pledged as security for certain outstanding notes or to be sold under a supplemental order prescribing the minimum price to be received for said bonds.

Application No. 829. Decision No. 1212.

OAKDALE GAS COMPANY.

Modification of Decision No. 1205.

Application No. 875. Decision No. 1220.

HOME TELEPHONE AND TELEGRAPH COMPANY OF SANTA BARBARA COUNTY.

By this order the applicant was authorized to issue its 6 per cent note in the sum of \$15,000.00 in lieu of a note of like amount then outstanding and to pledge its bonds of the face value of \$27,000.00 as security therefor.

Application No. 925. Decision No. 1231.

ESCALON WATER AND LIGHT COMPANY.

Applicant was authorized to issue stock to the par value of \$9,240.00.

Application No. 500. Decision No. 1238.

ECONOMIC GAS COMPANY.

Supplemental opinion in rebond issue and refinancing.

Application No. 954. Decision No. 1243.

STANDARD OIL COMPANY OF CALIFORNIA.

The Commission authorized Standard Oil Company of California to issue its common capital stock to the amount of \$4,748,400.00 at par. In passing upon this application allowing the company to issue its stock below the market value, the Commission explicitly stated that this case should not be taken as a precedent. The question whether a utility should be permitted to issue stock below its market value was to be decided in some future case when the money derived from the sale of such stock was to be applied to public utility purposes.

Application No. 960. Decision No. 1246.

SACRAMENTO NATURAL GAS COMPANY.

Sacramento Natural Gas Company was authorized to issue bonds to the face value of \$20,000.00 and execute notes not in excess of \$100,000.00. The bonds herein authorized were allowed to be pledged as collateral.

Application No. 939. Decision No. 1247.

OAKLAND, ANTIOCH AND EASTERN RAILWAY.

By this order the Oakland, Antioch and Eastern Railway was authorized to issue its notes to the amount of \$700,000.00 and to pledge as collateral to secure said notes, bonds to the face value of \$500,000.00.

Application No. 939. Decision No. 1257.

OAKLAND, ANTIOCH AND EASTERN RAILWAY.

Supplemental order to Decision No. 1247.

Applications Nos. 837 and 876. Decision No. 1262.

NEVADA-CALIFORNIA-OREGON TELEPHONE AND TELEGRAPH COMPANY.

Applicant was authorized to issue bonds to the face value of \$55,000.00. Of this amount \$15,000.00 was to be paid California and Oregon Telegraph Company and \$40,000.00 to the California Northern Telephone and Telegraph Company for property acquired from these corporations.

Application No. 851. Decision No. 1263.

LINDSAY HOME TELEPHONE AND TELEGRAPH COMPANY.

Applicant was permitted to issue its notes in the sum of \$3,000.00, payable in three years, with interest at 8 per cent.

Application No. 808. Decision No. 1264.

SAN DIEGO AND ARIZONA RAILWAY COMPANY.

The San Diego and Arizona Railway Company applied to the Commission for authority to issue bonds to the face value of \$15,000,000.00. Applicant was allowed to issue bonds to the face value of \$10,000,000.00, and \$3,000,000.00 par value of capital stock. The company was prohibited from issuing any of its bonds herein authorized until the Commission had approved the plan for the sale at par of \$3,000,000.00 capital stock.

Application No. 982. Decision No. 1266.

SOUTHERN PACIFIC COMPANY.

By this order the Southern Pacific Company was permitted to issue \$55,000,000.00 of 5 per cent twenty-year convertible bonds. The purchasers of said bonds have the right within ten years to exchange the same for common stock of the company. In passing on this application the Commission states:

"It is impossible for this Commission, acting within the jurisdiction of one state, to investigate or supervise completely, the issuance of securities by a corporation such as applicant, operating through and between five separate states of the Union where the lien of the securities extends over all of its property and the expenditures are scattered over its entire system. The best that can be done is to conclude generally

whether the proposed bonds are reasonable in amount, reasonably secure as to payment of principal and interest, and that the proceeds are to be used for proper purposes."

Application No. 982. Decision No. 1271.

SOUTHERN PACIFIC COMPANY.

Supplemental order *in re* Application No. 982.

Application No. 951. Decision No. 1279.

OCEAN SHORE RAILROAD COMPANY.

Applicant was authorized to issue bonds of the face value of \$25,000.00 and to execute its note aggregating \$12,442.00.

Application No. 888. Decision No. 1280.

JAMES A. GUNN, JR.

By this order James A. Gunn, Jr., was authorized to issue a promissory note in the sum of \$8,000.00, and to mortgage his hydroelectric and irrigation systems in Lake County as security therefor.

Application No. 953. Decision No. 1282.

SUBURBAN WATER COMPANY.

J. W. Bloom applied to this Commission for authority to transfer a certain water system located in Daly City and vicinity to the Suburban Water Company and receive in payment 47,795 shares (par value \$1.00) of its capital stock. The Commission authorized the company to issue to said J. W. Bloom but 30,000 shares of its capital stock for said property.

Application No. 940. Decision No. 1287.

GLENWOOD LAND COMPANY.

By this order the Glenwood Land Company was authorized to issue two promissory notes aggregating \$2,060.00. For the reason that the company did not intend to expend this money for public utility purposes, it was exempted from rendering monthly reports as called for in the Commission's General Order No. 24.

Application No. 886. Decision No. 1288.

CENTRAL CALIFORNIA GAS COMPANY.

Applicant asked for authority to issue bonds of the face value of \$25,000.00, common stock of the par value of \$12,500.00 and preferred stock of the par value of \$1,300.00. The company received authority to issue \$12,000.00 of bonds, \$12,500.00 of common stock and \$1,300.00 of preferred stock.

Application No. 871. Decision No. 1296.

SOUTHWESTERN HOME TELEPHONE COMPANY.

Southwestern Home Telephone Company applied to the Commission for authority to issue capital stock to the amount of \$25,000.00, bonds to the amount of \$182,000.00 and notes aggregating \$101,300.00. Because of the complex and unsatisfactory financial condition of the applicant, this application was neither granted nor denied. The company, however, was directed to submit on or before July 1, 1914, a plan for reorganization and reduction of its capitalization.



Application No. 693. Decision No. 1313.

PITT RIVER POWER COMPANY.

This is a supplemental order permitting the Pitt River Power Company to sell \$75,000.00 of its capital stock at 80 in lieu of \$60,000.00 capital stock at par as per Decision No. 1191.

Application No. 992. Decision No. 1319.

SAN JOAQUIN LIGHT AND POWER CORPORATION.

The petitioner requested authority to issue bonds to the face value of \$3,180,000.00 and to refund notes aggregating \$200,000.00. In this order the Commission authorized applicant to issue its notes but deferred action on the question of issuing bonds.

Application No. 678. Decision No. 1323.

KERMAN TELEPHONE COMPANY.

Kerman Telephone Company was authorized to issue 39 shares (par value \$35.00) of its capital stock in lieu of a like number of shares issued after March 23, 1912, without the authority of the Commission.

Application No. 1026. Decision No. 1325.

CONSOLIDATED SECURITIES COMPANY.

Applicant was permitted to issue notes to the face value of \$16,000.00. Of this amount it desired to use \$9,000.00 to purchase the electric distributing system owned by the Maclay Rancho Water Company and devote \$7,000.00 to non-public utility purposes.

Application No. 928. Decision No. 1326.

SAN JOAQUIN VALLEY TELEPHONE COMPANY.

The application of San Joaquin Valley Telephone Company to issue 1,000 shares (par value \$10.00) was denied in part. Applicant was allowed to issue 250 shares for the purpose of purchasing the telephone system owned by the San Joaquin Valley Farm Lands Company.

Application No. 932. Decision No. 1329.

GLOBE WAREHOUSE COMPANY.

Globe Warehouse Company, incorporated for the purpose of taking over the warehouse business of the Globe Grain and Milling Company and the Colton Grain and Milling Company, was authorized to issue \$10,000.00 of its capital stock.

Application No. 836. Decision No. 1330.

DEATH VALLEY RAILROAD COMPANY.

The Death Valley Railroad Company was authorized to issue bonds to the face amount of \$230,351.00 and capital stock to the amount of \$75,000.00. The company was directed not to expend any money derived from the sale of the bonds until it had disposed of 75,000 shares of its capital stock (par value \$1.00 per share).

Application No. 886. Decision No. 1332.

CENTRAL CALIFORNIA GAS COMPANY.

Supplemental order *in re* Application No. 886.

Application No. 995. Decision No. 1342.

WESTERN STATES GAS AND ELECTRIC COMPANY.

By this order the Western States Gas and Electric Company was authorized to issue bonds in the amount of \$219,000.00 at a price not less than \$24.

Application No. 1036. Decision No. 1372.

ORO ELECTRIC CORPORATION.

This order authorized Oro Electric Corporation to execute notes amounting to \$8,434.43.

Application No. 987. Decision No. 1374.

OAKDALE GAS COMPANY.

The Oakdale Gas Company asked for authority to issue bonds to the amount of \$23,000.00 and stock to the amount of \$8,000.00. The company was permitted to issue stock as requested, but denied the right to issue bonds in excess of \$15,000.00.

Application No. 1038. Decision No. 1376.

PACIFIC GAS AND ELECTRIC COMPANY.

Applicant was authorized to issue \$7,000,000.00 of collateral trust notes, of which amount \$5,000,000.00 was to be used to refund a like amount of outstanding 6 per cent gold notes, and \$2,000,000.00 to be used to defray the cost of additions and betterments to applicant's plant.

Application No. 947. Decision No. 1377.

MARIN COUNTY ELECTRIC RAILWAYS.

Marin County Electric Railways, incorporated to construct an electric railway in Mill Valley and vicinity, applied to the Commission to issue \$75,600.00 of its capital stock. The company was permitted to issue \$67,000.00 of its stock on the condition that its prospectus be approved by the Commission and that the stock be sold to none but bona fide residents of Mill Valley.

Application No. 1008. Decision No. 1394.

TULARE HOME TELEPHONE AND TELEGRAPH COMPANY.

The applicant's request for authority to issue notes to the amount of \$9,000.00 was dismissed on the ground that this Commission's authority was not necessary to execute one day notes.

Application No. 1028. Decision No. 1398.

VENTURA COUNTY POWER COMPANY.

The application of Ventura County Power Company to issue notes to the amount of \$200,000.00 was dismissed at the request of applicant.

Application No. 871. Decision No. 1410.

SOUTHWESTERN HOME TELEPHONE COMPANY.

This company was authorized to issue notes to the amount of \$35,050.00 for the purpose of refunding notes of a like amount executed without the consent of the Commission.

Application No. 751. Decision No. 1412.

SIGNAL HILL WATER COMPANY.

Signal Hill Water Company's request that its application to issue 495 shares (par value \$1.00) of its capital stock be dismissed, granted.

Application No. 1046. Decision No. 1421.

GLENDAL AND EAGLE ROCK RAILWAY COMPANY.

The Glendale and Eagle Rock Railway Company applied for authority to issue \$150,000.00 of bonds. This order permitted the company to issue bonds not in excess of \$65,000.00.

Application No. 1050. Decision No. 1422.

SAWTELLE WATER COMPANY.

Sawtelle Water Company's application to issue \$25,000.00 of its 5 per cent thirty-year bonds was denied. The company, however, was permitted to issue a note to the amount of \$10,500.00.

Application No. 1044. Decision No. 1428.

NORTHWESTERN PACIFIC RAILROAD COMPANY.

The Commission authorized the Northwestern Pacific Railroad Company to issue bonds to the face value of \$5,534,000.00 on the condition that the company apply \$313,000.00 to refund underlying bonds and \$5,221,000.00 to defray the cost of additions and betterments.

Application No. 1038. Decision No. 1435.

PACIFIC GAS AND ELECTRIC COMPANY.

This is a supplemental order allowing the Pacific Gas and Electric Company to sell \$2,000,000.00 of its collateral trust notes authorized under Decision No. 1376, at 97½.

Application No. 1018. Decision No. 1438.

SEAFOAM WAREHOUSE COMPANY.

Seafoam Warehouse Company, incorporated to take over the warehouse business of the Long Beach Milling Company, was authorized to issue \$10,000.00 of stock.

Applications Nos. 1043 and 1067. Decision No. 1441.

LOS ANGELES AND SAN DIEGO BEACH RAILWAY COMPANY.

In application No. 1043 the company asked permission to execute a note of \$15,000.00; in application No. 1067, a note of \$19,000.00. Both of these applications were granted.

Application No. 1060. Decision No. 1442.

FAIRMONT WATER COMPANY.

This company was authorized to issue and deliver to the Pacific Building Company, in exchange for a water system, \$45,900.00 of its capital stock at par.

Application No. 1013. Decision No. 1443.

CITY WATER COMPANY OF BANNING.

Applicant was authorized to issue 186 shares of its capital stock (par value \$5.00 per share).

Application No. 1035. Decision No. 1444.

WILMINGTON TRANSPORTATION COMPANY.

The applicant in this order was authorized to issue 135 shares (par value \$100.00) instead of 155 shares of its capital stock as requested in the application. The company was not permitted to issue stock for the maintenance of service for a period of two years.

Applications Nos. S37 and S76. Decision No. 1456.

NEVADA-CALIFORNIA-OREGON TELEPHONE AND TELEGRAPH COMPANY.

Modification of order dated February 7, 1914.

Application No. 1054. Decision No. 1460.

SAN DIEGO CONSOLIDATED GAS AND ELECTRIC COMPANY.

For the purpose of refunding outstanding notes, the San Diego Consolidated Gas and Electric Company was authorized to execute its notes not in excess of \$373,288.88.

Application No. 721. Decision No. 1467.

PACIFIC LIGHT AND POWER CORPORATION.

This is a supplemental order permitting the applicant to issue bonds to the face value of \$1,105,000.00 to retire notes of a like amount.

Application No. 1092. Decision No. 1468.

HAPPY VALLEY LAND AND WATER COMPANY.

The applicant was permitted by this order to issue 1,000 shares (par value \$10.00 per share) of its capital stock on the condition that the stock should be sold only to present stockholders or persons having an interest in lands irrigable from the system owned by the applicant.

Application No. 1104. Decision No. 1469.

PACIFIC LIGHT AND POWER CORPORATION.

The applicant was authorized to issue notes to the amount of \$2,500,000.00 to refund short term notes and to defray the cost of additions and betterments.

Application No. 1109. Decision No. 1474.

SACRAMENTO WAREHOUSE COMPANY.

Authorized to issue notes not in excess of \$60,000.00.



Application No. 984. Decision No. 1482.

MT. WHITNEY POWER AND ELECTRIC COMPANY.

Authorized to issue bonds to the face value of \$500,000.00.

Application No. 1046. Decision No. 1483.

GLENDALE AND EAGLE ROCK RAILWAY COMPANY.

Glendale and Eagle Rock Railway Company asked for authority to issue bonds to the amount of \$70,000.00. The Commission authorized the company to issue bonds to the amount of \$50,000.00.

Application No. 1065. Decision No. 1484.

CAMPBELL WATER COMPANY.

This company was authorized by this decision to issue its capital stock in an amount not in excess of \$12,000.00.

Application No. 917. Decision No. 1491.

ROSEVILLE TELEPHONE COMPANY.

The Roseville Telephone Company, incorporated to acquire the property of the Roseville Home Telephone Company, was by this decision permitted to issue its capital stock to the amount of \$11,000.00.

Application No. 1093. Decision No. 1508.

MINKLER SOUTHERN RAILWAY COMPANY.

This company, organized to construct a road from Minkler, Fresno County, to Exeter, Tulare County, has been authorized to issue capital stock to the amount of \$42,000.00.

Application No. 1089. Decision No. 1513.

MODOC COUNTY IRRIGATION COMPANY.

The application of the Modoc County Irrigation Company for permission to issue bonds to the face value of \$750,000.00 was denied without prejudice. It developed during the hearing of the application that the company's title was in question.

Application No. 1080. Decision No. 1521.

BIG FOUR ELECTRIC RAILWAY COMPANY.

The Big Four Electric Railway Company was authorized to issue stock to the amount of \$392,058.00.

Application No. 439. Decision No. 1524.

TULARE COUNTY POWER COMPANY.

The Tulare County Power Company's application to issue \$50,000.00 of so-called "consumers' stock" was dismissed at the request of the applicant.

Application No. 992. Decision No. 1525.

SAN JOAQUIN LIGHT AND POWER CORPORATION.

Under this decision this company was authorized to issue \$3,051,000.00 of its first and refunding mortgage Series B, 5 per cent bonds to retire a like amount of bonds issued by San Joaquin Light and Power Com-

pany. The corporation was also authorized to issue \$129,000.00 of first and refunding mortgage bonds to retire a like amount of San Joaquin Power Company bonds.

Application No. 1076. Decision No. 1536.

UNITED RAILROADS OF SAN FRANCISCO.

By this decision the United Railroads of San Francisco was authorized to issue \$300,000.00 car trust certificates for the purpose of purchasing 65 passenger cars. During the hearing of this application it was discovered that \$1,096,000.00 had been diverted from the treasury of the United Railroads of San Francisco for extraneous purposes.

Application No. 1047. Decision No. 1537.

SANTA MONICA WATER COMPANY.

The applicant asked for authority to issue bonds to the face value of \$500,000.00. The Commission allowed the company to issue \$257,000.00 of bonds, of which amount \$250,000.00 were to be applied to refunding purposes. The company was not allowed to issue bonds to take care of its intercorporate indebtedness.

Application No. 1094. Decision No. 1540.

LONG BEACH CONSOLIDATED GAS COMPANY.

Long Beach Consolidated Gas Company was authorized to issue \$140,000.00 of its 6 per cent cumulative preferred stock and its thirty-year gold bonds to the amount of \$60,000.00.

Application No. 1095. Decision No. 1541.

MIDLAND COUNTIES PUBLIC SERVICE CORPORATION.

Applicant was authorized to issue notes to the face value of \$163,269.27.

Application No. 1129. Decision No. 1542.

CONSOLIDATED SECURITIES COMPANY.

Applicant was permitted to execute two promissory notes not to exceed \$10,000.00.

Application No. 1134. Decision No. 1543.

SOUTHERN COUNTIES GAS COMPANY OF CALIFORNIA.

The request of the Southern Counties Gas Company of California to cancel an escrow agreement under which its preferred stock has been and was to be issued, granted.

Application No. 1168. Decision No. 1544.

HALF MOON BAY LIGHT AND POWER COMPANY.

The application of the Half Moon Bay Light and Power Company for permission to issue 19 shares (par value \$25.00) of its capital stock in lieu of certain stock issued without the consent of the Commission, was dismissed.

Application No. 1137. Decision No. 1545.

LOS ANGELES WAREHOUSE COMPANY.

The Commission granted the request of the Los Angeles Warehouse Company to extend for a period of one year a note amounting to \$150,000.00.

Application No. 1120. Decision No. 1546.

MT. KONOCTI LIGHT AND POWER COMPANY.

The application of Mt. Konocti Light and Power Company to recover a public utility fee of \$250.00 was dismissed on the ground that the order to which said fee referred had expired.

Application No. 1135. Decision No. 1558.

OAKLAND, ANTIOCH AND EASTERN RAILWAY.

Applicant authorized to execute its notes to an amount not exceeding \$60,770.27.

Application No. 1110. Decision No. 1561.

PEOPLES WATER COMPANY.

This company was authorized to execute its notes to an amount not in excess of \$3,541,551.87 and pledge its 5 per cent thirty-year general mortgage bonds as collateral in the ratio of  $2\frac{1}{2}$  to 1.

Application No. 1084. Decision No. 1563.

FRESNO INTERURBAN RAILWAY COMPANY.

Fresno Interurban Railway Company was authorized to issue bonds to the face value of \$120,000.00 and stock of the par value of \$60,000.00. The bonds are to be sold for not less than 90 and the stock for not less than 80.

Application No. 1165. Decision No. 1576.

SOUTHERN CALIFORNIA EDISON COMPANY.

This decision permits applicant to apply bonds to the amount of \$30,000.00 heretofore authorized to the purchase of the property formerly owned by the Downey Light and Power Company.

Application No. 1117. Decision No. 1579.

SAN PEDRO, LOS ANGELES AND SALT LAKE RAILROAD COMPANY.

Application to issue bonds to the face value of \$861,000.00, granted.

Application No. 1094. Decision No. 1580.

LONG BEACH CONSOLIDATED GAS COMPANY.

Modification of Decision No. 1540.

Application No. 1157. Decision No. 1582.

FOWLER GAS COMPANY.

Fowler Gas Company by this decision was permitted to issue bonds to the face value of \$15,000.00 and stock to the par value of \$8,000.00. The bonds are to be sold for not less than 90 and the stock at par.

Application No. 1168. Decision No. 1586.

CENTRAL CALIFORNIA GAS COMPANY.

The Commission authorized this company to issue and sell bonds to the amount of \$15,000.00 and common capital stock to the amount of \$10,000.00.

Application No. 1155. Decision No. 1588.

OJAI POWER COMPANY.

By this decision the Ojai Power Company has been authorized to issue stock in the par value of \$19,200.00.

Application No. 871. Decision No. 1589.

SOUTHWESTERN HOME TELEPHONE COMPANY.

Authorized to execute notes not in excess of \$8,500.00.

Application No. 38. Decision No. 1594.

TIDEWATER SOUTHERN RAILWAY COMPANY.

Commission authorized Tidewater Southern Railway Company to refund notes in an amount not exceeding \$100,000.00.

Applications Nos. 990 and 1152. Decision No. 1604.

SAN FRANCISCO-OAKLAND TERMINAL RAILWAYS.

This is a preliminary decision allowing the applicant to issue \$650,000.00 of notes and pledge bonds to the face value of \$1,000,000.00. The proceeds derived from the issue of notes are to be applied to the payment of interest, taxes and additions and betterments.

The application (No. 1152) for authority to issue \$10,000,000.00 of bonds held in suspense.

Application No. 1167. Decision No. 1611.

OCEAN SHORE RAILROAD COMPANY.

The Commission authorized the Ocean Shore Railroad Company to execute its notes in an amount not exceeding \$32,084.25.

Application No. 1173. Decision No. 1615.

SOUTHERN CALIFORNIA EDISON COMPANY.

By this decision, applicant was allowed to purchase 1,060 shares (par value \$100.00) of the capital stock of the Long Beach Consolidated Gas Company.

Application No. 1186. Decision No. 1616.

CONSOLIDATED UTILITIES COMPANY.

This company was authorized to issue two notes, one of the face value of \$1,580.00, the other of the face value of \$1,500.00.

Application No. 668. Decision No. 1622.

SOUTHERN COUNTIES GAS COMPANY OF CALIFORNIA.

At the request of the applicant, the Commission dismissed the supplemental application *in re* Application No. 668.



Application No. 1199. Decision No. 1623.

SOUTHERN COUNTIES GAS COMPANY OF CALIFORNIA.

This application was dismissed at the request of applicant.

Application No. 992. Decision No. 1625.

SAN JOAQUIN LIGHT AND POWER CORPORATION.

Supplemental order renewing notes.

Application No. 1110. Decision No. 1626.

PEOPLES WATER COMPANY.

This is a supplemental order specifying that the Peoples Water Company must pay a public utility fee on 6,097 bonds authorized under a former order to be pledged as collateral to secure notes.

Application No. 1136. Decision No. 1629.

INDIAN VALLEY ELECTRIC LIGHT AND POWER COMPANY.

The request to have this Commission modify its order of September 21, 1912, was denied without prejudice.

Applications Nos. 370 and 426. Decision No. 1634.

LAWNDALE LAND AND WATER COMPANY.

This decision modifies a former order in that it substitutes the Los Angeles Trust and Savings Bank in place of the Los Angeles Abstract and Trust Company as trustee.

TABLE No. 1.

STOCKS APPLIED FOR, AUTHORIZED, DENIED, DISMISSED AND PENDING  
FROM JULY 1, 1913,  
Abbreviations: A. & B., Additions

Num- ber of appli- cation	Name of company	Applied
607	San Diego and Southeastern Railway Company.....	
651	Clear Lake Railroad Company.....	\$200,000 00
728	Southern Pacific Company.....	
808	San Diego and Arizona Railway Company.....	
836	Tonopah and Tidewater Railroad Company.....	
982	Southern Pacific Company.....	55,000,000 00
985	Ocean Shore Railroad Company.....	
836	Death Valley Railroad Company.....	
1044	Northwestern Pacific Railroad Company.....	
1093	Minkler Southern Railway Company.....	42,000 00
1117	San Pedro, Los Angeles and Salt Lake Railroad Com- pany.....	
1142	Trona Railway Company.....	150,000 00
1167	Ocean Shore Railroad Company.....	
1194	California Despatch Line.....	100,000 00
1190	Modesto Interurban Railway Company.....	14,200 00
	Totals.....	\$55,506,200 00

\*Authorized to be issued in exchange for bonds.

\*\$61,700 more stock authorized than applied for in formal application.

\*\$3,000,000 more stock authorized than applied for in formal application.

TABLE No. 1. STEAM

BONDS APPLIED FOR, AUTHORIZED, DENIED, DISMISSED AND PENDING  
FROM JULY 1, 1913,  
Abbreviations: A. & B., Additions

Num- ber of appli- cation	Name of company	Applied
607	San Diego and Southeastern Railway Company.....	\$600,000 00
651	Clear Lake Railroad Company.....	500,000 00
728	Southern Pacific Company.....	
808	San Diego and Arizona Railway Company.....	15,000,000 00
836	Tonopah and Tidewater Railroad Company.....	364,000 00
982	Southern Pacific Company.....	55,000,000 00
985	Ocean Shore Railroad Company.....	200,000 00
836	Death Valley Railroad Company.....	230,351 00
1044	Northwestern Pacific Railroad Company.....	5,534,000 00
1093	Minkler Southern Railway Company.....	
1117	San Pedro, Los Angeles and Salt Lake Railroad Com- pany.....	861,000 00
1142	Trona Railway Company.....	559,000 00
1167	Ocean Shore Railway Company.....	
1194	California Despatch Line.....	
1190	Modesto Interurban Railway Company.....	
	Totals.....	\$78,839,351 00

## STEAM RAILROADS.

BY AND BEFORE RAILROAD COMMISSION OF THE STATE OF CALIFORNIA  
TO JUNE 30, 1914.

and Betterments; Ref., Refunding.

Purpose	Stocks			
	Authorized	Denied	Dismissed	Pending
A. & B.	\$261,700 00			
A. & B.	3,000,000 00			
Ref.	155,000,000 00			
A. & B.	75,000 00			
A. & B.	42,000 00			
A. & B.				\$150,000 00
A. & B.				100,000 00
A. & B.				14,200 00
	\$58,378,700 00			\$264,200 00

## RAILROADS—Continued.

BY AND BEFORE RAILROAD COMMISSION OF THE STATE OF CALIFORNIA  
TO JUNE 30, 1914.

and Betterments; Ref., Refunding.

Purpose	Bonds			
	Authorized	Denied	Dismissed	Pending
A. & B.	\$343,000 00	\$257,000 00		
A. & B.	500,000 00			
A. & B.	10,000,000 00	5,000,000 00		
A. & B.		364,000 00		
Ref.	30,500,000 00			
A. & B.	24,500,000 00			
A. & B.				\$200,000 00
A. & B.	230,351 00			
A. & B.	5,221,000 00			
Ref.	313,000 00			
A. & B.	861,000 00			
A. & B.				550,000 00
	\$72,468,351 00	\$5,621,000 00		\$750,000 00

TABLE No. 1. STEAM  
NOTES APPLIED FOR, AUTHORIZED, DENIED, DISMISSED AND PENDING  
FROM JULY 1, 1913,  
Abbreviations: A. & B., Additions

Num- ber of appli- cation	Name of company	Applied
607	San Diego and Southeastern Railway Company.....	-----
651	Clear Lake Railroad Company.....	-----
728	Southern Pacific Company.....	-----
808	San Diego and Arizona Railway Company.....	-----
836	Tonopah and Tidewater Railroad Company.....	-----
982	Southern Pacific Company.....	-----
985	Ocean Shore Railroad Company.....	-----
836	Death Valley Railroad Company.....	-----
1044	Northwestern Pacific Railroad Company.....	-----
1093	Minkler Southern Railway Company.....	-----
1117	San Pedro, Los Angeles and Salt Lake Railroad Com- pany.....	-----
1142	Trona Railway Company.....	-----
1167	Ocean Shore Railroad Company.....	\$32,084 25
1194	California Despatch Line.....	9,353 24
1190	Modesto Interurban Railway Company.....	-----
	Totals .....	\$41,437 49

TABLE No. 1. STEAM  
CERTIFICATES APPLIED FOR, AUTHORIZED, DENIED, DISMISSED AND  
CALIFORNIA FROM  
Abbreviations: A. & B., Additions

Num- ber of appli- cation	Name of company	Applied
607	San Diego and Southeastern Railway Company.....	-----
651	Clear Lake Railroad Company.....	-----
728	Southern Pacific Company.....	\$2,010,000 00
808	San Diego and Arizona Railway Company.....	-----
836	Tonopah and Tidewater Railroad Company.....	-----
982	Southern Pacific Company.....	-----
985	Ocean Shore Railroad Company.....	-----
836	Death Valley Railroad Company.....	-----
1044	Northwestern Pacific Railroad Company.....	-----
1093	Minkler Southern Railway Company.....	-----
1117	San Pedro, Los Angeles and Salt Lake Railroad Com- pany.....	-----
1142	Trona Railway Company.....	-----
1167	Ocean Shore Railroad Company.....	-----
1194	California Despatch Line.....	-----
1190	Modesto Interurban Railway Company.....	-----
	Totals .....	\$2,010,000 00





TABLE No. 1. STEAM  
STOCKS, BONDS, NOTES AND CERTIFICATES APPLIED FOR, AUTHORIZED,  
SION OF THE STATE OF CALIFORNIA  
Abbreviations: A. & B., Additions

Number of appli- cation	Name of company	Applied
607	San Diego and Southeastern Railway Company.....	\$600,000 00
651	Clear Lake Railroad Company.....	700,000 00
728	Southern Pacific Company.....	2,010,000 00
808	San Diego and Arizona Railway Company.....	15,000,000 00
836	Tonopah and Tidewater Railroad Company.....	364,000 00
982	Southern Pacific Company.....	110,000,000 00
985	Ocean Shore Railroad Company.....	200,000 00
836	Death Valley Railroad Company.....	230,351 00
1044	Northwestern Pacific Railroad Company.....	5,534,000 00
1093	Minkler Southern Railway Company.....	42,000 00
1117	San Pedro, Los Angeles and Salt Lake Railroad Com- pany.....	\$61,000 00
1142	Trona Railway Company.....	700,000 00
1167	Ocean Shore Railroad Company.....	32,084 25
1194	California Despatch Line.....	109,353 24
1190	Modesto Interurban Railway Company.....	14,200 00
	Totals.....	\$136,396,988 49

\*\$61,700 more stock authorized than applied for in formal application.

\*\$3,000,000 more stock authorized than applied for in formal application.

\*\$75,000 more stock authorized than applied for in formal application.

## RAILROADS—Concluded.

DENIED, DISMISSED AND PENDING BY AND BEFORE RAILROAD COMMISSION FROM JULY 1, 1913, TO JUNE 30, 1914.  
and Betterments; Ref., Refunding.

## Grand totals

Authorized	Denied	Dismissed	Pending
\$343,000 00	\$257,000 00	-----	-----
<sup>2</sup> 761,700 00		-----	-----
2,010,000 00		-----	-----
<sup>3</sup> 13,000,000 00	5,000,000 00	-----	-----
	364,000 00	-----	-----
110,000,000 00		-----	\$200,000 00
<sup>4</sup> 205,351 00		-----	-----
{ 5,221,000 00 }		-----	-----
{ A. & B. }		-----	-----
{ 313,000 00 }		-----	-----
{ Ref. }		-----	-----
42,000 00		-----	-----
861,000 00		-----	700,000 00
32,084 25		-----	109,353 24
		-----	14,200 00
\$132,889,135 25	\$5,621,000 00	-----	\$1,023,553 24

TABLE No. 2.

STOCKS APPLIED FOR, AUTHORIZED, DENIED, DISMISSED AND PENDING  
 CALIFORNIA FROM JULY 1,  
 Abbreviations: A. & B., Additions and

Num- ber of appli- cation	Name of company	Applied
608	Oakland, Antioch and Eastern Railway Company.....	
666	Oakland, Antioch and Eastern Railway Company.....	
374	Fresno, Hanford and Summit Lake Interurban Railway.....	
699	Humboldt Transit Company.....	
773	Fresno, Hanford and Summit Lake Interurban Railway.....	\$225,000 00
770	San Rafael and San Anselmo Valley Railroad Company.....	100,000 00
306	Angels Flight Railway Company.....	100,000 00
891	The Los Angeles Railway.....	20,000,000 00
899	San Francisco-Napa and Calistoga Railway.....	
939	Oakland, Antioch and Eastern Railway Company.....	
947	Marin County Electric Railways.....	75,600 00
990	San Francisco-Oakland Terminal Railways.....	
1046	Glendale and Eagle Rock Railway Company.....	
1043	Los Angeles and San Diego Beach Railway.....	
1067	Los Angeles and San Diego Beach Railway.....	
1059	Northern Electric Railway Company.....	
1075	Sacramento Valley Electric Railroad.....	
1076	United Railroads of San Francisco.....	
1080	Big Four Electric Railway.....	392,058 00
1081	Fresno Interurban Railway.....	60,000 00
1135	Oakland, Antioch and Eastern Railway.....	
1152	San Francisco-Oakland Terminal Railways.....	
	Tidewater Southern Railway Company.....	
1206	San Diego Electric Railway Company.....	
	Totals .....	\$20,952,658 00





TABLE NO. 2. ELECTRIC  
BONDS APPLIED FOR, AUTHORIZED, DENIED, DISMISSED AND PENDING  
CALIFORNIA FROM JULY 1,  
Abbreviations: A. & B., Additions and

Num- ber of appli- cation	Name of company	Applied
608	Oakland, Antioch and Eastern Railway Company-----	\$1,000,000 00
666	Oakland, Antioch and Eastern Railway Company-----	500,000 00
374	Fresno, Hanford and Summit Lake Interurban Railway-----	358,000 00
699	Humboldt Transit Company-----	
773	Fresno, Hanford and Summit Lake Interurban Railway-----	
770	San Rafael and San Anselmo Valley Railroad Company-----	100,000 00
306	Angels Flight Railway Company-----	
894	The Los Angeles Railway-----	23,544,000 00
899	San Francisco, Napa and Calistoga Railway-----	33,000 00
939	Oakland, Antioch and Eastern Railway Company-----	500,000 00
947	Marin County Electric Railways-----	
990	San Francisco-Oakland Terminal Railways-----	1,000,000 00
1046	Glendale and Eagle Rock Railway Company-----	150,000 00
1043	Los Angeles and San Diego Beach Railway-----	
1067	Los Angeles and San Diego Beach Railway-----	
1059	Northern Electric Railway Company-----	
1075	Sacramento Valley Electric Railroad-----	
1076	United Railroads of San Francisco-----	
1080	Big Four Electric Railway-----	
1084	Fresno Interurban Railway-----	120,000 00
1135	Oakland, Antioch and Eastern Railway-----	
1152	San Francisco-Oakland Terminal Railways-----	10,000,000 00
	Tidewater Southern Railway Company-----	
1206	San Diego Electric Railway Company-----	1 1,806,000 00
		1 2,678,000 00
	Totals -----	\$41,789,000 00

## RAILWAYS—Continued.

BY AND BEFORE THE RAILROAD COMMISSION OF THE STATE OF CALIFORNIA, TO JUNE 30, 1914.

Betterments; Ref., Refunding; Col., Collateral.

Bonds				
Purpose	Authorized	Denied	Dismissed	Pending
A. & B.	\$1,000,000 00			
A. & B.	500,000 00			
A. & B.	358,000 00			
A. & B.	45,000 00	\$55,000 00		
A. & B.				\$23,544,000 00
Col.	33,000 00			
Col.	500,000 00			
Col.	1,000,000 00			
Ref.	25,000 00			
A. & B.	40,000 00	\$5,000 00		
A. & B.	120,000 00			
A. & B.				10,000,000 00
Ref.				
A. & B.				4,484,000 00
	\$3,621,000 00	\$140,000 00		\$38,028,000 00

TABLE No. 2. ELECTRIC  
NOTES APPLIED FOR, AUTHORIZED, DENIED, DISMISSED AND PENDING  
FORNIA FROM JULY 1,  
Abbreviations: A. & B., Additions and

Num- ber of appli- cation	Name of company	Applied
608	Oakland, Antioch and Eastern Railway Company.....	-
666	Oakland, Antioch and Eastern Railway Company.....	-
371	Fresno, Hanford and Summit Lake Interurban Railway.....	-
699	Humboldt Transit Company.....	\$20,600 00
773	Fresno, Hanford and Summit Lake Interurban Railway.....	-
770	San Rafael and San Anselmo Valley Railroad Company.....	-
306	Angels Flight Railway Company.....	-
891	The Los Angeles Railway.....	-
899	San Francisco-Napa and Calistoga Railway.....	-
939	Oakland, Antioch and Eastern Railway.....	700,000 00
947	Marin County Electric Railways.....	-
990	San Francisco-Oakland Terminal Railways.....	500,000 00
1046	Glendale and Eagle Rock Railway Company.....	-
1043 / 1067 }	Los Angeles and San Diego Beach Railway.....	34,000 00
1059	Northern Electric Railway Company.....	2,116,575 00
1075	Sacramento Valley Electric Railroad.....	16,856 70
1076	United Railroads of San Francisco.....	-
1080	Big Four Electric Railway.....	-
1084	Fresno Interurban Railway.....	-
1135	Oakland, Antioch and Eastern Railway.....	60,770 27
1152	San Francisco-Oakland Terminal Railways.....	-
	Tidewater Southern Railway Company.....	100,000 00
1206	San Diego Electric Railway Company.....	-
	Totals .....	\$3,548,201 97

<sup>1</sup>\$150,000.00 more authorized than applied for in formal application.



## RAILWAYS—Continued.

BY AND BEFORE THE RAILROAD COMMISSION OF THE STATE OF CALIFORNIA, TO JUNE 30, 1914.

Betterments; Ref., Refunding; Col., Collateral; Misc., Miscellaneous.

Notes				
Purpose	Authorized	Denied	Dismissed	Pending
A. & B.	\$20,000 00			
A. & B.	700,000 00			
Misc.	490,000 00			
A. & B.	160,000 00			
A. & B.	34,000 00			
Ref.				\$2,116,575 00
A. & B.				16,856 70
A. & B.	60,770 27			
Ref.	100,000 00			
	\$1,564,770 27			\$2,133,431 70

TABLE NO. 2. ELECTRIC  
CERTIFICATES APPLIED FOR, AUTHORIZED, DENIED, DISMISSED AND  
OF CALIFORNIA FROM  
Abbreviations: A. & B., Additions and

Num- ber of appli- cation	Name of company	Applied
608	Oakland, Antioch and Eastern Railway Company.....	-----
666	Oakland, Antioch and Eastern Railway Company.....	-----
371	Fresno, Hanford and Summit Lake Interurban Railway.....	-----
699	Humboldt Transit Company.....	-----
773	Fresno, Hanford and Summit Lake Interurban Railway.....	-----
770	San Rafael and San Anselmo Valley Railroad Company.....	-----
306	Angels Flight Railway Company.....	-----
894	The Los Angeles Railway.....	-----
899	San Francisco-Napa and Calistoga Railway.....	-----
939	Oakland, Antioch and Eastern Railway Company.....	-----
947	Marin County Electric Railways.....	-----
990	San Francisco-Oakland Terminal Railways.....	-----
1046	Glendale and Eagle Rock Railway Company.....	-----
1043	Los Angeles and San Diego Beach Railway.....	-----
1067	Los Angeles and San Diego Beach Railway.....	-----
1059	Northern Electric Railway Company.....	-----
1075	Sacramento Valley Electric Railroad.....	-----
1076	United Railroads of San Francisco.....	\$300,000 00
1080	Big Four Electric Railway.....	-----
1084	Fresno Interurban Railway.....	-----
1135	Oakland, Antioch and Eastern Railway.....	-----
1152	San Francisco-Oakland Terminal Railways.....	-----
	Tidewater Southern Railway Company.....	-----
1206	San Diego Electric Railway Company.....	-----
	Totals .....	\$300,000 00

## RAILWAYS—Continued.

PENDING BY AND BEFORE THE RAILROAD COMMISSION OF THE STATE  
JULY 1, 1913, TO JUNE 30, 1914.

Betterments; Ref., Refunding; Col., Collateral.

[illegible]

TABLE NO. 2. ELECTRIC  
STOCKS, BONDS, NOTES AND CERTIFICATES APPLIED FOR, AUTHORIZED,  
MISSION OF THE STATE OF CALIFORNIA  
Abbreviations: A. & B., Additions and

Num- ber of appli- cation	Name of company	Applied
608	Oakland, Antioch and Eastern Railway Company-----	\$1,000,000 00
666	Oakland, Antioch and Eastern Railway Company-----	500,000 00
374	Fresno, Hanford and Summit Lake Interurban Railway-----	358,000 00
699	Humboldt Transit Company-----	20,000 00
773	Fresno, Hanford and Summit Lake Interurban Railway-----	225,000 00
770	San Rafael and San Anselmo Valley Railroad Company-----	200,000 00
306	Angels Flight Railway Company-----	100,000 00
894	The Los Angeles Railway-----	43,544,000 00
899	San Francisco-Napa and Calistoga Railway-----	33,000 00
939	Oakland, Antioch and Eastern Railway-----	1,200,000 00
947	Marin County Electric Railways-----	75,600 00
990	San Francisco-Oakland Terminal Railways-----	1,500,000 00
1046	Glendale and Eagle Rock Railway Company-----	150,000 00
1043 / 1067 )	Los Angeles and San Diego Beach Railway-----	34,000 00
1059	Northern Electric Railway Company-----	2,116,575 00
1075	Sacramento Valley Electric Railroad-----	16,856 70
1076	United Railroads of San Francisco-----	300,000 00
1080	Big Four Electric Railway-----	392,058 60
1084	Fresno Interurban Railway-----	180,000 00
1135	Oakland, Antioch and Eastern Railway-----	60,770 27
1152	San Francisco-Oakland Terminal Railways-----	10,000,000 00
	Tidewater Southern Railway Company-----	100,000 00
1206	San Diego Electric Railway Company-----	4,484,000 00
	Totals -----	\$66,589,859 97

<sup>1</sup>\$150,000.00 more authorized than applied for in formal application.



## RAILWAYS—Concluded.

DENIED, DISMISSED AND PENDING BY AND BEFORE THE RAILROAD COM-  
FROM JULY 1, 1913, TO JUNE 30, 1914.

Betterments; Ref., Refunding; Col., Collateral.

Total Stocks, Bonds, Notes and Certificates				
Authorized	Denied	Dismissed	Pending	
\$1,000,000 00				
500,000 00				
358,000 00				
20,000 00				
225,000 00				
100,000 00	\$100,000 00			
25,000 00	75,000 00			
			\$43,544,000 00	
33,000 00				
1,200,000 00				
67,000 00	8,600 00			
11,650,000 00				
65,000 00	85,000 00			
34,000 00				
			2,116,575 00	
			16,856 70	
300,000 00				
392,058 00				
180,000 00				
60,770 27				
			10,000,000 00	
100,000 00				
			4,484,000 00	
\$6,309,828 27	\$268,600 00		\$60,161,431 70	

TABLE No. 3. GAS AND  
STOCKS APPLIED FOR, AUTHORIZED, DENIED, DISMISSED AND PENDING  
FORNIA FROM JULY 1.  
Abbreviations: A. & B., Additions and Betterments; Ref.,

Number of application	Name of company	Applied
609	Oro Electric Corporation†.....	-----
479	Beaumont Gas and Power Company.....	-----
526	Southern California Edison Company.....	} \$332,000 00 / 2,668,000 00
500	Economic Gas Company.....	-----
627	Santa Barbara Gas and Electric Company.....	-----
629	San Joaquin Light and Power Corporation.....	-----
630	Pacific Gas and Electric Company.....	-----
609	Pacific Light and Power Corporation.....	2,500,000 00
647	Pacific Gas and Electric Company.....	-----
648	Santa Monica Gas and Power Company.....	-----
657	H. G. Lacey and Company.....	-----
591	San Diego Consolidated Gas and Electric Company.....	285,000 00
663	Alta District Gas Company.....	35,000 00
668	Southern Counties Gas Company.....	-----
694	Tulare County Power Company.....	-----
695	Tulare County Power Company.....	-----
702	Midway Gas Company.....	-----
616	Western States Gas and Electric Company.....	-----
74	Lompoc Gas and Electric Company.....	-----
577	Ojai Power Company.....	10,000 00
719	Santa Maria Gas and Power Company.....	-----
515	Midland Counties Public Service Corporation.....	1,000,500 00
742	Midland Counties Public Service Corporation.....	-----
746	Pacific Gas and Electric Company.....	-----
722	Pacific Light and Power Corporation.....	52,300 00
721	Pacific Light and Power Corporation.....	-----
725	Napa Valley Electric Company.....	} 6,500 00 / 8,800 00
729	Madera Gas Company.....	25,000 00
731	Amador Electric Light and Power Company.....	3,000 00
750	Coast Counties Gas and Electric Company.....	200,000 00
769	Hemet-San Jacinto Gas Company.....	-----
736	Tulare County Power Company.....	33,000 00
777	United Light and Power Company of California.....	-----
781	The Southern Sierras Power Company.....	-----
789	Coast Valleys Gas and Electric Company.....	-----
812	Mt. Whitney Power and Electric Company.....	-----
807	Winters Gas Company.....	25,000 00
829	Oakdale Gas Company.....	42,000 00
839	Coachella Valley Ice and Electric Company.....	-----
862	Tulare County Power Company.....	80,000 00
872	Northern California Power Company, Consolidated.....	-----
886	Central California Gas Company.....	13,800 00
428	United Light, Fuel and Power Company.....	} 21,000 00 / 177,000 00
693	Pitt River Power Company.....	} 15,000 00 / 132,500 00
920	Coast Counties Gas and Electric Company.....	-----
951	Oceanside Electric and Gas Company.....	-----
945	Electric Service Company.....	75,000 00
960	Sacramento Natural Gas Company.....	-----
500*	Economic Gas Company.....	} 527,500 00 / 122,500 00

†Application filed June 17, 1913.

<sup>1</sup>Error in application.

\*Supplemental decision.

## ELECTRIC COMPANIES.

BY AND BEFORE THE RAILROAD COMMISSION OF THE STATE OF CALIFORNIA, TO JUNE 30, 1914.

Refunding; Col., Collateral; Misc., Miscellaneous.

Stocks				
Purpose	Authorized	Denied	Dismissed	Pending
Ref. } A. & B. }	\$3,000,000 00			
A. & B.	2,500,000 00			
Misc. } A. & B. }	35,000 00	\$285,000 00		
A. & B.	10,000 00			
A. & B.			\$1,000,500 00	
A. & B.	52,300 00			
A. & B. } Misc. }	15,300 00			
A. & B.	14,000 00	11,000 00		
A. & B.	3,000 00			
A. & B.		200,000 00		
A. & B.	33,000 00			
A. & B.	21,300 00	3,700 00		
A. & B.	15,000 00	27,000 00		
A. & B.	80,000 00			
A. & B. } A. & B. }	13,800 00			
Misc. }	197,000 00	11,000 00		
Misc. }	15,000 00			
A. & B.	90,000 00	42,500 00		
A. & B.				\$75,000 00
Ref. } Misc. }	650,000 00			

TABLE NO. 3. GAS AND  
STOCKS APPLIED FOR, AUTHORIZED, DENIED, DISMISSED AND PENDING  
FORNIA FROM JULY 1,  
Abbreviations: A. & B., Additions and Betterments; Ref.,

Num- ber of appli- cation	Name of company	Applied
888	James A. Gunn, Jr.....	
984	Mt. Whitney Power and Electric Company.....	
995	Western States Gas and Electric Company.....	
997	Southern Counties Gas Company of California.....	
996	Southern Counties Gas Company of California.....	
987	Oakdale Gas Company.....	
992	San Joaquin Light and Power Corporation.....	
1038	Pacific Gas and Electric Company.....	
1036	Oro Electric Corporation.....	
1054	San Diego Consolidated Gas and Electric Company.....	
1028	Ventura County Power Company.....	
1057	Southern California Edison Company.....	3,000,000 00
1084	Long Beach Consolidated Gas Company.....	140,000 00
1095	Midland Counties Public Service Corporation.....	
1104	Pacific Light and Power Corporation.....	
721*	Pacific Light and Power Corporation.....	
439	Tulare County Power Company.....	50,000 00
1068	Half Moon Bay Light and Power Company.....	475 00
1131	Western States Gas and Electric Company.....	
1153	Midland Counties Public Service Corporation.....	650,000 00
1155	Ojai Power Company.....	19,200 00
1157	Fowler Gas Company.....	8,000 00
1168	Central California Gas Company.....	10,000 00
1208	Modesto Gas, Light and Coke Company.....	
1197	San Joaquin Light and Power Corporation.....	
1210	Midland Counties Public Service Corporation.....	
992	San Joaquin Light and Power Corporation.....	
1188	Pacific Gas and Electric Company.....	} 8,484,848 00 4,015,152 00
Totals .....		\$24,768,075 00

\*\$8,000.00 stock authorized but not applied for in formal application.

\*\$1,500,000.00 stock authorized but not applied for in formal application.

\*Supplemental decision.





TABLE NO. 3. GAS AND  
BONDS APPLIED FOR, AUTHORIZED, DENIED, DISMISSED AND PENDING  
FORNIA FROM JULY 1,  
Abbreviations: A. & B., Additions and Betterments; Ref.,

Number of application	Name of company	Applied
609	Oro Electric Corporation <sup>1</sup> .....	\$1,686,000 00
479	Beaumont Gas and Power Company.....	
526	Southern California Edison Company.....	
500	Economic Gas Company.....	270,000 00
627	Santa Barbara Gas and Electric Company.....	660,000 00
629	San Joaquin Light and Power Corporation.....	100,000 00
630	Pacific Gas and Electric Company.....	2,500,000 00
609	Pacific Light and Power Corporation.....	
647	Pacific Gas and Electric Company.....	
648	Santa Monica Gas and Power Company.....	
657	H. G. Lacey and Company.....	
591	San Diego Consolidated Gas and Electric Company.....	
663	Alta District Gas Company.....	
668	Southern Counties Gas Company.....	100,000 00
694	Tulare County Power Company.....	
695	Tulare County Power Company.....	
702	Midway Gas Company.....	
616	Western States Gas and Electric Company.....	354,000 00
74	Lompoc Gas and Electric Company.....	75,000 00
577	Ojai Power Company.....	
719	Santa Maria Gas and Power Company.....	
515	Midland Counties Public Service Corporation.....	1,500,000 00
742	Midland Counties Public Service Corporation.....	1,159,000 00
746	Pacific Gas and Electric Company.....	
722	Pacific Light and Power Corporation.....	
721	Pacific Light and Power Corporation.....	497,000 00
725	Napa Valley Electric Company.....	1,233,000 00
729	Madera Gas Company.....	20,500 00
731	Amador Electric Light and Power Company.....	5,000 00
750	Coast Counties Gas and Electric Company.....	25,000 00
769	Hemet-San Jacinto Gas Company.....	12,000 00
736	Tulare County Power Company.....	
777	United Light and Power Company of California.....	
781	The Southern Sierras Power Company.....	
789	Coast Valleys Gas and Electric Company.....	114,000 00
812	Mt. Whitney Power and Electric Company.....	250,000 00
807	Winters Gas Company.....	
829	Oakdale Gas Company.....	30,000 00
839	Coachella Valley Ice and Electric Company.....	300,000 00
862	Tulare County Power Company.....	
872	Northern California Power Company, Consolidated.....	
886	Central California Gas Company.....	25,000 00
428	United Light, Fuel and Power Company.....	
693	Pitt River Power Company.....	
920	Coast Counties Gas and Electric Company.....	150,000 00
951	Oceanside Electric and Gas Company.....	12,442 00
945	Electric Service Company.....	1,658 00
960	Sacramento Natural Gas Company.....	10,900 00
500*	Economic Gas Company.....	20,000 00
		262,000 00
		365,000 00

<sup>1</sup>Application filed June 17, 1913.

\*Supplemental decision.

## ELECTRIC COMPANIES—Continued.

BY AND BEFORE THE RAILROAD COMMISSION OF THE STATE OF CALIFORNIA, TO JUNE 30, 1914.

Refunding; Col., Collateral; Misc., Miscellaneous.

Bonds				
Purpose	Authorized	Denied	Dismissed	Pending
A. & B.				\$1,686,000 00
Ref. }				
A. & B. }	\$270,000 00	\$660,000 00		
A. & B.	100,000 00			
Col.	1,766,000 00	724,000 00		
A. & B.	75,000 00	25,000 00		
A. & B.	354,000 00			
A. & B.			\$75,000 00	
A. & B.			1,500,000 00	
A. & B.	1,159,000 00			
Misc. }		1,730,000 00		
A. & B. }				
A. & B.	20,500 00			
Misc. }		5,000 00		
A. & B. }	25,000 00			
A. & B.	12,000 00			
A. & B.	3,000 00			
A. & B.	114,000 00			
A. & B.	250,000 00			
A. & B.	25,000 00	5,000 00		
A. & B.	300,000 00			
A. & B.	12,000 00	13,000 00		
A. & B.	150,000 00			
Ref. }				
A. & B. }	25,000 00			
Misc. }				
Col.	20,000 00			
A. & B. }				
Misc. }	627,000 00			

TABLE NO. 3. GAS AND  
BONDS APPLIED FOR, AUTHORIZED, DENIED, DISMISSED AND PENDING  
FORNIA FROM JULY 1,  
Abbreviations: A. & B., Additions and Betterments; Ref.,

Decision Number of appli-	Name of company	Applied
888	James A. Gunn, Jr.....	
984	Mt. Whitney Power and Electric Company.....	500,000 00
995	Western States Gas and Electric Company.....	219,000 00
997	Southern Counties Gas Company of California.....	
996	Southern Counties Gas Company of California.....	135,294 00
987	Oakdale Gas Company.....	23,000 00
992	San Joaquin Light and Power Corporation.....	3,180,000 00
1038	Pacific Gas and Electric Company.....	
1036	Oro Electric Corporation.....	
1054	San Diego Consolidated Gas and Electric Company.....	
1028	Ventura County Power Company.....	
1057	Southern California Edison Company.....	
1094	Long Beach Consolidated Gas Company.....	60,000 00
1095	Midland Counties Public Service Corporation.....	
1104	Pacific Light and Power Corporation.....	
721*	Pacific Light and Power Corporation.....	1,233,000 00 497,000 00
439	Tulare County Power Company.....	
1068	Half Moon Bay Light and Power Company.....	
1131	Western States Gas and Electric Company.....	
1153	Midland Counties Public Service Corporation.....	
1155	Ojai Power Company.....	
1157	Fowler Gas Company.....	15,000 00
1168	Central California Gas Company.....	15,000 00
1208	Modesto Gas, Light and Coke Company.....	
1197	San Joaquin Light and Power Corporation.....	
1210	Midland Counties Public Service Corporation.....	
992	San Joaquin Light and Power Corporation.....	
1188	Pacific Gas and Electric Company.....	5,000,000 00
	Totals .....	\$22,617,794 00

\*Supplemental decision.



## ELECTRIC COMPANIES—Continued.

BY AND BEFORE THE RAILROAD COMMISSION OF THE STATE OF CALI-  
1913, TO JUNE 30, 1914.

Refunding; Col., Collateral; Misc., Miscellaneous.

Bonds—Continued				
Purpose	Authorized	Denied	Dismissed	Pending
A. & B.	500,000 00			
A. & B.	219,000 00			
A. & B.				\$135,294 00
A. & B.	15,000 00	8,000 00		
Ref.	3,180,000 00			
A. & B.	60,000 00			
Ref.	1,233,000 00	497,000 00		
Misc.				
A. & B.	15,000 00			
A. & B.	15,000 00			
A. & B.	5,000,000 00			
	\$15,554,500 00	\$3,667,000 00	\$1,575,000 00	\$1,821,294 00

TABLE NO. 3. GAS AND  
NOTES APPLIED FOR, AUTHORIZED, DENIED, DISMISSED AND PENDING  
FORNIA FROM JULY 1,  
Abbreviations: A. & B., Additions and Betterments; Ref.,

Number of application	Name of company	Applied
609	Oro Electric Corporation†.....	
479	Beaumont Gas and Power Company.....	\$5,000 00
526	Southern California Edison Company.....	
500	Economic Gas Company.....	
627	Santa Barbara Gas and Electric Company.....	
629	San Joaquin Light and Power Corporation.....	1,875,000 00
630	Pacific Gas and Electric Company.....	319,006 08
609	Pacific Light and Power Corporation.....	
647	Pacific Gas and Electric Company.....	250,774 95
648	Santa Monica Gas and Power Company.....	1,000 00
657	H. G. Lacey and Company.....	20,000 00
591	San Diego Consolidated Gas and Electric Company.....	
663	Alta District Gas Company.....	20,000 00
668	Southern Counties Gas Company.....	
694	Tulare County Power Company.....	50,000 00
695	Tulare County Power Company.....	3,243 82
702	Midway Gas Company.....	210,000 00
616	Western States Gas and Electric Company.....	
74	Lompoc Gas and Electric Company.....	
577	Ojai Power Company.....	2,500 00
719	Santa Maria Gas and Power Company.....	1,000 00
515	Midland Counties Public Service Corporation.....	
742	Midland Counties Public Service Corporation.....	
746	Pacific Gas and Electric Company.....	} 4,500,000 00
722	Pacific Light and Power Corporation.....	{ 2,500,000 00
721	Pacific Light and Power Corporation.....	
725	Napa Valley Electric Company.....	5,000 00
729	Madera Gas Company.....	
731	Amador Electric Light and Power Company.....	
750	Coast Counties Gas and Electric Company.....	
769	Hemet-San Jacinto Gas Company.....	
736	Tulare County Power Company.....	250,000 00
777	United Light and Power Company of California.....	6,000 00
781	The Southern Sierras Power Company.....	10,000 00
789	Coast Valleys Gas and Electric Company.....	
812	Mt. Whitney Power and Electric Company.....	250,000 00
807	Winters Gas Company.....	
829	Oakdale Gas Company.....	
839	Coachella Valley Ice and Electric Company.....	
862	Tulare County Power Company.....	
872	Northern California Power Company, Consolidated.....	12,000 00
886	Central California Gas Company.....	
428	United Light, Fuel and Power Company.....	
693	Pitt River Power Company.....	
920	Coast Counties Gas and Electric Company.....	
951	Oceanside Electric and Gas Company.....	12,442 00
945	Electric Service Company.....	
960	Sacramento Natural Gas Company.....	100,000 00
500*	Economic Gas Company.....	
888	James A. Gunn, Jr.....	8,000 00
984	Mt. Whitney Power and Electric Company.....	
995	Western States Gas and Electric Company.....	
997	Southern Counties Gas Company of California.....	16,000 00

†Application filed June 17, 1913.

\*Supplemental decision.

## ELECTRIC COMPANIES—Continued.

BY AND BEFORE THE RAILROAD COMMISSION OF THE STATE OF CALIFORNIA, TO JUNE 30, 1914.

Refunding; Col., Collateral; Misc., Miscellaneous.

Purpose	Authorized	Notes		
		Denied	Dismissed	Pending
A. & B.	\$5,000 00			
A. & B.	1,332,000 00	\$543,000 00		
A. & B.	319,006 08			
Ref.	250,774 95			
A. & B.	1,000 00			
A. & B.	20,000 00			
A. & B.	20,000 00			
A. & B.	50,000 00			
Misc.			\$3,243 82	
Misc.	210,000 00			
A. & B.	2,500 00			
A. & B.	1,000 00			
Ref. }	7,000,000 00			
A. & B. }				
Ref.	5,000 00			
Note	250,000 00			
A. & B.	6,000 00			
Ref.	10,000 00			
A. & B.	250,000 00			
A. & B.	12,000 00			
A. & B.	12,442 00			
A. & B.	100,000 00			
A. & B.	8,000 00			
Misc.				\$16,000 00

TABLE NO. 3. GAS AND  
NOTES APPLIED FOR, AUTHORIZED, DENIED, DISMISSED AND PENDING  
FORNIA FROM JULY 1,  
Abbreviations: A. & B., Additions and Betterments; Ref.,

Num- ber of appli- cation	Name of company	Applied
996	Southern Counties Gas Company of California.....	
987	Oakdale Gas Company.....	
992	San Joaquin Light and Power Corporation.....	200,000 00
1038	Pacific Gas and Electric Company.....	5,000,000 00
1036	Oro Electric Corporation.....	2,000,000 00
1054	San Diego Consolidated Gas and Electric Company.....	8,434 43
1028	Ventura County Power Company.....	373,228 88
1057	Southern California Edison Company.....	120,850 00
1094	Long Beach Consolidated Gas Company.....	79,150 00
1095	Midland Counties Public Service Corporation.....	
1104	Pacific Light and Power Corporation.....	163,269 27
721*	Pacific Light and Power Corporation.....	2,500,000 00
439	Tulare County Power Company.....	
1068	Half Moon Bay Light and Power Company.....	
1131	Western States Gas and Electric Company.....	341,000 00
1153	Midland Counties Public Service Corporation.....	
1155	Ojai Power Company.....	
1157	Fowler Gas Company.....	
1168	Central California Gas Company.....	
1208	Modesto Gas, Light and Coke Company.....	42,778 00
1197	San Joaquin Light and Power Corporation.....	139,967 13
1210	Midland Counties Public Service Corporation.....	6,500 00
992	San Joaquin Light and Power Corporation.....	200,000 00
1188	Pacific Gas and Electric Company.....	
Totals .....		\$21,352,144 56

\*Supplemental decision.



## ELECTRIC COMPANIES—Continued.

BY AND BEFORE THE RAILROAD COMMISSION OF THE STATE OF CALIFORNIA, TO JUNE 30, 1914.

Refunding; Col., Collateral; Misc., Miscellaneous.

Notes—Continued				
Purpose	Authorized	Denied	Dismissed	Pending
A. & B.	200,000 00			
Ref.        )	7,000,000 00			
A. & B.    )				
A. & B.	8,434 43			
Note	373,228 88			
Misc.       )				
A. & B.    )			\$200,000 00	
A. & B.	163,269 27			
A. & B.	2,500,000 00			
A. & B.	341,000 00			
Ref.				42,778 00
Ref.				139,967 13
Ref.	200,000 00			6,500 00
	\$20,400,655 61	\$543,000 00	\$203,243 82	\$205,245 13

TABLE No. 3. GAS AND  
STOCKS, BONDS, NOTES AND CERTIFICATES<sup>§</sup> APPLIED FOR, AUTHORIZED,  
MISSION OF THE STATE OF CALIFORNIA  
Abbreviations: A. & B., Additions and Betterments; Ref.,

Number of appli- cation	Name of company	Applied
609	Oro Electric Corporation†.....	\$1,686,000 00
479	Beaumont Gas and Power Company.....	5,000 00
526	Southern California Edison Company.....	3,000,000 00
500	Economic Gas Company.....	930,000 00
627	Santa Barbara Gas and Electric Company.....	100,000 00
629	San Joaquin Light and Power Corporation.....	4,375,000 00
630	Pacific Gas and Electric Company.....	319,006 08
609	Pacific Light and Power Corporation.....	2,500,000 00
647	Pacific Gas and Electric Company.....	250,774 95
648	Santa Monica Gas and Power Company.....	1,000 00
657	H. G. Lacey and Company.....	20,000 00
591	San Diego Consolidated Gas and Electric Company.....	285,000 00
663	Alta District Gas Company.....	55,000 00
668	Southern Counties Gas Company.....	100,000 00
694	Tulare County Power Company.....	50,000 00
695	Tulare County Power Company.....	3,243 82
702	Midway Gas Company.....	210,000 00
616	Western States Gas and Electric Company.....	354,000 00
74	Lompoc Gas and Electric Company.....	75,000 00
577	Ojai Power Company.....	12,500 00
719	Santa Maria Gas and Power Company.....	1,000 00
515	Midland Counties Public Service Corporation.....	2,500,500 00
742	Midland Counties Public Service Corporation.....	1,159,000 00
746	Pacific Gas and Electric Company.....	7,000,000 00
722	Pacific Light and Power Corporation.....	52,300 00
721	Pacific Light and Power Corporation.....	1,730,000 00
725	Napa Valley Electric Company.....	40,800 00
729	Madera Gas Company.....	55,000 00
731	Amador Electric Light and Power Company.....	15,000 00
750	Coast Counties Gas and Electric Company.....	200,000 00
769	Hemet-San Jacinto Gas Company.....	3,000 00
736	Tulare County Power Company.....	283,000 00
777	United Light and Power Company of California.....	6,000 00
781	The Southern Sierras Power Company.....	10,000 00
789	Coast Valleys Gas and Electric Company.....	114,000 00
812	Mt. Whitney Power and Electric Company.....	250,000 00
807	Winters Gas Company.....	25,000 00
829	Oakdale Gas Company.....	72,000 00
839	Coachella Valley Ice and Electric Company.....	300,000 00
862	Tulare County Power Company.....	80,000 00
872	Northern California Power Company, Consolidated.....	12,000 00
886	Central California Gas Company.....	38,800 00
428	United Light, Fuel and Power Company.....	198,000 00
693	Pitt River Power Company.....	147,500 00
920	Coast Counties Gas and Electric Company.....	150,000 00
951	Oceanside Electric and Gas Company.....	37,442 00
945	Electric Service Company.....	75,000 00
960	Sacramento Natural Gas Company.....	120,000 00
500*	Economic Gas Company.....	1,277,000 00
888	James A. Gunn, Jr.....	8,000 00
984	Mt. Whitney Power and Electric Company.....	500,000 00
995	Western States Gas and Electric Company.....	219,000 00
997	Southern Counties Gas Company of California.....	16,000 00

<sup>§</sup>No certificates applied for or authorized.

†Application filed June 17, 1913.

\*Error in application.

## ELECTRIC COMPANIES—Continued.

DENIED, DISMISSED AND PENDING BY AND BEFORE THE RAILROAD COM-  
FROM JULY 1, 1913, TO JUNE 30, 1914.

Refunding; Col., Collateral; Misc., Miscellaneous.

Total Stocks, Bonds and Notes				
Authorized	Denied	Dismissed	Pending	
			\$1,686,000 00	
\$5,000 00				
3,000,000 00				
270,000 00	\$660,000 00			
100,000 00				
3,108,000 00	1,267,000 00			
319,006 08				
2,500,000 00				
250,774 95				
1,000 00				
20,000 00				
	285,000 00			
55,000 00				
75,000 00	25,000 00			
50,000 00				
		\$3,243 82		
210,000 00				
354,000 00				
		75,000 00		
12,500 00				
1,000 00				
		2,500,500 00		
1,159,000 00				
7,000,000 00				
52,300 00				
	1,730,000 00			
40,800 00				
39,000 00	16,000 00			
15,000 00				
	200,000 00			
3,000 00				
283,000 00				
6,000 00				
10,000 00				
114,000 00				
250,000 00				
21,300 00	3,700 00			
40,000 00	32,000 00			
300,000 00				
80,000 00				
12,000 00				
25,800 00	13,000 00			
197,000 00	11,000 00			
105,000 00	42,500 00			
150,000 00				
37,442 00				
			75,000 00	
120,000 00				
1,277,000 00				
8,000 00				
500,000 00				
219,000 00				
			16,000 00	

TABLE NO. 3. GAS AND  
STOCKS, BONDS, NOTES AND CERTIFICATES<sup>§</sup> APPLIED FOR, AUTHORIZED.  
MISSION OF THE STATE OF CALIFORNIA  
Abbreviations: A. & B., Additions and Betterments; Ref.,

Num- ber of appli- cation	Name of company	Applied
996	Southern Counties Gas Company of California.....	135,294 00
987	Oakdale Gas Company.....	23,000 00
992	San Joaquin Light and Power Corporation.....	3,380,000 00
1038	Pacific Gas and Electric Company.....	7,000,000 00
1036	Oro Electric Corporation.....	8,434 43
1054	San Diego Consolidated Gas and Electric Company.....	373,228 88
1028	Ventura County Power Company.....	200,000 00
1057	Southern California Edison Company.....	3,000,000 00
1094	Long Beach Consolidated Gas Company.....	200,000 00
1095	Midland Counties Public Service Corporation.....	163,269 27
1104	Pacific Light and Power Corporation.....	2,500,000 00
721*	Pacific Light and Power Corporation.....	1,730,000 00
439	Tulare County Power Company.....	50,000 00
1068	Half Moon Bay Light and Power Company.....	475 00
1131	Western States Gas and Electric Company.....	341,000 00
1153	Midland Counties Public Service Corporation.....	650,000 00
1155	Ojai Power Company.....	19,200 00
1157	Fowler Gas Company.....	23,000 00
1168	Central California Gas Company.....	25,000 00
1208	Modesto Gas, Light and Coke Company.....	42,778 00
1197	San Joaquin Light and Power Corporation.....	139,967 13
1210	Midland Counties Public Service Corporation.....	6,500 00
992	San Joaquin Light and Power Corporation.....	200,000 00
1188	Pacific Gas and Electric Company.....	17,500,000 00
Totals .....		\$68,738,013 56

<sup>§</sup>\$8,000.00 stock authorized but not applied for in formal application.

<sup>§</sup>\$1,500,000.00 stock authorized but not applied for in formal application.

§No certificates applied for or authorized.

\*Supplemental decision.



## ELECTRIC COMPANIES—Concluded.

DENIED, DISMISSED AND PENDING BY AND BEFORE THE RAILROAD COM-  
FROM JULY 1, 1913, TO JUNE 30, 1914.

Refunding; Col., Collateral; Misc., Miscellaneous.

## Total Stocks, Bonds and Notes—Continued

Authorized	Denied	Dismissed	Pending
			135,294 00
23,000 00	8,000 00		
3,380,000 00			
7,000,000 00			
8,434 43			
373,228 88			
		200,000 00	
			3,000,000 00
200,000 00			
163,269 27			
2,500,000 00			
1,233,000 00	497,000 00		
		50,000 00	
		475 00	
341,000 00			
			650,000 00
19,200 00			
23,000 00			
25,000 00			
			42,778 00
			139,967 13
			6,500 00
200,000 00			
19,000,000 00			
\$56,885,055 61	\$4,780,200 00	\$2,829,218 92	\$5,751,539 13

TABLE No. 4.

STOCKS APPLIED FOR, AUTHORIZED, DENIED, DISMISSED AND PENDING  
FORNIA FROM JULY 1,

Abbreviations: A. &amp; B., Additions and Betterments; Ref.,

Num- ber of appli- cation	Name of company	Applied
418	Susanville Water Works.....	
623	Hanford Water Company.....	\$58,750 00
621	Mt. Jackson Water and Power Company.....	
341	Torrance Water, Light and Power Company.....	50,000 00
593	Davis Water Company.....	49,500 00
689	Hihn Water Company.....	30,000 00
680	City and Suburban Investment Company.....	99,997 00
755	Sonoma Valley Water, Light and Power Company.....	
743	Consolidated Water Company of Pomona.....	
751	Signal Hill Water Company of Long Beach.....	495 00
762	Southern California Utilities Company.....	
170	The Empire Water Company.....	
801	Spring Valley Water Company.....	
598	Campbell Water Company.....	475 00
593	Davis Water Company.....	6,000 00
814	Santa Clara Valley Water Company.....	7,425 00
819	Los Vergels Land and Water Company.....	25,000 00
813	Eagle Rock Water Company.....	40,780 00
830	Spring Valley Water Company.....	7,596 00
828	Mokelumne River Power and Water Company.....	
835	San Dimas Water Company.....	
884	Pasadena Consolidated Water Company.....	12,900 00
925	Esealon Water and Light Company.....	9,240 00
953	Suburban Water Company.....	47,795 00
1026	Consolidated Securities Company.....	
1047	Santa Monica Water Company.....	
1050	Sawtelle Water Company.....	
1013	City Water Company of Banning.....	930 00
1060	Fairmont Water Company.....	45,900 00
1035	Wilmington Water Company.....	2,000 00
1065	The Campbell Water Company.....	13,500 00
1089	Modoc County Irrigation Company.....	12,000 00
1092	Happy Valley Land and Water Company.....	10,000 00
1110	Peoples Water Company.....	
1130	Cuyamaca Water Company.....	600,000 00
1175	Hayward Water Company.....	148,700 00
	Totals .....	\$1,278,983 00

## WATER COMPANIES.

BY AND BEFORE THE RAILROAD COMMISSION OF THE STATE OF CALI-  
1913, TO JUNE 30, 1914.

Refunding; Col., Collateral; Misc., Miscellaneous.

Stocks				
Purpose	Authorized	Denied	Dismissed	Pending
Ref.	\$47,000 00	\$11,750 00		
A. & B.	34,000 00	16,000 00		
A. & B.	36,450 00	13,050 00		
A. & B.			\$30,000 00	
A. & B.			99,997 00	
A. & B.			495 00	
A. & B.				
A. & B.				
Misc.	475 00	6,000 00		
A. & B.	7,425 00			
Ref.	25,000 00			
A. & B.	65,780 00			
A. & B.	7,596 00			
A. & B.	12,900 00			
A. & B.	9,240 00			
A. & B.	30,000 00	17,795 00		
A. & B.	930 00			
A. & B.	45,900 00			
Misc.				
A. & B.	13,500 00	2,000 00		
A. & B.	12,000 00			
A. & B.	10,000 00			
A. & B.	600,000 00			
A. & B.				\$148,700 00
	\$933,196 00	\$66,595 00	\$130,492 00	\$148,700 00

TABLE No. 4.

BONDS APPLIED FOR, AUTHORIZED, DENIED, DISMISSED AND PENDING  
FORNIA FROM JULY 1,

Abbreviations: A. &amp; B., Additions and Betterments; Ref.,

Num- ber of appli- cation	Name of company	Applied
418	Susanville Water Works.....	
623	Hanford Water Company.....	
621	Mt. Jackson Water and Power Company.....	\$11,000 00
341	Torrance Water, Light and Power Company.....	125,000 00
593	Davis Water Company.....	
689	Hihn Water Company.....	
680	City and Suburban Investment Company.....	
755	Sonoma Valley Water, Light and Power Company.....	30,000 00
743	Consolidated Water Company of Pomona.....	
751	Signal Hill Water Company of Long Beach.....	
762	Southern California Utilities Company.....	
170	The Empire Water Company.....	200,000 00
801	Spring Valley Water Company.....	400,000 00
598	Campbell Water Company.....	
593	Davis Water Company.....	
814	Santa Clara Valley Water Company.....	
819	Los Vergels Land and Water Company.....	
813	Eagle Rock Water Company.....	
830	Spring Valley Water Company.....	
828	Mokelumne River Power and Water Company.....	
835	San Dimas Water Company.....	15,000 00
884	Pasadena Consolidated Water Company.....	
925	Escalon Water and Light Company.....	
953	Suburban Water Company.....	
1026	Consolidated Securities Company.....	
1047	Santa Monica Water Company.....	} 250,000 00
		} 250,000 00
1050	Sawtelle Water Company.....	} 14,532 56
		} 10,467 44
1013	City Water Company of Banning.....	
1060	Fairmont Water Company.....	
1035	Wilmington Water Company.....	
1065	The Campbell Water Company.....	
1089	Modoc County Irrigation Company.....	750,000 00
1092	Happy Valley Land and Water Company.....	
1110	Peoples Water Company.....	8,250,000 00
1130	Cuyamaca Water Company.....	900,000 00
1175	Hayward Water Company.....	
	Totals .....	\$11,206,000 00



## WATER COMPANIES—Continued.

BY AND BEFORE THE RAILROAD COMMISSION OF THE STATE OF CALI-  
1913, TO JUNE 30, 1914.

Refunding; Col., Collateral; Misc., Miscellaneous.

Bonds				
Purpose	Authorized	Denied	Dismissed	Pending
A. & B.		\$11,000 00		
A. & B.	\$115,000 00	10,000 00		
A. & B.	30,000 00			
A. & B.		200,000 00		
Col.	400,000 00			
A. & B.	15,000 00			
Ref.				
A. & B.	257,000 00	243,000 00		
Misc.				
A. & B.		25,000 00		
A. & B.			\$750,000 00	
Col.	5,670,000 00	2,580,000 00		
A. & B.		900,000 00		
	\$6,487,000 00	\$3,969,000 00	\$750,000 00	

TABLE No. 4.

NOTES APPLIED FOR, AUTHORIZED, DENIED, DISMISSED AND PENDING  
 FORNIA FROM JULY 1,  
 Abbreviations: A. & B. Additions and Betterments; Ref.,

Num- ber of appli- cation	Name of company	Applied
418	Susanville Water Works.....	\$10,000 00
623	Hanford Water Company.....	
621	Mt. Jackson Water and Power Company.....	
341	Torrance Water, Light and Power Company.....	
593	Davis Water Company.....	
689	Hihn Water Company.....	
680	City and Suburban Investment Company.....	
755	Sonoma Valley Water, Light and Power Company.....	
743	Consolidated Water Company of Pomona.....	161,000 00
751	Signal Hill Water Company of Long Beach.....	
762	Southern California Utilities Company.....	50,000 00
170	The Empire Water Company.....	
801	Spring Valley Water Company.....	} 185,500 00
598	Campbell Water Company.....	{ 114,500 00
593	Davis Water Company.....	
814	Santa Clara Valley Water Company.....	} 3,995 00
819	Los Vergels Land and Water Company.....	{ 2,655 00
813	Eagle Rock Water Company.....	25,000 00
830	Spring Valley Water Company.....	} 300,000 00
828	Mokelumne River Power and Water Company.....	{ 700,000 00
835	San Dimas Water Company.....	8,899 86
884	Pasadena Consolidated Water Company.....	} 5,000 00
925	Escalon Water and Light Company.....	{ 2,700 00
953	Suburban Water Company.....	
1026	Consolidated Securities Company.....	9,000 00
1047	Santa Monica Water Company.....	
1050	Sawtelle Water Company.....	
1013	City Water Company of Banning.....	
1060	Fairmont Water Company.....	
1035	Wilmington Water Company.....	
1065	The Campbell Water Company.....	
1089	Modoc County Irrigation Company.....	
1092	Happy Valley Land and Water Company.....	
1110	Peoples Water Company.....	} 2,915,259 01
1130	Cuyamaca Water Company.....	{ 414,624 85
1175	Hayward Water Company.....	
	Totals .....	\$4,908,133 72

\*\$10,500.00 notes authorized but not applied for in formal application.

\*\$211,668.01 more notes authorized than applied for in formal application.



TABLE No. 4.

STOCKS, BONDS, NOTES AND CERTIFICATES<sup>§</sup> APPLIED FOR, AUTHORIZED,  
 COMMISSION OF THE STATE OF CALIFORNIA  
 Abbreviations: A. & B., Additions and Betterments; Ref.,

Number of application	Name of company	Applied
418	Susanville Water Works.....	\$10,000 00
623	Hanford Water Company.....	58,750 00
621	Mt. Jackson Water and Power Company.....	11,000 00
341	Torrance Water, Light and Power Company.....	175,000 00
593	Davis Water Company.....	49,500 00
689	Hihn Water Company.....	30,000 00
680	City and Suburban Investment Company.....	99,997 00
755	Sonoma Valley Water, Light and Power Company.....	30,000 00
743	Consolidated Water Company of Pomona.....	161,000 00
751	Signal Hill Water Company of Long Beach.....	495 00
762	Southern California Utilities Company.....	50,000 00
170	The Empire Water Company.....	200,000 00
801	Spring Valley Water Company.....	700,000 00
598	Campbell Water Company.....	6,475 00
593	Davis Water Company.....	7,425 00
814	Santa Clara Valley Water Company.....	6,650 00
819	Los Vergels Land and Water Company.....	90,780 00
813	Eagle Rock Water Company.....	7,596 00
830	Spring Valley Water Company.....	1,000,000 00
828	Mokelumne River Power and Water Company.....	8,899 86
335	San Dimas Water Company.....	15,000 00
884	Pasadena Consolidated Water Company.....	20,600 00
925	Escalon Water and Light Company.....	9,240 00
953	Suburban Water Company.....	47,795 00
1026	Consolidated Securities Company.....	9,000 00
1047	Santa Monica Water Company.....	500,000 00
1050	Sawtelle Water Company.....	25,000 00
1013	City Water Company of Banning.....	930 00
1060	Fairmont Water Company.....	45,900 00
1035	Wilmington Water Company.....	15,500 00
1065	The Campbell Water Company.....	12,000 00
1089	Modoc County Irrigation Company.....	750,000 00
1092	Happy Valley Land and Water Company.....	10,000 00
1110	Peoples Water Company.....	11,579,883 86
1130	Cuyamaca Water Company.....	1,500,000 00
1175	Hayward Water Company.....	148,700 00
Totals .....		\$17,393,116 72

<sup>§</sup>No certificates applied for or authorized.

<sup>¶</sup>\$10,500.00 notes authorized but not applied for in formal application.

<sup>\*\*</sup>\$211,668.01 more notes authorized than applied for in formal application.



## WATER COMPANIES—Concluded.

DENIED, DISMISSED AND PENDING BY AND BEFORE THE RAILROAD  
FROM JULY 1, 1913, TO JUNE 30, 1914.

Refunding; Col., Collateral; Misc., Miscellaneous.

## Total Stocks, Bonds and Notes

Authorized	Denied	Dismissed	Pending
\$10,000 00			
47,000 00	\$11,750 00		
	11,000 00		
149,000 00	26,000 00		
36,450 00	13,050 00		
		\$30,000 00	
		99,997 00	
30,000 00			
161,000 00			
		495 00	
		50,000 00	
	200,000 00		
700,000 00			
475 00	6,000 00		
7,425 00			
2,655 00	1,495 00	2,500 00	
90,780 00			
7,596 00			
1,000,000 00			
		8,899 86	
15,000 00			
20,600 00			
9,240 00			
30,000 00	17,795 00		
9,000 00			
257,000 00	243,000 00		
110,500 00	25,000 00		
930 00			
45,900 00			
13,500 00	2,000 00		
12,000 00			
		750,000 00	
10,000 00			
9,211,551 87	2,580,000 00		
1,600,000 00	900,000 00		
			\$148,700 00
\$12,487,602 87	\$4,037,090 00	\$941,891 86	\$148,700 00

TABLE NO. 5. TELEPHONE  
STOCKS APPLIED FOR, AUTHORIZED, DENIED, DISMISSED AND PENDING  
FORNIA FROM JULY 1,  
Abbreviations: A. & B., Additions and Betterments;

Num- ber of appli- cation	Name of company	Applied
419	Honey Lake Valley Mutual Telephone Company.....	
637	Home Telephone Company of Covina.....	
626	Lindsay Home Telephone and Telegraph Company.....	\$1,644 00
673	Delano-Linns Valley Telephone Company.....	250 00
741	Delano-Linns Valley Telephone Company.....	
763	Pacific Telephone and Telegraph Company.....	
764	Reedley Telephone Company.....	2,500 00
772	Dos Palos Telephone Company.....	1,273 00
800	San Diego Home Telephone Company.....	
813	California Telephone and Light Company.....	50,000 00
837	Nevada-California and Oregon Telephone and Telegraph Company.....	(Sec
851	Lindsay Home Telephone and Telegraph Company.....	
875	Home Telephone and Telegraph Company of Santa Barbara County.....	
874	Home Telephone and Telegraph Company of Santa Barbara.....	
871	Southwestern Home Telephone Company.....	
917	Roseville Home Telephone Company.....	11,122 24
876	Nevada-California and Oregon Telephone and Telegraph Company.....	
1008	Tulare Home Telephone and Telegraph Company.....	
678	Kerman Telephone Company.....	1,365 00
928	San Joaquin Valley Telephone Company.....	2,500 00
1147	Campbell Telephone Company.....	247 50
1186	Consolidated Utilities Company.....	15,800 00
	Totals.....	\$86,701 74

AND TELEGRAPH COMPANIES.

BY AND BEFORE THE RAILROAD COMMISSION OF THE STATE OF CALIFORNIA, TO JUNE 30, 1914.

Ref., Refunding; Col., Collateral; Misc., Miscellaneous.

Stocks				
Purpose	Authorized	Denied	Dismissed	Pending
A. & B.	\$1,644 00			
A. & B.	250 00			
A. & B.	2,500 00			
A. & B.	1,273 00			
A. & B.	50,000 00			
Application #87 6)				
A. & B.	11,000 00	\$122 24		
A. & B.	1,365 00			
A. & B.	2,500 00			
A. & B.				\$247 50
A. & B.				15,800 00
	\$70,532 00	\$122 24		\$16,047 50

TABLE NO. 5. TELEPHONE AND  
BONDS APPLIED FOR, AUTHORIZED, DENIED, DISMISSED AND PENDING  
CALIFORNIA FROM JULY 1,  
Abbreviations: A. & B., Additions and Betterments;

Number of appli- cation	Name of company	Applied
419	Honey Lake Valley Mutual Telephone Company-----	
637	Home Telephone Company of Covina-----	\ \$59,300 00
626	Lindsay Home Telephone and Telegraph Company-----	/ 40,000 00
673	Delano-Linns Valley Telephone Company-----	
741	Delano-Linns Valley Telephone Company-----	
763	Pacific Telephone and Telegraph Company-----	\ 1,850,000 00
764	Reedley Telephone Company-----	/ 1,150,000 00
772	Dos Palos Telephone Company-----	
800	San Diego Home Telephone Company-----	
813	California Telephone and Light Company-----	100,000 00
837	Nevada-California and Oregon Telephone and Telegraph Company-----	
851	Lindsay Home Telephone and Telegraph Company-----	
875	Home Telephone and Telegraph Company of Santa Barbara County-----	
874	Home Telephone and Telegraph Company of Santa Barbara-----	
871	Southwestern Home Telephone Company-----	
917	Roseville Home Telephone Company-----	
876	Nevada-California and Oregon Telephone and Telegraph Company-----	95,599 39
1008	Tulare Home Telephone and Telegraph Company-----	
678	Kerman Telephone Company-----	
928	San Joaquin Valley Telephone Company-----	
1147	Campbell Telephone Company-----	
1186	Consolidated Utilities Company-----	
	Totals-----	\$3,294,899 39



## TELEGRAPH COMPANIES—Continued.

BY AND BEFORE THE RAILROAD COMMISSION OF THE STATE OF CALIFORNIA, TO JUNE 30, 1914.

Ref., Refunding; Col., Collateral; Misc., Miscellaneous.

Bonds				
Purpose	Authorized	Denied	Dismissed	Pending
Ref.	\$57,000 00	\$2,300 00		
A. & B.	40,000 00			
Ref.				
A. & B.	3,000,000 00			
A. & B.	100,000 00			
A. & B.	55,000 00	\$40,599 39		
	\$3,252,000 00	\$42,899 39		

TABLE No. 5. TELEPHONE AND  
NOTES APPLIED FOR, AUTHORIZED, DENIED, DISMISSED AND PENDING  
FORNIA FROM JULY 1.

Abbreviations: A. & B., Additions and Betterments;

Num- ber of appli- cation	Name of company	Applied
419	Honey Lake Valley Mutual Telephone Company.....	\$10,000 00
637	Home Telephone Company of Covina.....	
626	Lindsay Home Telephone and Telegraph Company.....	
673	Delano-Linns Valley Telephone Company.....	
741	Delano-Linns Valley Telephone Company.....	700 00
763	Pacific Telephone and Telegraph Company.....	
764	Reedley Telephone Company.....	
772	Dos Palos Telephone Company.....	
800	San Diego Home Telephone Company.....	150,000 00
813	California Telephone and Light Company.....	
837	Nevada-California and Oregon Telephone and Telegraph Company.....	
851	Lindsay Home Telephone and Telegraph Company.....	3,000 00
875	Home Telephone and Telegraph Company of Santa Barbara County.....	15,000 00
874	Home Telephone and Telegraph Company of Santa Barbara.....	20,000 00
871	Southwestern Home Telephone Company.....	8,500 00
917	Roseville Home Telephone Company.....	
876	Nevada-California and Oregon Telephone and Telegraph Company.....	
1008	Tulare Home Telephone and Telegraph Company.....	9,000 00
678	Kerman Telephone Company.....	
928	San Joaquin Valley Telephone Company.....	
1147	Campbell Telephone Company.....	
1186	Consolidated Utilities Company.....	
	Totals.....	\$216,200 00

## TELEGRAPH COMPANIES—Continued.

BY AND BEFORE THE RAILROAD COMMISSION OF THE STATE OF CALI-  
1913, TO JUNE 30, 1914.

Ref., Refunding; Col., Collateral; Misc., Miscellaneous.

Notes				
Purpose	Authorized	Denied	Dismissed	Pending
A. & B.	\$10,000 00			
Misc.	700 00			
A. & B.	150,000 00			
A. & B.	3,000 00			
A. & B.	15,000 00			
A. & B.	20,000 00			
Misc.	8,500 00			
A. & B.			\$9,000 00	
	\$207,200 00		\$9,000 00	

TABLE NO. 5. TELEPHONE AND  
 CERTIFICATES APPLIED FOR, AUTHORIZED, DENIED, DISMISSED AND  
 OF CALIFORNIA FROM  
 Abbreviations: A. & B., Additions and Betterments;

Number of application	Name of company	Applied
419	Honey Lake Valley Mutual Telephone Company.....	.....
637	Home Telephone Company of Covina.....	.....
626	Lindsay Home Telephone and Telegraph Company.....	.....
673	Delano-Linns Valley Telephone Company.....	.....
741	Delano-Linns Valley Telephone Company.....	.....
763	Pacific Telephone and Telegraph Company.....	.....
764	Reedley Telephone Company.....	.....
772	Dos Palos Telephone Company.....	.....
800	San Diego Home Telephone Company.....	.....
813	California Telephone and Light Company.....	.....
837	Nevada-California and Oregon Telephone and Telegraph Company.....	.....
851	Lindsay Home Telephone and Telegraph Company.....	.....
875	Home Telephone and Telegraph Company of Santa Barbara County.....	.....
874	Home Telephone and Telegraph Company of Santa Barbara.....	.....
871	Southwestern Home Telephone Company.....	.....
917	Roseville Home Telephone Company.....	.....
876	Nevada-California and Oregon Telephone and Telegraph Company.....	.....
1008	Tulare Home Telephone and Telegraph Company.....	.....
678	Kerman Telephone Company.....	.....
928	San Joaquin Valley Telephone Company.....	.....
1147	Campbell Telephone Company.....	.....
1186	Consolidated Utilities Company.....	.....
	Totals.....	.....



## TELEGRAPH COMPANIES—Continued.

PENDING BY AND BEFORE THE RAILROAD COMMISSION OF THE STATE  
JULY 1, 1913, TO JUNE 30, 1914.

Ref., Refunding; Col., Collateral; Misc., Miscellaneous.

[illegible]

TABLE NO. 5. TELEPHONE AND  
STOCKS, BONDS, NOTES AND CERTIFICATES APPLIED FOR, AUTHORIZED,  
MISSION OF THE STATE OF CALIFORNIA

Abbreviations: A. & B., Additions and Betterments;

Num- ber of appli- cation	Name of company	Applied
419	Honey Lake Valley Mutual Telephone Company .....	\$10,000 00
637	Home Telephone Company of Covina .....	99,300 00
626	Lindsay Home Telephone and Telegraph Company .....	1,644 00
673	Delano-Linns Valley Telephone Company .....	250 00
741	Delano-Linns Valley Telephone Company .....	700 00
763	Pacific Telephone and Telegraph Company .....	3,000,000 00
764	Reedley Telephone Company .....	2,500 00
772	Dos Palos Telephone Company .....	1,273 00
800	San Diego Home Telephone Company .....	150,000 00
813	California Telephone and Light Company .....	150,000 00
837	Nevada-California and Oregon Telephone and Telegraph Company .....	
851	Lindsay Home Telephone and Telegraph Company .....	3,000 00
875	Home Telephone and Telegraph Company of Santa Barbara County .....	15,000 00
874	Home Telephone and Telegraph Company of Santa Barbara .....	20,000 00
871	Southwestern Home Telephone Company .....	8,500 00
917	Roseville Home Telephone Company .....	11,122 24
876	Nevada-California and Oregon Telephone and Telegraph Company .....	95,599 39
1008	Tulare Home Telephone and Telegraph Company .....	9,000 00
678	Kerman Telephone Company .....	1,365 00
928	San Joaquin Valley Telephone Company .....	2,500 00
1147	Campbell Telephone Company .....	247 50
1186	Consolidated Utilities Company .....	15,800 00
	Totals .....	\$3,597,801 13

## TELEGRAPH COMPANIES—Concluded.

DENIED, DISMISSED AND PENDING BY AND BEFORE THE RAILROAD COM-  
FROM JULY 1, 1913, TO JUNE 30, 1914.

Ref., Refunding; Col., Collateral; Misc., Miscellaneous.

## Total Stocks, Bonds, Notes and Certificates

Authorized	Denied	Dismissed	Pending
\$10,000 00			
97,000 00	\$2,300 00		
1,644 00			
250 00			
700 00			
3,000,000 00			
2,500 00			
1,273 00			
150,000 00			
150,000 00			
3,000 00			
15,000 00			
20,000 00			
8,500 00			
11,000 00	122 24		
55,000 00	40,599 39		
		\$9,000 00	
1,365 00			
2,500 00			
			\$247 50
			15,800 00
\$3,529,732 00	\$43,021 63	\$9,000 00	\$16,047 50

TABLE No. 6.

STOCKS APPLIED FOR, AUTHORIZED, DENIED, DISMISSED AND PENDING  
 FORNIA FROM JULY 1,  
 Abbreviations: A. & B., Additions and Better

Num- ber of appli- cation	Name of company	Applied
502	Sacramento Warehouse Company-----	\$200,000 00
704	Finnell Warehouse Company-----	15 00
737	Huntington Beach Warehouse Company-----	25,000 00
737	Sawtelle Warehouse Company-----	25,000 00
737	Hueneme Wharf and Warehouse Company-----	110,000 00
767	Griffins Transfer and Storage Company-----	64,000 00
		8,000 00
932	The Globe Warehouse Company-----	10,000 00
1018	Seafoam Warehouse Company-----	10,000 00
1109	Sacramento Warehouse Company-----	
1137	Los Angeles Warehouse Company-----	
1192	Davies Warehouse Company-----	
	Totals -----	\$452,015 00

TABLE No. 6. WARE

BONDS APPLIED FOR, AUTHORIZED, DENIED, DISMISSED AND PENDING  
 FORNIA FROM JULY 1,  
 Abbreviations: A. & B., Additions and Better

Num- ber of appli- cation	Name of company	Applied
502	Sacramento Warehouse Company-----	
704	Finnell Warehouse Company-----	
737	Huntington Beach Warehouse Company-----	
737	Sawtelle Warehouse Company-----	
737	Hueneme Wharf and Warehouse Company-----	
767	Griffins Transfer and Storage Company-----	\$13,000 00
932	The Globe Warehouse Company-----	
1018	Seafoam Warehouse Company-----	
1109	Sacramento Warehouse Company-----	
1137	Los Angeles Warehouse Company-----	
1192	Davies Warehouse Company-----	250,000 00
	Totals -----	\$263,000 00



## WAREHOUSES.

BY AND BEFORE THE RAILROAD COMMISSION OF THE STATE OF CALI-  
1913, TO JUNE 30, 1914.

ments; Ref., Refunding; Col., Collateral; Misc., Miscellaneous.

Stocks				
Purpose	Authorized	Denied	Dismissed	Pending
A. & B.	\$200,000 00	-----	-----	-----
A. & B.	15 00	-----	-----	-----
A. & B.	25,000 00	-----	-----	-----
A. & B.	25,000 00	-----	-----	-----
A. & B.	110,000 00	-----	-----	-----
A. & B. {	72,000 00	-----	-----	-----
Misc. }		-----	-----	-----
A. & B.	10,000 00	-----	-----	-----
Misc.	10,000 00	-----	-----	-----
-----		-----	-----	-----
-----		-----	-----	-----
-----		-----	-----	-----
	\$452,015 00	-----	-----	-----
-----		-----	-----	-----

## HOUSES—Continued.

BY AND BEFORE THE RAILROAD COMMISSION OF THE STATE OF CALI-  
1913, TO JUNE 30, 1914.

ments; Ref., Refunding; Col., Collateral.

Bonds				
Purpose	Authorized	Denied	Dismissed	Pending
-----		-----	-----	-----
-----		-----	-----	-----
-----		-----	-----	-----
-----		-----	-----	-----
A. & B.	\$13,000 00	-----	-----	-----
-----		-----	-----	-----
-----		-----	-----	-----
A. & B.		-----	-----	\$250,000 00
	\$13,000 00	-----	-----	\$250,000 00

TABLE No. 6. WARE  
 NOTES APPLIED FOR, AUTHORIZED, DENIED, DISMISSED AND PENDING  
 OF CALIFORNIA FROM JULY 1,  
 Abbreviations: A. & B., Additions and Better

Num- ber of appli- cation	Name of company	Applied
502	Sacramento Warehouse Company.....	
704	Finnell Warehouse Company.....	
737	Huntington Beach Warehouse Company.....	
737	Sawtelle Warehouse Company.....	\$40,000 00
737	Hueneme Wharf and Warehouse Company.....	
767	Griffins Transfer and Storage Company.....	
932	The Globe Warehouse Company.....	
1018	Seafoam Warehouse Company.....	
1109	Sacramento Warehouse Company.....	60,000 00
1137	Los Angeles Warehouse Company.....	150,000 00
1192	Davies Warehouse Company.....	
	Totals .....	\$250,000 00

TABLE No. 6. WARE  
 CERTIFICATES APPLIED FOR, AUTHORIZED, DENIED, DISMISSED AND  
 OF CALIFORNIA FROM  
 Abbreviations: A. & B., Additions and Better

Num- ber of appli- cation	Name of company	Applied
502	Sacramento Warehouse Company.....	
704	Finnell Warehouse Company.....	
737	Huntington Beach Warehouse Company.....	
737	Sawtelle Warehouse Company.....	
737	Hueneme Wharf and Warehouse Company.....	
767	Griffins Transfer and Storage Company.....	
932	The Globe Warehouse Company.....	
1018	Seafoam Warehouse Company.....	
1109	Sacramento Warehouse Company.....	
1137	Los Angeles Warehouse Company.....	
1192	Davies Warehouse Company.....	
	Totals .....	



TABLE NO. 6. WARE  
STOCKS, BONDS, NOTES AND CERTIFICATES APPLIED FOR, AUTHORIZED,  
MISSION OF THE STATE OF CALIFORNIA,  
Abbreviations: A. & B., Additions and Better

Num- ber of appli- cation	Name of company	Applied
502	Sacramento Warehouse Company.....	\$200,000 00
704	Finnell Warehouse Company.....	15 00
737	Huntington Beach Warehouse Company.....	25,000 00
737	Sawtelle Warehouse Company.....	65,000 00
737	Hueneme Wharf and Warehouse Company.....	110,000 00
767	Griffins Transfer and Storage Company.....	85,000 00
932	The Globe Warehouse Company.....	10,000 00
1018	Seafoam Warehouse Company.....	10,000 00
1109	Sacramento Warehouse Company.....	60,000 00
1137	Los Angeles Warehouse Company.....	150,000 00
1192	Davies Warehouse Company.....	250,000 00
	Totals .....	\$965,015 00



## HOUSES—Concluded.

DENIED, DISMISSED AND PENDING BY AND BEFORE THE RAILROAD COM-  
FROM JULY 1, 1913, TO JUNE 30, 1914.  
ments; Ref., Refunding; Col., Collateral.

Total Stocks, Bonds, Notes and Certificates				
Authorized	Denied	Dismissed	Pending	
\$200,000 00	-----	-----	-----	
15 00	-----	-----	-----	
25,000 00	-----	-----	-----	
65,000 00	-----	-----	-----	
110,000 00	-----	-----	-----	
85,000 00	-----	-----	-----	
10,000 00	-----	-----	-----	
10,000 00	-----	-----	-----	
60,000 00	-----	-----	-----	
150,000 00	-----	-----	-----	
-----	-----	-----	\$250,000 00	
\$715,015 00	-----	-----	\$250,000 00	

TABLE NO. 7.  
STOCKS APPLIED FOR, AUTHORIZED, DENIED, DISMISSED AND PENDING  
FORNIA FROM JULY 1,  
Abbreviations: A. & B., Additions and Betterments;

Num- ber of appli- cation	Name of company	Applied
954	Standard Oil Company-----	\$4,748,400 00

TABLE NO. 7.  
BONDS APPLIED FOR, AUTHORIZED, DENIED, DISMISSED AND PENDING  
FORNIA FROM JULY 1,  
Abbreviations: A. & B., Additions and Betterments;

Num- ber of appli- cation	Name of company	Applied
954	Standard Oil Company-----	

TABLE NO. 7.  
NOTES APPLIED FOR, AUTHORIZED, DENIED, DISMISSED AND PENDING  
FORNIA FROM JULY 1,  
Abbreviations: A. & B., Additions and Betterments;

Num- ber of appli- cation	Name of company	Applied
954	Standard Oil Company-----	

TABLE NO. 7.  
CERTIFICATES APPLIED FOR, AUTHORIZED, DENIED, DISMISSED AND  
OF CALIFORNIA FROM  
Abbreviations: A. & B., Additions and Betterments;

Num- ber of appli- cation	Name of company	Applied
954	Standard Oil Company-----	

## PIPE LINE COMPANIES.

BY AND BEFORE THE RAILROAD COMMISSION OF THE STATE OF CALI-  
1913, TO JUNE 30, 1914.

Ref., Refunding; Col., Collateral.

Stocks				
Purpose	Authorized	Denied	Dismissed	Pending
A. & B.	\$4,748,400 00			

## PIPE LINE COMPANIES—Continued.

BY AND BEFORE THE RAILROAD COMMISSION OF THE STATE OF CALI-  
1913, TO JUNE 30, 1914.

Ref., Refunding; Col., Collateral.

Bonds				
Purpose	Authorized	Denied	Dismissed	Pending

## PIPE LINE COMPANIES—Continued.

BY AND BEFORE THE RAILROAD COMMISSION OF THE STATE OF CALI-  
1913, TO JUNE 30, 1914.

Ref., Refunding; Col., Collateral.

Notes				
Purpose	Authorized	Denied	Dismissed	Pending

## PIPE LINE COMPANIES—Concluded.

PENDING BY AND BEFORE THE RAILROAD COMMISSION OF THE STATE  
JULY 1, 1913, TO JUNE 30, 1914.

Ref., Refunding; Col., Collateral.

Certificates				
Purpose	Authorized	Denied	Dismissed	Pending

TABLE No. 8.

STOCKS APPLIED FOR, AUTHORIZED, DENIED, DISMISSED AND PENDING  
FORNIA FROM JULY 1,

Abbreviations: A. & B., Additions and Betterments;

Num- ber of appli- cation	Name of company	
		Applied
1122	San Diego and Long Beach Steamship Company-----	\$250,000 00

TABLE No. 8. STEAMSHIP

BONDS APPLIED FOR, AUTHORIZED, DENIED, DISMISSED AND PENDING  
FORNIA FROM JULY 1,

Abbreviations: A. & B., Additions and Betterments;

Num- ber of appli- cation	Name of company	
		Applied
1122	San Diego and Long Beach Steamship Company-----	-----

TABLE No. 8. STEAMSHIP

NOTES APPLIED FOR, AUTHORIZED, DENIED, DISMISSED AND PENDING  
FORNIA FROM JULY 1,

Abbreviations: A. & B., Additions and Betterments;

Num- ber of appli- cation	Name of company	
		Applied
1122	San Diego and Long Beach Steamship Company-----	-----

TABLE No. 8. STEAMSHIP

CERTIFICATES APPLIED FOR, AUTHORIZED, DENIED, DISMISSED AND  
OF CALIFORNIA FROM

Abbreviations: A. & B., Additions and Betterments;

Num- ber of appli- cation	Name of company	
		Applied
1122	San Diego and Long Beach Steamship Company-----	-----



## STEAMSHIP COMPANIES.

BY AND BEFORE THE RAILROAD COMMISSION OF THE STATE OF CALI-  
1913, TO JUNE 30, 1914.

Ref., Refunding; Col., Collateral.

Stocks.				
Purpose	Authorized	Denied	Dismissed	Pending
A. & B.				\$250,000 00

## COMPANIES.—Continued.

BY AND BEFORE THE RAILROAD COMMISSION OF THE STATE OF CALI-  
1913, TO JUNE 30, 1914.

Ref., Refunding; Col., Collateral.

Bonds				
Purpose	Authorized	Denied	Dismissed	Pending

## COMPANIES.—Continued.

BY AND BEFORE THE RAILROAD COMMISSION OF THE STATE OF CALI-  
1913, TO JUNE 30, 1914.

Ref., Refunding; Col., Collateral.

Notes				
Purpose	Authorized	Denied	Dismissed	Pending

## COMPANIES.—Concluded.

PENDING BY AND BEFORE THE RAILROAD COMMISSION OF THE STATE  
JULY 1, 1913, TO JUNE 30, 1914.

Ref., Refunding; Col., Collateral.

Certificates				
Purpose	Authorized	Denied	Dismissed	Pending

TABLE

SHOWING AMOUNT OF STOCKS APPLIED FOR, AUTHORIZED, DENIED,  
OF THE STATE OF CALIFORNIA

Class of utility	Applied
Steam railroads .....	\$55,506,200 00
Electric railroads .....	20,952,658 00
Gas and electric companies .....	24,768,075 00
Water companies .....	1,278,983 00
Telephone and telegraph companies .....	86,701 74
Warehouse companies .....	452,015 00
Pipe line companies .....	4,748,400 00
Steamship companies .....	250,000 00
Totals .....	\$108,043,032 74

<sup>†</sup>Includes \$55,000,000.00 stock of Southern Pacific Company to be exchanged for bonds.

<sup>1</sup>Includes \$3,136,700.00 more than applied for in formal application.

<sup>2</sup>Includes \$1,508,000.00 more than applied for in formal application.

TABLE No. 9

SHOWING AMOUNT OF BONDS APPLIED FOR, AUTHORIZED, DENIED,  
OF THE STATE OF CALIFORNIA

Class of utility	Applied
Steam railroads .....	\$78,839,351 00
Electric railroads .....	41,789,000 00
Gas and electric companies .....	122,617,794 00
Water companies .....	11,206,000 00
Telephone and telegraph companies .....	3,294,899 39
Warehouse companies .....	263,000 00
Pipe line companies .....	
Steamship companies .....	
Totals .....	\$158,010,044 39

<sup>1</sup>Includes Application No. 609, filed June 11, 1913.

## No. 9.

DISMISSED AND PENDING BY AND BEFORE THE RAILROAD COMMISSION  
FROM JULY 1, 1913, TO JUNE 30, 1914.

Stocks			
Authorized	Denied	Dismissed	Pending
<sup>1</sup> \$58,378,700 00			\$264,200 00
824,058 00	\$128,600 00		20,000,000 00
<sup>2</sup> 20,929,900 00	570,200 00	\$1,050,975 00	3,725,000 00
933,196 00	66,595 00	130,492 00	148,700 00
70,532 00	122 24		16,047 50
452,015 00			
4,748,400 00			
			250,000 00
\$86,336,801 00	\$765,517 24	\$1,181,467 00	\$24,403,947 50

## —Continued.

DISMISSED AND PENDING BY AND BEFORE THE RAILROAD COMMISSION  
FROM JULY 1, 1913, TO JUNE 30, 1914.

Bonds			
Authorized	Denied	Dismissed	Pending
\$72,468,351 00	\$5,621,000 00		\$750,000 00
3,621,000 00	140,000 00		38,028,000 00
15,554,500 00	3,667,000 00	\$1,575,000 00	<sup>1</sup> \$21,294 00
6,487,000 00	3,969,000 00	750,000 00	
3,252,000 00	42,899 39		
13,000 00			250,000 00
\$101,395,851 00	\$13,439,899 39	\$2,325,000 00	\$40,849,294 00





—Continued.

IZED, DENIED, DISMISSED AND PENDING BY AND BEFORE THE RAILROAD  
FORNIA FROM JULY 1, 1913, TO JUNE 30, 1914.

Notes			Certificates*	
Denied	Dismissed	Pending	Applied	Authorized
		\$9,353 24	\$2,010,000 00	\$2,010,000 00
		2,133,431 70	300,000 00	300,000 00
\$543,000 00	\$203,243 82	205,245 13		
1,495 00	61,399 86			
	9,000 00			
\$544,495 00	\$273,643 68	\$2,348,030 07	\$2,310,000 00	\$2,310,000 00

—Concluded.

APPLIED FOR, AUTHORIZED, DENIED, DISMISSED AND PENDING  
OF CALIFORNIA FROM JULY 1, 1913, TO JUNE 30, 1914.

Total Stocks, Bonds, Notes and Certificates				
Authorized	Denied	Dismissed	Pending	
<sup>1</sup> \$132,889,135 25	\$5,621,000 00		\$1,023,553 24	
<sup>2</sup> 6,309,828 27	268,600 00		60,161,431 70	
<sup>3</sup> 56,885,055 61	4,780,200 00	\$2,829,218 82	5,751,539 13	
<sup>4</sup> 12,487,602 87	4,037,090 00	941,891 86	148,700 00	
3,529,732 00	43,021 63	9,000 00	16,047 50	
715,015 00			250,000 00	
4,748,400 00				
			250,000 00	
\$217,564,768 00	\$14,749,912 63	\$3,780,110 68	\$67,601,271 57	

TABLE

SHOWING PURPOSE AND AMOUNT OF STOCKS APPLIED FOR, AUTHORIZED,  
MISSION OF THE STATE OF CALIFORNIA

Class of utility and purpose	Applied
<i>Additions and Betterments.</i>	
Steam Railroad Companies.....	\$506,200 00
Electric Railway Companies.....	20,854,658 00
Gas and Electric Companies.....	14,829,952 00
Water Companies.....	1,187,233 00
Telephone and Telegraph Companies.....	86,701 74
Warehouse Companies.....	434,015 00
Pipe Line Companies.....	4,748,400 00
Steamship Companies.....	250,000 00
Totals.....	\$42,897,159 74
<i>Refunding.</i>	
Steam Railroad Companies.....	\$55,000,000 00
Electric Railway Companies.....	98,000 00
Gas and Electric Companies.....	9,344,348 00
Water Companies.....	83,750 00
Telephone and Telegraph Companies.....	
Warehouse Companies.....	
Pipe Line Companies.....	
Steamship Companies.....	
Totals.....	\$64,526,098 00
<i>Collateral.</i>	
Steam Railroad Companies.....	
Electric Railway Companies.....	
Gas and Electric Companies.....	
Water Companies.....	
Telephone and Telegraph Companies.....	
Warehouse Companies.....	
Pipe Line Companies.....	
Steamship Companies.....	
Totals.....	
<i>Miscellaneous.</i>	
Steam Railroad Companies.....	
Electric Railway Companies.....	
Gas and Electric Companies.....	\$593,775 00
Water Companies.....	8,000 00
Telephone and Telegraph Companies.....	
Warehouse Companies.....	18,000 00
Pipe Line Companies.....	
Steamship Companies.....	
Totals.....	\$619,775 00

<sup>1</sup>Includes \$3,136,700.00 more authorized than applied for in formal application.

<sup>2</sup>Includes \$8,000.00 more authorized than applied for in formal application.



TABLE No. 10

SHOWING PURPOSE AND AMOUNT OF BONDS APPLIED FOR, AUTHORIZED,  
MISSION OF THE STATE OF CALIFORNIA

Class of utility and purpose	Applied
<i>Additions and Betterments.</i>	
Steam Railroad Companies.....	\$18,026,351 00
Electric Railway Companies.....	38,425,000 00
Gas and Electric Companies.....	14,027,452 00
Water Companies.....	2,291,467 44
Telephone and Telegraph Companies.....	1,385,599 39
Warehouse Companies.....	263,000 00
Pipe Line Companies.....	
Steamship Companies.....	
Totals.....	\$104,418,869 83
<i>Refunding.</i>	
Steam Railroad Companies.....	\$30,813,000 00
Electric Railway Companies.....	1,831,000 00
Gas and Electric Companies.....	4,695,442 00
Water Companies.....	250,000 00
Telephone and Telegraph Companies.....	1,909,300 00
Warehouse Companies.....	
Pipe Line Companies.....	
Steamship Companies.....	
Totals.....	\$39,498,742 00
<i>Collateral.</i>	
Steam Railroad Companies.....	
Electric Railway Companies.....	\$1,533,000 00
Gas and Electric Companies.....	2,520,000 00
Water Companies.....	8,650,000 00
Telephone and Telegraph Companies.....	
Warehouse Companies.....	
Pipe Line Companies.....	
Steamship Companies.....	
Totals.....	\$12,703,000 00
<i>Miscellaneous.</i>	
Steam Railroad Companies.....	
Electric Railway Companies.....	
Gas and Electric Companies.....	\$1,374,900 00
Water Companies.....	14,532 56
Telephone and Telegraph Companies.....	
Warehouse Companies.....	
Pipe Line Companies.....	
Steamship Companies.....	
Totals.....	\$1,389,432 56



—Continued.

DENIED, DISMISSED AND PENDING BY AND BEFORE THE RAILROAD COM-  
FROM JULY 1, 1913, TO JUNE 30, 1914.

Bonds				
Authorized	Denied	Dismissed	Pending	
\$41,655,351 00	\$5,621,000 00	-----	\$750,000 00	
2,063,000 00	140,000 00	-----	36,222,000 00	
8,687,158 00	1,944,000 00	\$1,575,000 00	1,821,294 00	
167,000 00	1,374,467 44	750,000 00	-----	
1,345,000 00	40,599 39	-----	-----	
13,000 00	-----	-----	250,000 00	
-----	-----	-----	-----	
\$53,930,509 00	\$9,120,066 83	\$2,325,000 00	\$39,043,294 00	
\$30,813,000 00	-----	-----	-----	
25,000 00	-----	-----	\$1,806,000 00	
4,695,442 00	-----	-----	-----	
250,000 00	-----	-----	-----	
1,907,000 00	\$2,300 00	-----	-----	
-----	-----	-----	-----	
\$37,690,442 00	\$2,300 00	-----	\$1,806,000 00	
-----	-----	-----	-----	
\$1,533,000 00	-----	-----	-----	
1,796,000 00	\$724,000 00	-----	-----	
6,070,000 00	2,580,000 00	-----	-----	
-----	-----	-----	-----	
-----	-----	-----	-----	
-----	-----	-----	-----	
\$9,399,000 00	\$3,304,000 00	-----	-----	
-----	-----	-----	-----	
\$375,900 00	\$999,000 00	-----	-----	
-----	14,532 56	-----	-----	
-----	-----	-----	-----	
-----	-----	-----	-----	
\$375,900 00	\$1,013,532 56	-----	-----	

TABLE No. 10

SHOWING PURPOSE AND AMOUNT OF NOTES AND CERTIFICATES APPLIED  
THE RAILROAD COMMISSION OF THE STATE OF

Class of utility and purpose	Applied	Authorized
<i>Additions and Betterments.</i>		
Steam Railroad Companies.....	\$41,437 49	\$32,084 25
Electric Railway Companies.....	811,626 97	1974,770 27
Gas and Electric Companies.....	10,851,030 66	10,228,880 66
Water Companies.....	1,491,779 85	<sup>2</sup> 1,659,952 86
Telephone and Telegraph Companies.....	207,000 00	198,000 00
Warehouse Companies.....	250,000 00	250,000 00
Pipe Line Companies.....		
Steamship Companies.....		
Totals.....	\$13,682,874 97	\$13,343,688 04
<i>Refunding.</i>		
Steam Railroad Companies.....		
Electric Railway Companies.....	\$2,216,575 00	100,000 00
Gas and Electric Companies.....	10,151,020 08	9,961,774 95
Water Companies.....	3,409,658 87	3,400,759 01
Telephone and Telegraph Companies.....		
Warehouse Companies.....		
Pipe Line Companies.....		
Steamship Companies.....		
Totals.....	\$15,777,253 95	\$13,462,533 96
<i>Collateral.</i>		
Steam Railroad Companies.....		
Electric Railway Companies.....		
Gas and Electric Companies.....		
Water Companies.....		
Telephone and Telegraph Companies.....		
Warehouse Companies.....		
Pipe Line Companies.....		
Steamship Companies.....		
Totals.....		
<i>Miscellaneous.</i>		
Steam Railroad Companies.....		
Electric Railway Companies.....	\$490,000 00	\$490,000 00
Gas and Electric Companies.....	350,093 82	210,000 00
Water Companies.....	6,695 00	6,695 00
Telephone and Telegraph Companies.....	9,200 00	9,200 00
Warehouse Companies.....		
Pipe Line Companies.....		
Steamship Companies.....		
Totals.....	\$855,988 82	\$715,895 00

<sup>1</sup>Includes \$150,000.00 more authorized than applied for in formal application.

<sup>2</sup>Includes \$222,168.01 more authorized than applied for in formal application.

\*No certificates denied, dismissed or pending.

—Continued.

FOR, AUTHORIZED, DENIED, DISMISSED AND PENDING BY AND BEFORE CALIFORNIA FROM JULY 1, 1913, TO JUNE 30, 1914.

Notes			Certificates*	
Denied	Dismissed	Pending	Applied	Authorized
		\$9,353 24	\$2,010,000 00	\$2,010,000 00
		16,856 70	300,000 00	300,000 00
\$543,000 00	\$79,150 00			
1,495 00	52,500 00			
	9,000 00			
\$544,495 00	\$140,650 00	\$26,209 94	\$2,310,000 00	\$2,310,000 00
		\$2,116,575 00		
		189,245 13		
	\$8,899 86			
	\$8,899 96	\$2,305,820 13		
	\$124,093 82	\$16,000 00		
	\$124,093 82	\$16,000 00		

TABLE NO. 10

SHOWING PURPOSE AND AMOUNT OF STOCKS, BONDS, NOTES AND CERTIFI  
AND BEFORE THE RAILROAD COMMISSION OF THE STATE

Class of utility and purpose	Applied
<i>Additions and Betterments.</i>	
Steam Railroad Companies.....	\$50,583,988 49
Electric Railway Companies.....	60,421,284 97
Gas and Electric Companies.....	39,708,434 66
Water Companies.....	4,970,480 29
Telephone and Telegraph Companies.....	1,679,301 13
Warehouse Companies.....	947,015 00
Pipe Line Companies.....	4,748,400 00
Steamship Companies.....	250,000 00
Totals .....	\$163,308,904 54
<i>Refunding.</i>	
Steam Railroad Companies.....	\$85,813,000 00
Electric Railway Companies.....	4,145,575 00
Gas and Electric Companies.....	24,190,810 08
Water Companies.....	3,743,408 87
Telephone and Telegraph Companies.....	1,909,300 00
Warehouse Companies.....	
Pipe Line Companies.....	
Steamship Companies.....	
Totals .....	\$119,802,093 95
<i>Collateral.</i>	
Steam Railroad Companies.....	
Electric Railway Companies.....	\$1,533,000 00
Gas and Electric Companies.....	2,520,000 00
Water Companies.....	8,650,000 00
Telephone and Telegraph Companies.....	
Warehouse Companies.....	
Pipe Line Companies.....	
Steamship Companies.....	
Totals .....	\$12,703,000 00
<i>Miscellaneous.</i>	
Steam Railroad Companies.....	
Electric Railway Companies.....	\$490,000 00
Gas and Electric Companies.....	2,318,768 82
Water Companies.....	29,227 56
Telephone and Telegraph Companies.....	9,200 00
Warehouse Companies.....	18,000 00
Pipe Line Companies.....	
Steamship Companies.....	
Totals .....	\$2,865,196 38

<sup>1</sup>Includes \$3,136,700.00 more authorized than applied for in formal application.

<sup>2</sup>Includes \$150,000.00 more authorized than applied for in formal application.

<sup>3</sup>Includes \$222,168.01 more authorized than applied for in formal application.

<sup>4</sup>Includes \$8,000.00 more authorized than applied for in formal application.

<sup>5</sup>Includes \$3,516,868.01 more authorized than applied for in formal application.

<sup>6</sup>Includes \$1,500,000.00 more authorized than applied for in formal application.



—Concluded.

CATES APPLIED FOR, AUTHORIZED, DENIED, DISMISSED AND PENDING BY OF CALIFORNIA FROM JULY 1, 1913, TO JUNE 30, 1914.

Total Stocks, Bonds, Notes and Certificates			
Authorized	Denied	Dismissed	Pending
<sup>1</sup> \$17,076,135 25	\$5,621,000 00		\$1,023,553 24
<sup>2</sup> 4,063,828 27	268,600 00		56,238,856 70
<sup>2</sup> 28,693,290 66	2,772,200 00	\$2,704,650 00	5,546,294 00
<sup>4</sup> 2,688,148 86	1,422,807 44	932,992 00	148,700 00
1,613,532 00	40,721 63	9,000 00	16,047 50
697,015 00			250,000 00
4,748,000 00			
			250,000 00
<sup>5</sup> \$89,580,350 04	\$10,125,329 07	\$3,646,642 00	\$63,473,451 44
\$85,813,000 00			
223,000 00			\$3,922,575 00
24,001,564 95			189,245 13
3,722,759 01	\$11,750 00	\$8,899 86	
1,907,000 00	2,300 00		
\$115,667,323 96	\$14,050 00	\$8,899 86	\$4,111,820 13
\$1,533,000 00			
1,796,000 00	\$724,600 00		
6,070,000 00	2,580,000 00		
\$9,399,000 00	\$3,304,000 00		
\$490,000 00			
<sup>6</sup> 2,394,200 00	\$1,284,000 00	\$124,568 82	\$16,000 00
6,695 00	22,532 56		
9,200 00			
18,000 00			
<sup>6</sup> \$2,918,095 00	\$1,306,532 56	\$124,568 82	\$16,000 00

## APPLICATIONS FOR AUTHORITY TO SELL, TRANSFER OR LEASE PROPERTY.

Since the enactment of the Public Utilities Act it is illegal for a public utility to sell, transfer or lease its property without the consent of the Railroad Commission. Section 51 of the act reads:

SEC. 51. (a) No railroad corporation, street railroad corporation, pipe line corporation, gas corporation, electrical corporation, telephone corporation, telegraph corporation or water corporation shall henceforth sell, lease, assign, mortgage or otherwise dispose of or encumber the whole or any part of its railroad, street railroad, line, plant or system, necessary or useful in the performance of its duties to the public, or any franchise or permit or any right thereunder, nor by any means whatsoever, direct or indirect, merge or consolidate its railroad, street railroad, line, plant or system, or franchises or permits or any part thereof, with any other public utility, without having first secured from the commission an order authorizing it so to do. Every such sale, lease, assignment, mortgage, disposition, encumbrance, merger or consolidation made other than in accordance with the order of the commission authorizing the same shall be void. The permission and approval of the commission to the exercise of a franchise or permit under section 50 of this act, or the sale, lease, assignment, mortgage or other disposition or encumbrance of a franchise or permit under this section shall not be construed to revive or validate any lapsed or invalid franchise or permit, or to enlarge or add to the powers or privileges contained in the grant of any franchise or permit, or to waive any forfeiture. Nothing in this subsection contained shall be construed to prevent the sale, lease or other disposition by any public utility of a class designated in this subsection of property which is not necessary or useful in the performance of its duties to the public, and any sale of its property by such public utility shall be conclusively presumed to have been of property which is not useful or necessary in the performance of its duties to the public, as to any purchaser of such property in good faith for value.

(b) No public utility shall hereafter purchase or acquire, take or hold, any part of the capital stock of any other public utility, organized or existing under or by virtue of the laws of this state, without having first been authorized to do so by the commission. Every assignment, transfer, contract or agreement for assignment or transfer of any stock by or through any person or corporation to any corporation or otherwise in violation of any of the provisions of this section shall be void and of no effect, and no such transfer shall be made on the books of any public utility. Nothing herein contained shall be construed to prevent the holding of stock heretofore lawfully acquired.

The value of the property transferred by the authority of the Commission from July 1, 1913, to June 30, 1914, was in excess of \$4,260,000.00. There is pending at this time Application No. 894, whereby the "Los Angeles Railway Corporation" and the "City Railway Company of Los Angeles" asked for authority to transfer their property to "The Los Angeles Railway" which desires to issue stock to the par value of \$20,000,000.00 and bonds to the face value of \$23,544,000.00.

Except in cases where corporations desired to issue securities in exchange for property, it has not been the practice of the Commission to make a valuation of the property transferred. In its orders authorizing transfer of property the Commission frequently stipulates that the sum paid for the property shall not be binding upon the Railroad Commission of the State of California or any other regulatory body in the matter of fixing rates.

By chapter 553, approved June 14, 1913, the Public Utilities Act was amended and any county, city and county, incorporated city or town or

municipal water district given authority to file at any time with the Commission a petition setting forth the intention of the county, city and county, incorporated city or town or municipal water district to acquire under eminent domain proceedings or otherwise, any existing public utility, and the lands, property and rights of any character whatsoever connected with such existing public utility, or any part or portion thereof. Such a petition is to give a complete description of the property to be acquired, and may request the Commission to ascertain the value thereof.

The first application under this provision of the law was that of the city council of Eureka asking the Commission to determine the value of the property of the Eureka Water Company. Under Application No. 936 the city of Glendale asked the Commission to determine the value of certain property belonging to the Glendale Consolidated Water Company, the Verdugo Springs Water Company, the Miradero Water Company, and the Verdugo Pipe and Reservoir Company. There are pending at the present time the applications of Fort Bragg, asking for a valuation of the property of the Fort Bragg Water Company, and the Marin Municipal Water District, requesting the Commission to ascertain the value of the property of the Marin Water and Power Company and the North Coast Water Company.

A brief synopsis of each application for authority to transfer property is found on the following pages. The decisions have been printed and can be found in volumes 3 and 4 of the Opinions and Orders of the Railroad Commission of the State of California.

Decision No. 794. Application No. 586.

PACIFIC GAS AND ELECTRIC COMPANY AND UNITED WATER AND POWER COMPANY.

Decided July 19, 1913.

Application of Pacific Gas and Electric Company and United Water and Power Company to buy and sell certain property in Nevada and Placer counties.

Application granted.

Decision No. 797. Application No. 622.

EL MOLINO TERRACE LAND AND WATER COMPANY.

Decided July 19, 1913.

Application of the El Molino Terrace Land and Water Company to sell its water system to the city of Pasadena for \$5,800.00.

Application granted.

Decision No. 812. Application No. 642.

SARATOGA TELEPHONE COMPANY.

Decided July 23, 1913.

Application of the Saratoga Telephone Company to sell its plant to The Pacific Telephone and Telegraph Company for \$3,000.00.

Application granted.

Decision No. 830. Application No. 576.

P. T. DURFY.

Decided July 29, 1913.

Application of P. T. Durfy to sell and Sherman Water Company to buy a water system in the town of Sherman, Los Angeles County; and of Sherman Water Company to issue therefor 120 shares of capital stock of the par value of \$100.00 per share.

Application granted.

Decision No. 862. Application No. 675.

VENTURA COUNTY POWER COMPANY.

Decided August 11, 1913.

Application of Ventura County Power Company to sell its water works at Oxnard, Ventura County, to the city of Oxnard for \$30,000.00.

Application granted.

Decision No. 863. Application No. 579.

WESTERN ELECTRIC COMPANY.

Decided August 11, 1913.

Application of Western Electric Company to sell its telephone plant at Portola, Plumas County, to The Pacific Telephone and Telegraph Company for \$466.31.

Application granted.

Decision No. 868. Application No. 611.

BURBANK ELECTRIC LIGHT AND POWER COMPANY.

Decided August 13, 1913.

Application of the Burbank Electric Light and Power Company to sell its plant to the city of Burbank, Los Angeles County, for \$3,212.50.

Application granted.

Decision No. 869. Application No. 595.

MIRADERO WATER COMPANY.

Decided August 13, 1913.

Application of Miradero Water Company to sell a portion of its water system to the city of Burbank, Los Angeles County, for \$20,000.00.

Application granted.

Decision No. 875. Application No. 596.

FULLERTON DOMESTIC WATER COMPANY.

Decided August 15, 1913.

Application of the Fullerton Domestic Water Company to sell its plant to the city of Fullerton, Orange County, for the sum of \$12,500.00.

Application granted.

Decision No. 880. Application No. 594.

SCHMEISER MANUFACTURING COMPANY.

Decided August 15, 1913.

Application of the Schmeiser Manufacturing Company to sell its water plant, with the exception of a storage tank, located in the town



of Davis, Yolo County, to the Davis Water Company, for \$6,300.00 par value of the capital stock of said company.

Application granted.

Decision No. 893. Application No. 679.

OAKLAND, ANTIOCH AND EASTERN RAILWAY AND NORTHERN ELECTRIC RAILWAY COMPANY.

Decided August 19, 1913.

Application of the Oakland, Antioch and Eastern Railway to purchase from the Northern Electric Company, and of the Northern Electric Railway Company to sell to the Oakland, Antioch and Eastern Railway, one half interest in certain tracks in the city of Sacramento for the sum of \$11,403.00.

Application granted.

Decision No. 913. Application No. 718.

ANSEL M. EASTON.

Decided August 30, 1913.

Application of Ansel M. Easton, the sole owner of the Black Hawk Water Company, to sell his water system to the city of Burlingame for the sum of \$5,520.00.

Application granted.

Decision No. 922. Application No. 577.

ARTHUR W. SLOAN AND FRANK ROSEBROUGH.

Decided August 30, 1913.

Application of Arthur W. Sloan and Frank Rosebrough to sell the system of the Nordhoff Water Company to the Ojai Power Company.

Application granted.

Decision No. 924. Application No. 698.

WATSONVILLE RAILWAY AND NAVIGATION COMPANY.

Decided August 30, 1913.

Application of the Watsonville Railway and Navigation Company to lease a certain portion of its railway to the Pajaro Valley Consolidated Railroad Company.

Application granted subject to conditions.

Decision No. 934. Application No. 726.

PENINSULA WATER COMPANY.

Decided September 6, 1913.

Application of the Peninsula Water Company to sell a portion of its water system, known as the Burlingame Water System, to the city of Burlingame for the sum of \$48,375.00.

Application granted subject to condition that the city of Burlingame shall file with the Commission a stipulation that the city accepts each and all of the obligations of the Peninsula Water Company and its subsidiary company, the Burlingame Water System, and that it will obligate itself to give the same character of service to consumers whose

homes are located outside the city limits of Burlingame as to those persons whose homes are within the city limits.

Decision No. 959. Application No. 732.

NORTHERN ELECTRIC RAILWAY COMPANY.

Decided September 22, 1913.

Application of the Northern Electric Railway Company to sell certain motor generator sets and appliances to the Pacific Gas and Electric Company.

Application granted.

Decision No. 965. Application No. 749.

CALIFORNIA AND HAWAIIAN SUGAR REFINING COMPANY.

Decided September 23, 1913.

Application of the California and Hawaiian Sugar Refining Company for approval of a wharf franchise awarded by the board of supervisors of Contra Costa County.

Application granted.

Decision No. 966. Application No. 742.

MIDLAND COUNTIES PUBLIC SERVICE CORPORATION.

Decided September 24, 1913.

Application of the Midland Counties Public Service Corporation to purchase the properties of the Midland Counties Gas and Electric Company, Paso Robles Light and Water Company, and Russel-Robison Water and Electric Company.

Application granted.

Decision No. 972. Application No. 663.

A. A. WEBER.

Decided September 23, 1913.

Application of A. A. Weber to sell to the Alta District Gas Company his gas distributing plant in the city of Dinuba, Tulare County, also his franchise in the cities of Dinuba and Reedley for \$35,000.00, face value of capital stock of said company.

Application granted.

Decision No. 982. Application No. 737.

FARMERS' WAREHOUSE COMPANY.

Decided October 2, 1913.

Application of the Farmers' Warehouse Company, operating in Los Angeles and Ventura counties, to sell certain warehouse property to the Huntington Beach Warehouse Company, the Sawtelle Warehouse Company, and Hueneme Wharf and Warehouse Company.

Application granted.

Decision No. 985. Application No. 729.

GEORGE W. KITCHEN.

Decided October 2, 1913.

Application of George W. Kitchen to sell a gas plant in the city of Madera to the Madera Gas Company for \$25,000.00 face value of bonds and \$25,000.00 face value of stock.

Application granted with condition that the Madera Gas Company be permitted to issue and deliver in consideration for said property \$25,000.00 face value of bonds and \$14,000.00 par value of stock.

Decision No. 1002. Application No. 724.

RIVERSIDE ARTESIA WATER COMPANY.

Decided October 8, 1913.

Application of the Riverside Artesia Water Company to sell its water system to the city of Riverside for \$195,000.00.

Application granted subject to condition that the city shall stipulate that said property is taken subject to all claims for water which might have been enforced against the Riverside Artesia Water Company.

Decision No. 1003. Application No. 716.

RIVERSIDE WATER COMPANY.

Decided October 8, 1913.

Application of the Riverside Water Company to sell a portion of its water system to the city of Riverside for \$575,000.00 and to sell to said city for \$12,300.00 the right to develop water in the Garner Tract.

Application granted subject to the condition that the city shall stipulate that said property is taken subject to all legal claims for water which might be enforced against the Riverside Water Company.

Decision No. 1004. Application No. 723.

HENRY P. KYES.

Decided October 8, 1913.

Application of Henry P. Kyes to sell a major portion of his water system to the city of Riverside for \$15,000.00.

Application granted subject to the condition that the city of Riverside shall stipulate that said property is taken subject to all legal claims for water, with certain specified exceptions, which might have been enforced against the former owner.

Decision No. 1024. Application No. 778.

H. H. MAYBERRY.

Decided October 16, 1913.

Application of H. H. Mayberry to sell his water system located in Los Angeles County to J. A. Graves.

Application granted.

Decision No. 1038. Application No. 703.

SANGER TELEPHONE COMPANY.

Decided October 25, 1913.

Application of the Sanger Telephone Company to sell to Ross B. Matkins, for the sum of \$10,000.00, a telephone plant located in Fresno County.

Application granted.

Decision No. 1068. Application No. 788.

W. H. MOFFETT & SON.

Decided November 5, 1913.

Application of W. H. Moffett and J. A. Moffett, doing business under the firm name of W. H. Moffett & Son, for authority to sell to Paul Huneke for the sum of \$850.00, the telephone exchange located at Lemon Cove, Tulare County.

Application granted.

Decision No. 1076. Application No. 774.

INDIO LIGHT, WATER AND ICE COMPANY.

Decided November 11, 1913.

Application of Indio Light, Water and Ice Company for permission to convey to the Riverside Abstract Company, in trust for H. E. Gard, its water utility plant located at Indio, Riverside County.

Application granted subject to conditions.

Decision No. 1079. Application No. 811

PERCY J. COOKE.

Decided November 11, 1913.

Application of Percy J. Cooke to sell a certain portion of his water system to the town of Colusa, Colusa County, for the sum of \$4,000.00.

Application granted.

Decision No. 1087. Application No. 813.

MARY E. BACKUS.

Decided November 21, 1913.

Application of Mary E. Backus to sell her water system in the city of Eagle Rock, Los Angeles County, to the Eagle Rock Water Company, in return for 7,596 shares of the capital stock of the Eagle Rock Water Company having the par value of \$7,596.00.

Application granted.

Decision No. 1184. Application No. 908.

FLORIN BROTHERS.

Decided November 31, 1913.

Application of Ernest and Fred Florin, doing business under the firm name of Florin Brothers, for authority to sell their electrical plant and system at Fall River Mills, Shasta County, to the California Power and Manufacturing Company for the sum of \$25,000.00.

Application granted.



Decision No. 1205. Application No. 829.

J. R. ANDERSON.

Decided January 16, 1914.

Application of J. R. Anderson to sell a gas plant and distributing system in the city of Oakdale, Stanislaus County, to the Oakdale Gas Company.

Application granted.

Decision No. 1218. Application No. 901.

F. E. LAUMANN.

Decided January 22, 1914.

Application of F. E. Laumann to sell a small telephone exchange in and adjacent to the town of Fulton, Sonoma County, to The Pacific Telephone and Telegraph Company.

Application granted.

Decision No. 1221. Application No. 879.

DEER CREEK RURAL TELEPHONE COMPANY.

Decided January 22, 1914.

Application of the Deer Creek Rural Telephone Company for permission to sell its telephone properties located at Terra Bella, Tulare County, to The Pacific Telephone and Telegraph Company.

Application granted with conditions.

Decision No. 1229. Application No. 909.

G. H. BLOWERS.

Decided January 27, 1914.

Application of G. H. Blowers to sell the Reedley Water Works to the city of Reedley, Fresno County, for the sum of \$16,817.65.

Application granted.

Decision No. 1262. Applications Nos. 837 and 876.

CALIFORNIA AND OREGON TELEGRAPH COMPANY AND

CALIFORNIA NORTHERN TELEPHONE AND TELEGRAPH COMPANY.

Decided February 7, 1914.

Applications of the California and Oregon Telegraph Company and California Northern Telephone and Telegraph Company to sell their respective telephone and telegraph systems to the Nevada, California and Oregon Telegraph and Telephone Company.

Application granted subject to conditions. In granting the application the Commission says:

"The applicants have established clearly that they propose to merge these three lines into one comprehensive and efficient system. I am convinced that one company, properly regulated, can operate these systems to better advantage than can the three companies as at present constituted."

Decision No. 1282. Application No. 953.

J. W. BLOOM.

Decided February 17, 1914.

Application of J. W. Bloom to sell a certain water distributing system located partly in the city and county of San Francisco and partly in the county of San Mateo to the Suburban Water Company.

Application granted with condition that J. W. Bloom shall discharge all obligations now existing against the said water system.

Decision No. 1320. Application No. 1000.  
GLENORA LIGHT AND POWER COMPANY.

Decided March 9, 1914.

Application of the Glendora Light and Power Company to sell its electrical distributing system in the city of Glendora, Los Angeles County, to the Pacific Light and Power Corporation for the sum of \$10,500.00.

Application granted.

Decision No. 1321. Application No. 1001.  
CONSOLIDATED UTILITIES COMPANY.

Decided March 9, 1914.

Application of the Consolidated Utilities Company to sell its electrical distributing system at Compton, Los Angeles County, to the Pacific Light and Power Corporation for the sum of \$8,500.00.

Application granted.

Decision No. 1324. Applications Nos. 980 and 981.  
MACLAY RANCHO WATER COMPANY AND CONSOLIDATED SECURITIES  
COMPANY.

Decided March 9, 1914.

Application of the Maclay Rancho Water Company and the Consolidated Securities Company to sell an electrical distributing system in San Fernando, Los Angeles County, to the Southern California Edison Company.

Application granted.

Decision No. 1326. Application No. 928.  
SAN JOAQUIN VALLEY FARM LANDS COMPANY AND LOUIS EVANS.  
Decided March 9, 1914.

Application of San Joaquin Valley Farm Lands Company to sell and transfer its telephone lines and system, located in Fresno County, and Louis Evans to assign and transfer his rights as lessee therein to the San Joaquin Valley Telephone Company.

Application granted subject to conditions.

Decision No. 1327. Application No. 977.  
JOHN T. WILSON.

Decided March 9, 1914.

Application of John T. Wilson to sell his electrical distributing system at San Fernando, Los Angeles County, to the Pacific Light and Power Corporation for the sum of \$16,000.00.

Application granted.

Decision No. 1328. Application No. 978.

SAN FERNANDO MISSION LAND COMPANY.

Decided March 9, 1914.

Application of San Fernando Mission Land Company to sell its electrical distributing system in and adjacent to the town of San Fernando, Los Angeles County, to the Pacific Light and Power Corporation for the sum of \$7,835.15.

Application granted.

Decision No. 1329. Application No. 932.

GLOBE GRAIN AND MILLING COMPANY AND COLTON GRAIN AND  
MILLING COMPANY.

Decided March 9, 1914.

Applications of the Globe Grain and Milling Company and Colton Grain and Milling Company to sell the warehouse portions of their business to the Globe Warehouse Company, in exchange for capital stock in the sum of \$10,000.00.

Application granted.

Decision No. 1358. Application No. 1005.

COLUSA AND HAMILTON RAILROAD COMPANY.

Decided March 17, 1914.

Application of the Colusa and Hamilton Railroad Company to lease its line of railway in course of construction between Harrington, Colusa County, and Hamilton, Glenn County, to the Southern Pacific Railroad Company, and of the latter company to assign said lease to the Southern Pacific Company.

Application granted with condition that the Commission reserves the right to prescribe such alterations or changes in the lease as may at any time seem necessary or proper.

Decision No. 1359. Application No. 1033.

CENTRAL CALIFORNIA GAS COMPANY.

Decided March 18, 1914.

Application of Central California Gas Company for an order authorizing the conveyance of certain property to the city of Porterville, Tulare County, for use as a public street.

Application granted with condition that if at any time hereafter the property conveyed shall be abandoned or not be used as a public street, it shall revert to the Central California Gas Company, or its successors.

Decision No. 1363. Application No. 942.

P. T. DUFY.

Decided March 23, 1914.

Application of P. T. Dufy to sell a portion of his water system to the city of Los Angeles for \$2,500.00. Sale of this system to Sherman Water Company, as authorized in Decision No. 830, was never consummated.

Application granted.

Decision No. 1366. Application No. 941.

JOHN HANLON.

Decided March 23, 1914.

Application of John Hanlon for an order authorizing P. T. Durfy to sell and convey to John Hanlon a water system known as the Sherman Water Company.

Application dismissed, the matters involved in this application having been considered in Application No. 942.

Decision No. 1367. Application No. 1010.

CRESENT CITY RAILWAY COMPANY.

Decided March 23, 1914.

Application of the Crescent City Railway Company to transfer to William G. Henshaw certain franchise rights granted by the city of Rialto, San Bernardino County, to said railway company.

Application granted.

Decision No. 1369. Application No. 999.

COLEY-CRAIG COMPANY.

Decided March 23, 1914.

Application of the Coley-Craig Company to sell its telephone system located in and adjacent to the town of Riverbank, Stanislaus County, to The Pacific Telephone and Telegraph Company for \$1,300.00.

Application granted.

Decision No. 1370. Application No. 843.

CITY COUNCIL OF EUREKA.

Decided March 23, 1914.

Application of the city council of Eureka, Humboldt County, for the Railroad Commission to fix a compensation to be paid by the city of Eureka for the water system owned by the Eureka Water Company.

This was the first case to arise, under the amendment to the Public Utilities Act, empowering the Commission to fix, on application of certain named governmental agencies, the compensation to be paid by such agencies for all or any designated portion of the property of a public utility.

In its decision the Commission discusses the market value theory in condemnation proceedings and holds that this theory may properly be followed in this case if the utility property is regarded as an entity and not divided into all its separate elements. The Commission also discusses the valuation of water rights and rejects the "additional cost of the next available source theory."

The Commission holds that the just compensation to be paid by the city of Eureka for the rights and property of the Eureka Water Company is the sum of \$270,000.00, which includes the property, the equipment, and the material used or useful in the conduct of its water utility business.



Decision No. 1387. Application No. 1052.

SUNSET TELEPHONE AND TELEGRAPH COMPANY.

Decided March 30, 1914.

Application of the Sunset Telephone and Telegraph Company for permission to sell a certain telephone exchange in the city of Tulare, Tulare County, to the Tulare Home Telephone and Telegraph Company.

Application granted.

Decision No. 1413. Application No. 1065.

YAPLE & COMPANY.

Decided April 9, 1914.

Application of Yaple & Company to sell a certain telephone exchange located at Ripon, San Joaquin County, to J. S. Moulton for the sum of \$352.22.

Application granted.

Decision No. 1424. Application No. 878.

NORTHERN ELECTRIC RAILWAY COMPANY, VALLEJO AND NORTHERN RAILROAD COMPANY.

Decided April 13, 1914.

Application of Northern Electric Railway Company and Vallejo and Northern Railroad Company to transfer to the West Side Railroad their rights and interest in the M-street bridge over the Sacramento River, between the counties of Yolo and Sacramento, for the sum of \$140,-593.69.

At the hearing protests were filed by the county of Sacramento, the county of Yolo, and the Oakland, Antioch and Eastern Railway. The protests of the county of Sacramento and the county of Yolo referred to the fact that the route of the Vallejo and Northern was to be between Sacramento and Vallejo, while the route of the West Side Railroad was to be between Sacramento and Rio Vista over an entirely different course. The counties took the position that a franchise to run from Sacramento to Vallejo could not be assigned to a railroad which is to run from Sacramento to Rio Vista over an entirely different route. They claimed that by reason of certain payments which they had obligated themselves to make in connection with the M-street bridge, they had a pecuniary interest therein, and that the arrangement which the petitioners asked the Commission to sanction was such that the two counties were to be deprived of compensation for an additional use of the bridge, to which compensation they believed themselves entitled. The Oakland, Antioch and Eastern likewise took the position that the use of the M-street bridge by the West Side Railroad was an additional use to which it was entitled through its pro rata payment and protested against any transfer of the right formerly held by the Vallejo and Northern in such a way as to deprive the Oakland, Antioch and Eastern of any compensation.

The Commission held that the West Side Railroad had no right to the use of the M-street bridge unless it had secured the necessary franchises. The application was therefore dismissed without prejudice to

the right of the petitioners to again apply after the West Side Railroad has secured the necessary franchises and been authorized by the Commission to exercise rights thereunder.

Decision No. 1438. Application No. 1018.

LONG BEACH MILLING COMPANY.

Decided April 15, 1914.

Application of the Long Beach Milling Company to lease to the Sea Foam Warehouse Company the unused portion of its warehouse.

Application granted on condition that this authority shall not act as a restriction on the city of Long Beach in any attempt that it may make to change the location of said warehouse.

Decision No. 1439. Application No. 1041.

FRANK M. KUMMETH.

Decided April 15, 1914.

Application of Frank M. Kummeth to sell the Sanger Water Works to the city of Sanger, Fresno County.

Application granted. The Commission fixed the price to be paid by the city of Sanger to Frank M. Kummeth at \$8,513.00.

Decision No. 1440. Application No. 1029.

HUNTINGTON BEACH COMPANY.

Decided April 15, 1914.

Application of the Huntington Beach Company to sell its electrical distributing system in the city of Huntington Beach, Orange County, to the Pacific Light and Power Corporation for \$16,500.00.

Application granted.

Decision No. 1442. Application No. 1060.

PACIFIC BUILDING COMPANY.

Decided April 15, 1914.

Application of the Pacific Building Company to sell its water system in and adjacent to the city of East San Diego, San Diego County, to the Fairmount Water Company in exchange for \$12,158.00 of stock and \$36,000.00 of bonds.

Application granted with conditions.

Decision No. 1446. Application No. 1045.

PACIFIC GAS AND ELECTRIC COMPANY.

Decided April 16, 1914.

Application of Pacific Gas and Electric Company to sell certain transformers and equipment to the West Sacramento Electric for \$2,588.82.

Application granted.

Decision No. 1447. Application No. 1053.

WILLIAM E. BALL.

Decided April 16, 1914.

Application of William E. Ball to transfer the Melvin Place water plant in Los Angeles County to James S. Harker for certain property in Madera County.

Application granted.

Decision No. 1454. Application No. 1064.

SUNNYVALE WATER COMPANY.

Decided April 25, 1914.

Application of the Sunnyvale Water Company to sell its water system to the town of Sunnyvale, Santa Clara County, for the sum of \$16,039.67.

Application granted.

Decision No. 1484. Application No. 1065.

CAMPBELL WATER COMPANY.

Decided May 5, 1914.

Application of the Campbell Water Company to sell its water system to the Campbell Water Company of Campbell, Santa Clara County, in exchange for 480 shares of capital stock of the par value of \$25.00 per share.

Application granted.

Decision No. 1491. Application No. 917.

ROSEVILLE HOME TELEPHONE COMPANY.

Decided May 7, 1914.

Application of Roseville Home Telephone Company to sell its telephone system located in the city of Roseville, Placer County, to the Roseville Telephone Company in exchange for \$11,000.00 par value of its capital stock.

Application granted.

Decision No. 1503. Application No. 1101.

SIERRA MADRE WATER COMPANY.

Decided May 14, 1914.

Application of the Sierra Madre Water Company to sell its water system to the city of Sierra Madre, Los Angeles County, for the sum of \$108,952.01.

Application granted.

Decision No. 1504. Application No. 1058.

DOWNEY LIGHT, WATER AND POWER COMPANY.

Decided May 14, 1914.

Application of the Downey Light, Water and Power Company to sell its electrical system in the town of Downey, Los Angeles County, to the Southern California Edison Company for \$50,938.30.

Application granted with the condition that the Southern California Edison Company shall place in effect a schedule of rates similar to those in effect over the balance of its system.

Decision No. 1515. Application No. 936.

CITY OF GLENDALE.

Decided May 18, 1914.

Application of the city of Glendale, Los Angeles County, for the Railroad Commission to fix valuation on certain water systems in said city.

After a thorough investigation the Commission determined upon the following: (1) That the fair compensation to be paid by applicant for the system of the Glendale Consolidated Water Company, including certain water stock owned by said company, is the sum of \$69,782.66; (2) For the system and water stock owned by the Verdugo Springs Water Company, the sum of \$50,292.00; (3) For the system and water stock owned by the Miradero Water Company, the sum of \$24,919.00; (4) For the system of the Verdugo Pipe and Reservoir Company, the sum of \$14,241.00.

Decision No. 1557. Application No. 1083.

ROSE L. BURCHAM.

Decided June 2, 1914.

Application of Rose L. Burcham to sell a certain telephone system serving the towns of Randsburg and Mojave, in Kern County, and Atolia, in San Bernardino County, to the Interstate Telegraph Company for the sum of \$3,000.00.

Application granted with condition that the telegraph company continue to provide service equal to that previously afforded.

Decision No. 1568. Application No. 1162.

GLENDALE AND MONTROSE RAILWAY.

Decided June 9, 1914.

Application of the Glendale and Montrose Railway to convey a certain lot to the city of Glendale, Los Angeles County.

Application granted.

Decision No. 1573. Application No. 1128.

NORTHERN ELECTRIC RAILWAY COMPANY.

Decided June 9, 1914.

Application of Northern Electric Railway Company to sell a certain parcel of land in the city of Woodland, Yolo County, to R. B. Crauston.

Application granted.

Decision No. 1609. Application No. 1130.

JAMES A. MURRAY AND ED FLETCHER.

Decided June 24, 1914.

Application of James A. Murray and Ed Fletcher to sell a certain water system in San Diego County to the Cuyamaca Water Company in exchange for \$600,000.00 of stock and \$900,000.00 bonds of the latter company.

Application granted on different security basis on condition that the property be transferred and taken by said corporation subject to all existing valid burdens and obligations.



Decision No. 1613. Application No. 1174.

SOUTHERN CALIFORNIA EDISON COMPANY.

Decided June 27, 1914.

Application of the Southern California Edison Company to sell its electric distributing system in San Fernando, Los Angeles County, to the Pacific Light and Power Corporation for \$9,448.00.

Application granted.

Decision No. 1627. Application No. 1187.

TITLE GUARANTEE AND TRUST COMPANY, AS TRUSTEE FOR THE BONDHOLDERS OF GLENDALE CONSOLIDATED WATER COMPANY, AND RALPH ROGERS.

Decided June 29, 1914.

Application of the Title Guarantee and Trust Company, as trustee, and Ralph Rogers to sell to the city of Los Angeles, for the sum of \$19,375.00, certain water distributing systems serving territory within the city of Los Angeles and adjacent thereto.

Application granted with the condition that the city council of Los Angeles shall continue serving present consumers located outside the city limits.

## APPLICATIONS FOR CERTIFICATES OF PUBLIC CONVENIENCE AND NECESSITY.

The Commission's jurisdiction over certificates of public convenience and necessity is defined by section 50 of the Public Utilities Act, which reads as follows:

SEC. 50. (a) No street railroad corporation, gas corporation, electrical corporation, telephone corporation or water corporation shall henceforth begin the construction of a street railroad, or of a line, plant or system, or of any extension of such street railroad, or line, plant or system, without having first obtained from the commission a certificate that the present or future public convenience and necessity require or will require such construction; *provided*, that this section shall not be construed to require any such corporation to secure such certificate for an extension within any city and county or city or town within which it shall have theretofore lawfully commenced operations, or for an extension into territory either within or without a city and county or city or town, contiguous to its street railroad or line, plant or system, and not theretofore served by a public utility of like character, or for an extension within or to territory already served by it, necessary in the ordinary course of its business; *and provided, further*, that if any public utility, in constructing or extending its line, plant or system, shall interfere or be about to interfere with the operation of the line, plant or system of any other public utility, already constructed, the commission, on complaint of the public utility claiming to be injuriously affected, may after hearing, make such order and prescribe such terms and conditions for the location of the lines, plants or systems affected as to it may seem just and reasonable.

(b) No public utility of a class specified in subsection (a) hereof shall henceforth exercise any right or privilege under any franchise or permit hereafter granted, or under any franchise or permit heretofore granted but not heretofore actually exercised, or the exercise of which has been suspended for more than one year, without first having obtained from the commission a certificate that public convenience and necessity require the exercise of such right or privilege; *provided*, that when the commission shall find, after hearing, that a public utility has heretofore begun actual construction work and is prosecuting such work, in good faith, and uninterruptedly and with reasonable diligence in proportion to the magnitude of the undertaking, under any franchise or permit heretofore granted but not heretofore actually exercised, such public utility may proceed, under such rules and regulations as the commission may prescribe, to the completion of such work, and may, after such completion, exercise such right or privilege; *and provided, further*, that this section shall not be construed to validate any right or privilege now invalid or hereafter becoming invalid under any law of this state.

(c) Before any certificate may issue, under this section, a certified copy of its articles of incorporation or charter, if the applicant be a corporation, shall be filed in the office of the commission. Every applicant for a certificate shall file in the office of the commission such evidence as shall be required by the commission to show that such applicant has received the required consent, franchise or permit of the proper county, city and county, municipal or other public authority. The commission shall have power, after hearing, to issue said certificate, as prayed for, or to refuse to issue the same, or to issue it for the construction of a portion only of the contemplated street railroad, line, plant or system, or extension thereof, or for the partial exercise only of said right or privilege, and may attach to the exercise of the rights granted by said certificate such terms and conditions as in its judgment the public convenience and necessity may require. If a public utility desires to exercise a right or privilege under a franchise or permit which it contemplates securing, but which has not as yet been granted to it, such public utility may apply to the commission for an order preliminary to the issue of the certificate. The commission may thereupon make an order declaring that it will thereafter, upon application, under such rules and regulations as it may prescribe, issue the desired certificate, upon such terms and conditions as it may designate, after the public utility has obtained the contemplated franchise or permit. Upon presentation to the commission of evidence satisfactory to it that such franchise or permit has been secured by such public utility, the commission shall thereupon issue such certificate.

The Commission in passing on these applications has adhered to the principle enunciated in some of the earlier decisions, that as long as public utilities serve the public faithfully and well in their respective territories and give complete and adequate service at reasonable rates, they will be protected in that territory. This, however, is not to be interpreted as indicating that the Commission would protect from competition a utility which could not give rates as low and service as complete and adequate as a second utility which desired to enter that field.

The following is a brief synopsis of the Commission's decisions on applications involving the granting of certificates of public convenience and necessity.

Application No. 563. Decision No. 798.

PACIFIC GAS AND ELECTRIC COMPANY.

Application of the Pacific Gas and Electric Company for certificate of public convenience and necessity to construct three additional power plants on an extension of Bear River Canal and a transmission line from Power Development No. 5 on Bear River Canal to Nicolaus.

Application granted.

Application No. 604. Decision No. 850.

SOUTHERN CALIFORNIA EDISON COMPANY.

Application of the Southern California Edison Company for a certificate of public convenience and necessity authorizing it to construct a gas distributing system in the city of Chino, San Bernardino County, and to operate under a franchise granted by said city.

Application granted with condition that Southern California Edison Company, or its successors, shall distribute gas at a price to consumers of not to exceed \$1.25 per thousand feet.

Application No. 605. Decision No. 851.

SOUTHERN CALIFORNIA EDISON COMPANY.

Application of the Southern California Edison Company for a certificate of public convenience and necessity authorizing it to construct a gas distributing system in the county of San Bernardino under a franchise granted by said county.

Application granted with condition similar to that in Decision No. 851.

Application No. 638. Decision No. 888.

DELANO-LINNS VALLEY TELEPHONE COMPANY.

Application of the Delano-Linns Valley Telephone Company and the Pacific Telephone and Telegraph Company, the one to enter and the other to withdraw from certain prescribed territory situated in Kern County.

Application granted subject to certain conditions.

Application No. 557. Decision No. 922.

OJAI POWER COMPANY.

Application of Ojai Power Company for a certificate of public convenience and necessity authorizing it to exercise franchise rights granted by the board of supervisors of Ventura County to construct and maintain a water system in and about Nordhoff.

Application granted.

Application No. 712. Decision No. 926.

J. R. ANDERSON.

Application of J. R. Anderson for a certificate of public convenience and necessity to exercise franchise rights granted by the city of Oakdale to construct, maintain and operate a gas distributing system for the purpose of supplying gas for light, heat and power in the city of Oakdale, Stanislaus County.

Application granted.

Application No. 681. Decision No. 951.

PACIFIC TELEPHONE AND TELEGRAPH COMPANY.

Application of Pacific Telephone and Telegraph Company and the Farmington Telephone Association, the former to withdraw and the latter to enter certain territory adjacent to the town of Farmington, San Joaquin County.

Application granted subject to certain conditions.

Application No. 757. Decision No. 961.

A. A. WEBER.

Application of A. A. Weber for a preliminary certificate of public convenience and necessity to construct a gas generating and distributing plant in the city of Fowler, Fresno County, under franchises from the city of Fowler applied for but not yet granted.

Application granted.

Application No. 663. Decision No. 972.

ALTA DISTRICT GAS COMPANY.

Application of Alta District Gas Company for certificate of public convenience and necessity authorizing it to operate a gas plant in the town of Dinuba, Tulare County, under a franchise previously granted to A. A. Weber; to construct and operate a gas plant in Reedley, Fresno County, under a franchise granted to A. A. Weber, and to construct and operate a gas distributing main between the aforesaid cities when the necessary franchises have been secured from the counties of Tulare and Fresno.

Application granted.

Application No. 779. Decision No. 989.

ORO ELECTRIC CORPORATION.

Application of Oro Electric Corporation for permission to furnish electric current to the California Rice Milling Company in the city of



Biggs, Butte County. The Commission on July 3, 1912, granted the Oro Electric Corporation a certificate of public convenience and necessity to serve all of Butte County except the towns of Chico, Biggs, and Gridley. In the present application it appeared that the board of trustees of the city of Biggs had given its consent to the service of the California Rice Milling Company by the applicant, for the reason that the amount of current required by said milling company was far in excess of the ability of the city to supply through its municipal plant. It also appeared that the Pacific Gas and Electric Company had no objections, and the application was therefore granted.

Application No. 768. Decision No. 1020.

PACIFIC LIGHT AND POWER CORPORATION.

Application of the Pacific Light and Power Corporation for certificate that public convenience and necessity require the construction and operation of an electrical transmission line in the county of Orange, and electrical distributing system in the city of Newport Beach. Applicant granted a certificate of public convenience and necessity authorizing it to construct its transmission line from Dominguez to the city of Newport Beach, and to construct and operate an electrical distributing system in Newport Beach.

It was made a condition of the order that electricity should be furnished at a price not to exceed 8 cents per kilowatt hour.

At the hearing of the case the Newport Beach Electric Light and Power Company protested against the granting of a certificate to the Pacific Light and Power Corporation. The Commission in its decision said:

"It is evident that until the Pacific Light and Power Corporation made application to invade this territory, the Newport Beach Electric Light and Power Company had made little, if any, effort to improve its service and had not in any instance reduced its rates. Therefore, under the rule heretofore laid down by the Commission, that where upon the application of a corporation to invade territory served by another corporation, the corporation occupying the field was found to be giving poor service at unduly high rates, the application would be granted, and the corporation seeking the privileges would be allowed to come in and compete, this application should be granted."

Application No. 758. Decision No. 1023.

PACIFIC ELECTRIC RAILWAY.

Application of the Pacific Electric Railway Company for authority to maintain and operate two wharves in the waters of the Pacific Ocean at Redondo Beach, Los Angeles County.

Application granted.

Application No. 798. Decision No. 1059.

A. R. PEDDER.

Application of A. R. Pedder for a certificate of public convenience and necessity to construct a water system in certain territory in the town of Davis, Yolo County.

Application granted subject to condition that A. R. Pedder shall secure from the board of supervisors of Yolo County the necessary franchises and permits.

Application No. 770. Decision No. 1075.

SAN RAFAEL AND SAN ANSELMO VALLEY RAILWAY.

Application of San Rafael and San Anselmo Valley Railway Company for a certificate of public convenience and necessity to construct and operate a line of railway between San Rafael and San Anselmo under certain franchises transferred to applicant by S. J. Norton.

Application granted with conditions.

Application No. 807. Decision No. 1113.

WINTERS GAS COMPANY.

Application of Winters Gas Company for a certificate of public convenience and necessity to construct and operate a gas plant in the town of Winters, Yolo County, under a franchise previously granted to C. A. Erwin.

Application granted.

Application No. 470. Decision No. 1120.

PITT RIVER POWER COMPANY.

Application of Pitt River Power Company for order preliminary to issue of a certificate of public convenience and necessity to supply electricity in the northeastern portion of Shasta County, Modoc County, and Lassen County.

Application granted with condition that the Pitt River Power Company secure the necessary franchises from Shasta, Modoc, and Lassen counties.

Application No. 792. Decision No. 1132.

McFARLAND TELEPHONE COMPANY.

Application of McFarland Telephone Company for a certificate of public convenience and necessity authorizing it to construct and operate a telephone exchange in the town of McFarland and adjacent territory in Kern County.

Application granted with condition that the company shall satisfy the Commission that it is financially able to furnish adequate service.

Application No. 848. Decision No. 1141.

GREAT WESTERN POWER COMPANY.

Application of the Great Western Power Company for a certificate of public convenience and necessity to exercise franchise rights for the construction, maintenance and operation of electrical works in the city of Oakland, Alameda County.

Application granted.

Application No. 893. Decision No. 1166.

LOS ANGELES GAS AND ELECTRIC CORPORATION.

Application of Los Angeles Gas and Electric Corporation for a certificate of public convenience and necessity to construct and operate a gas distributing system in the city of South Pasadena, under rights and privileges granted by an ordinance of the said city.

Application granted.

Application No. 882. Decision No. 1167.

PACIFIC TELEPHONE AND TELEGRAPH COMPANY.

Application of The Pacific Telephone and Telegraph Company for a certificate of public convenience and necessity to construct and operate a telephone system in the city of Eagle Rock, Los Angeles County, under the rights and privileges conferred upon it by an ordinance of said city.

Application granted.

Application No. 890. Decision No. 1180.

CALIFORNIA POWER AND MANUFACTURING COMPANY.

Application of the California Power and Manufacturing Company for a certificate of public convenience and necessity to develop and serve electrical energy within certain prescribed territory in Shasta County.

The Commission's decision is in part as follows:

"At the hearing the Pitt River Power Company protested against the granting of the application on the ground that heretofore the protestant had applied to this Commission to exercise a franchise thereafter to be granted by the board of supervisors of Shasta County and to distribute power within the same territory now sought to be served by the applicant. This application was filed by the protestant on March 28, 1913, and thereafter a hearing was held at which it developed that the then applicant in this case (Application No. 470) had not secured its franchises from the supervisors of Shasta, Modoc, and Lassen counties. Subsequent to the first hearing in Application No. 470 the board of supervisors of Shasta County offered a franchise for sale and the representative of the applicant herein put in a higher bid for the franchise and the same was sold, and the Pitt River Company was under necessity of again applying for a franchise to the board of supervisors of Shasta County. This franchise has now been granted and both the applicant and the protestant have franchises within the county of Shasta, and a right, so far as the county authorities are concerned, to serve this territory, and the protestant has been given an order in Application No. 470 to the effect that if it should secure franchises from the supervisors of Shasta County and thereafter apply to this Commission, that this Commission would, providing it approved of said franchises, issue to this protestant a certificate of public convenience and necessity and permission to exercise said franchise rights. The applicant, on the other hand, has a franchise and now asks approval of this Commission thereto and for an order declaring that public convenience and necessity require the exercise of said franchise. \* \* \*

I believe under all the circumstances of this case that the following disposition should be made of it: I believe when the Pitt River Company shall present its application finally to have its franchise approved, that a certificate should be issued to it for the entire territory which is not at that time served by any other utility, and that the applicant herein should be permitted at the present time to enlarge its facilities at Fall River Mills to the limit of its capacity and to furnish all who can be furnished from such supply. The net result of such a determination will be that as to all the territory which the applicant can not serve from its Fall River plant the Pitt River Company will have the exclusive right to serve; while on the other hand, in all the remaining territory, except that which is now served by the Fall River plant, the two companies will have the right to compete in all that territory.

I recommend this disposition of the case because of the fact that I am afraid that in any other determination reached there will be small likelihood of power being developed for these people within this vicinity within the near future. I think, however, that a reasonable limit of time should be placed within which each of these companies should begin actual construction work, and if either one of them is dilatory in this regard the certificate as to such should be revoked in favor of the agency that is in good faith and expeditiously attempting to serve these communities."



Application No. 470. Decision No. 1192.

PITT RIVER POWER COMPANY.

Application of Pitt River Power Company for a certificate of public convenience and necessity to supply electricity in the northeast portion of Shasta County.

Application granted subject to conditions laid down in Decision No. 1180.

Application No. 905. Decision No. 1200.

S. WALDO COLEMAN.

Application of S. Waldo Coleman for a certificate that the present and future public convenience and necessity require and will require the construction of a certain contemplated gas system in a portion of the county of Contra Costa, and for a certificate that public convenience and necessity require the exercise of a portion of the rights conferred upon said applicant by an ordinance of the county of Contra Costa.

Applicant granted a certificate of public convenience and necessity to operate a gas manufacturing and distributing system in the general territory commencing with Martinez, on the west, thence southeasterly to Pacheco and Concord, thence northeasterly and easterly to Pittsburg and Antioch, including the territory adjacent to said towns of Martinez, Pacheco, Concord, Pittsburg, and Antioch.

Application No. 827. Decision No. 1216.

SOUTHERN CALIFORNIA GAS COMPANY.

Application of Southern California Gas Company for a certificate of public convenience and necessity to construct a gas distributing system in the town of Glendale, Los Angeles County, under certain franchise rights granted by an ordinance of said city.

Application granted.

Application No. 885. Decision No. 1217.

FRESNO TRACTION COMPANY.

Application of Fresno Traction Company for a certificate that the present and future public convenience requires the extension of the lines of said company from a connection with the present lines of the system now in operation, commencing at or near the center line of Wishon avenue, on the southerly line of McKinley avenue, ending at a point in the southeast quarter ( $\frac{1}{4}$ ) of section twenty-five (25), township twelve (12) south, range twenty (20) east, and having a total length approximately of nine and one half ( $9\frac{1}{2}$ ) miles, under rights and privileges granted to the applicant by the county of Fresno.

Application granted.

Application No. 677. Decision No. 1223.

E. M. WILSON, NETTIE B. HARRIS, AND LAWRENCE A. WILSON.

Application of E. M. Wilson, Nettie B. Harris, and Lawrence A. Wilson for a certificate of public convenience and necessity to construct an electric line, plant and system in certain territory in Modoc County,



under rights and privileges granted by the board of supervisors of Modoc County.

Application granted.

Application No. 948. Decision No. 1272.

PACIFIC COAST RAILWAY COMPANY.

Application of Pacific Coast Railway Company for approval of franchises granted by the board of supervisors of the county of San Luis Obispo to said railway company, to construct, operate and maintain a wharf in the bay of San Luis Obispo.

Application granted.

Application No. 903. Decision No. 1219.

WILMINGTON WATER COMPANY.

Application of the Wilmington Water Company for an order preliminary to the issue of a certificate of public convenience and necessity authorizing the construction of a water distributing system in certain designated land in Los Angeles County.

Application granted.

Application No. 956. Decision No. 1227.

COAST COUNTIES GAS AND ELECTRIC COMPANY.

Application of the Coast Counties Gas and Electric Company for a certificate of public convenience and necessity to change the route of its power line on certain streets in the city of Gilroy, Santa Clara County, under an ordinance of said city.

Application granted.

Application No. 889. Decision No. 1276.

CHARLES A. LORAIN.

Application of Charles A. Lorain for a certificate of public convenience and necessity to construct a rural telephone line along certain roads in El Dorado County under a franchise granted by the board of supervisors of said county.

Application granted.

Application No. 971. Decision No. 1346.

SANTA BARBARA AND SUBURBAN RAILWAY COMPANY.

Application of the Santa Barbara and Suburban Railway Company for a certificate of public convenience and necessity to exercise certain rights under a franchise heretofore granted to it by the city of Santa Barbara, authorizing the extension of said railway in what is known as the Old Mission, in the city of Santa Barbara, to the State Normal School in said city.

Application granted.

Application No. 944. Decision No. 1347.

LOS ANGELES GAS AND ELECTRIC CORPORATION.

Application of the Los Angeles Gas and Electric Corporation for a certificate of public convenience and necessity to undertake certain construction, and to operate a system of gas pipes and gas mains in the county of Los Angeles, and to exercise certain rights and privileges granted to it by an ordinance of the county of Los Angeles.

Application granted with the condition that no portion of the language of said ordinance shall be construed as limiting in any way the lawful power of the Railroad Commission of the State of California at any time to make and enforce, as fully and effectually as though said condition had not been inserted in said franchise, any order concerning or affecting the making by said applicant of extensions or of service connections, or the payment of the cost of making any of the same, or concerning or affecting the persons for whose benefit the extensions or connections shall be made.

Application No. 922. Decision No. 1348.

SOUTHERN CALIFORNIA GAS COMPANY.

Application of Southern California Gas Company for a certificate of public convenience and necessity to lay a system of pipes for the distribution of gas over and along certain streets and highways in Los Angeles County under a franchise heretofore granted to it by the board of supervisors of said county.

The Midway Gas Company, a utility of like character, had a main on some of the roads involved in this application, but it did not distribute gas locally, and therefore did not oppose the granting of a certificate of public convenience and necessity to the Southern California Gas Company.

Application granted with condition similar to that in Decision No. 1348.

Application No. 923. Decision No. 1349.

SOUTHERN CALIFORNIA GAS COMPANY.

Application of Southern California Gas Company for a certificate of public convenience and necessity to construct a gas distributing system along certain streets and highways in Los Angeles County under a franchise heretofore granted to it by the board of supervisors of the county of Los Angeles.

Application granted with conditions similar to those in Decision No. 1348.

Application No. 906. Decision No. 1351.

SOUTHERN CALIFORNIA GAS COMPANY.

Application of Southern California Gas Company for a certificate of public convenience and necessity to construct a pipe line system for the purposes of carrying oil, natural or artificial gas, along certain roads and highways in the county of Orange, under franchise granted to it by the board of supervisors of said county.

Application granted.

Application No. 921. Decision No. 1352.

SOUTHERN CALIFORNIA GAS COMPANY.

Application of Southern California Gas Company for a certificate of public convenience and necessity to construct a gas distributing system along certain public highways in the county of Los Angeles, under a franchise heretofore granted to it by the board of supervisors of said county.

Application granted with condition that the applicant's franchise from the county of Los Angeles shall not be construed as limiting the powers of the Commission as to the installation of service connections.

Application No. 1031. Decision No. 1353.

GREAT WESTERN POWER COMPANY.

Application of the Great Western Power Company for a certificate of public convenience and necessity to construct an electrical transmission line in the town of Antioch, Contra Costa County, under certain rights and privileges granted to applicant by an ordinance of the town of Antioch, and later modified by a certain agreement made and entered into between applicant and the town of Antioch.

Application granted, it appearing that the authority herein given does not entitle it to distribute electric energy, but merely to provide a transmission line through said town, and that the Pacific Gas and Electric Company, which company is now distributing electrical energy within the town of Antioch, has no objection to the construction of this line.

Application No. 969. Decision No. 1362.

LOS ANGELES GAS AND ELECTRIC CORPORATION.

Application of the Los Angeles Gas and Electric Corporation for a certificate of public convenience and necessity to construct a gas distributing system in the city of Huntington Park, Los Angeles County, under certain rights and privileges granted to it by an ordinance of said city.

Application granted.

Application No. 1017. Decision No. 1365.

OAKDALE GAS COMPANY.

Application of Oakdale Gas Company for an order preliminary to the issue of a certificate of public convenience and necessity permitting it to construct and operate a gas distributing system in the town of Riverbank, Stanislaus County, and to construct a transmission main from its generator in Oakdale to Riverbank, and to sell gas along said transmission line.

Application granted subject to the condition that the gas company shall secure from the supervisors of Stanislaus County a franchise satisfactory to the Commission.

Application No. 1011. Decision No. 1368.

WILLIAM G. HENSHAW.

Application of William G. Henshaw for a certificate of public convenience and necessity permitting him to construct and operate a line of railway in accordance with the rights and privileges granted by the city of Rialto to the Crescent City Railway Company and thereafter transferred by that company to said William G. Henshaw.

Application granted.

Application No. 947. Decision No. 1377.

MARIN COUNTY ELECTRIC RAILWAYS.

Application of Marin County Electric Railways for a certificate of public convenience and necessity to construct and operate a street railway system in Mill Valley.

Application granted with condition that franchise secured from the town of Mill Valley be amended to conform with certain requirements of the Commission.

Application No. 1020. Decision No. 1393.

NAPA VALLEY ELECTRIC COMPANY.

Application of Napa Valley Electric Company for a certificate of public convenience and necessity authorizing the construction and the extension of its electric system into the town of Calistoga and the vicinity thereof in Napa County.

Calistoga Electric Company appeared at the hearing and protested against the granting of the application. Upon careful consideration of the evidence the Commission found no reason for the duplication by the Napa Valley Electric Company of the present lighting system maintained by the Calistoga Electric Company.

The portion of the application relative to the surrounding territory was granted with the condition that the Napa Valley Electric Company shall at its own expense construct the necessary extensions, and shall at its regular rates serve persons within said territory desiring electric energy from said company.

Application No. 1025. Decision No. 1405.

COALINGA PIPE LINE COMPANY.

Application of the Coalinga Pipe Line Company for a certificate of public convenience and necessity authorizing the sale of natural gas in the city of Coalinga, Fresno County.

Application granted.

Application No. 903. Decision No. 1417.

WILMINGTON WATER COMPANY.

Application of the Wilmington Water Company for a certificate of public convenience and necessity to construct and operate a water distributing system in certain territory in Los Angeles County. See Decision No. 1219.

Application granted.



Application No. 1079. Decision No. 1420.

E. M. WILSON, NETTIE B. HARRIS, AND LAWRENCE A. WILSON.

Application of E. M. Wilson, Nettie B. Harris, and Lawrence A. Wilson for a certificate of public convenience and necessity to erect and construct, maintain and operate, an electric transmission system over the highways of Lassen County under a franchise granted to them by the board of supervisors of said county.

Application granted for those portions of Lassen County which are not now served by the Pitt River Power Company.

Application No. 1048. Decision No. 1426.

SANTA MONICA WATER COMPANY.

Application of Santa Monica Water Company to maintain a water system in a certain portion of the city of Santa Monica, Los Angeles County, under a franchise granted by said city.

Application granted.

Application No. 1049. Decision No. 1427.

SAWTELLE WATER COMPANY.

Application of the Sawtelle Water Company for a certificate of public convenience and necessity to operate a water distributing system under a franchise granted by the city of Sawtelle, Los Angeles County.

Application granted.

Application No. 1071. Decision No. 1436.

PACIFIC TELEPHONE AND TELEGRAPH COMPANY.

Application of the Pacific Telephone and Telegraph Company for a certificate of public convenience and necessity to operate a telephone system in the city of Oakland, Alameda County, under a franchise previously granted to the Bay Cities Home Telephone Company, and by it transferred to The Pacific Telephone and Telegraph Company.

Application granted with condition that city of Oakland shall pass an ordinance approving transfer of said franchise.

Application No. 1029. Decision No. 1440.

PACIFIC LIGHT AND POWER CORPORATION.

Application of Pacific Light and Power Corporation for a certificate of public convenience and necessity to operate an electric distributing system in the city of Huntington Beach, Orange County, under a franchise granted by said city.

Application granted, with condition that the Pacific Light and Power Corporation agree to file rates for electric light and power as low as the rates being charged by it in Newport Beach and elsewhere.

Application No. 1042. Decision No. 1445.

PACIFIC LIGHT AND POWER CORPORATION.

Application of the Pacific Light and Power Corporation for an order preliminary to the issue of a certificate of public convenience and

necessity authorizing it to operate an electric distributing system in Ventura County under a franchise to be secured from said county.

Application granted.

Application No. 1020. Decision No. 1448.

NAPA VALLEY ELECTRIC COMPANY.

Application of the Napa Valley Electric Company for a rehearing of its application for a certificate of public convenience and necessity to construct an extension of its electrical distributing system into the town of Calistoga, Napa County.

Application denied.

Application No. 1113. Decision No. 1505.

LONG BEACH CONSOLIDATED GAS COMPANY.

Application of the Long Beach Consolidated Gas Company for a certificate of public convenience and necessity to construct and operate a gas distributing system to and within the town of Bay City, Orange County, under a franchise of said county.

Application granted.

Application No. 1074. Decision No. 1539.

COACHELLA VALLEY ICE AND ELECTRIC COMPANY.

Application of the Coachella Valley Ice and Electric Company for a certificate of public convenience and necessity to construct an electrical transmission line from Banning to El Centro under a franchise granted by Imperial County.

Application granted.

Application No. 1037. Decision No. 1547.

S. WALDO COLEMAN.

Application of S. Waldo Coleman for a certificate of public convenience and necessity to construct and operate a gas distributing and manufacturing system in certain districts in Contra Costa County under a franchise granted by the cities of Antioch, Martinez, Pittsburg, and Concord. See in this connection Decision No. 1200, Application No. 905.

Application granted.

Application No. 1446. Decision No. 1551.

CALISTOGA ELECTRIC COMPANY.

Application of Calistoga Electric Company for a certificate of public convenience and necessity authorizing it to erect and maintain an electrical distribution system in that portion of Napa County north of an east and west line extending through Bale Station under a franchise granted by said county.

Application granted.

Application No. 1161. Decision No. 1572.

SOUTHERN CALIFORNIA GAS COMPANY.

Application of Southern California Gas Company for a certificate of public convenience and necessity to construct and operate a gas distrib-

uting system under certain rights and franchises granted by the county of Los Angeles, the city of Vernon, and the city of Compton.

Application granted.

Application No. 1158. Decision No. 1574.

SOUTHERN CALIFORNIA GAS COMPANY.

Application of Southern California Gas Company for a certificate of public convenience and necessity to construct and operate a gas distributing system in the city of Burbank, under a franchise granted by said city.

The applicant stipulated that no portion of said franchise was to be construed by or on behalf of the applicant as limiting in any way the lawful power of the Railroad Commission to make and enforce any order concerning or affecting the making of extensions or service connections.

Application granted.

Application No. 1159. Decision No. 1575.

SOUTHERN CALIFORNIA GAS COMPANY.

Application of the Southern California Gas Company for a certificate of public convenience and necessity to construct and operate a gas distributing system in the city of Tropic, Los Angeles County, under a franchise of said city.

Applicant made a stipulation similar to that agreed to in Decision No. 1574.

Application granted.

Decision No. 1577. Application No. 1160.

SOUTHERN CALIFORNIA GAS COMPANY.

Application of Southern California Gas Company for a certificate of public convenience and necessity to construct and operate a gas distributing system in the city of San Fernando, Los Angeles County, under a franchise of said city.

Applicant made a stipulation similar to that agreed to in Decisions Nos. 1574 and 1575.

Application granted.

## FORMAL COMPLAINTS.

The following is a list of the formal complaints filed with the Commission during the fiscal year July 1, 1913, to June 30, 1914, also proceedings or investigations instituted upon the Commission's own initiative. Though the majority of these actions bring into question rates or service, all branches of public utility practice are reviewed, including investigations into construction and equipment of roads following serious accidents.

Case No.	Name of Litigants.
422.	W. H. Frazine <i>vs.</i> Atchison, Topeka and Santa Fe Railway Company.
423.	Baldwin Park Chamber of Commerce <i>vs.</i> Baldwin Park Water Company.
424.	Merchants Traffic Association et al. <i>vs.</i> Atchison, Topeka and Santa Fe Railway Company and Southern Pacific Company.
425.	A. M. Buchanan <i>vs.</i> Southern Pacific Company.
426.	Gridley Water Users Association et al. <i>vs.</i> Sutter-Butte Canal Company et al.
427.	Charles P. Grogan <i>vs.</i> Crocker-Huffman Land and Water Company.
428.	Board of Trustees, city of Elsinore, <i>vs.</i> Southwestern Home Telephone Company.
429.	Mt. Shasta Milling Company <i>vs.</i> Southern Pacific Company.
430.	Mt. Shasta Milling Company <i>vs.</i> Southern Pacific Company and McCloud River Railroad Company.
431.	Commission's investigation—Methods and equipment Pacific Electric Railway Company.
432.	S. Alexander <i>vs.</i> Southern Pacific Company and McCloud River Railroad Company.
433.	Tujunga Valley Improvement Association <i>vs.</i> Tujunga Water and Power Company.
434.	Noboru Omura <i>vs.</i> Tujunga Water and Power Company.
435.	City of Eagle Rock <i>vs.</i> Eagle Rock Water Company.
436.	L. Scatena & Company et al. <i>vs.</i> Atchison, Topeka and Santa Fe Railway Company.
437.	O. E. Slinack <i>vs.</i> Inglewood Water Company.
438.	Southwestern Home Telephone Company <i>vs.</i> Southern Sierras Power Company.
439.	W. T. Lucot <i>vs.</i> Southern Pacific Company.
440.	W. T. Lucot <i>vs.</i> Amador Central Railroad Company.
441.	Tujunga Terrace Improvement Association <i>vs.</i> Tujunga Water and Power Company.
442.	Edmond Thomas Dooley <i>vs.</i> Peoples Water Company.
443.	John W. Reese <i>vs.</i> Southwestern Home Telephone Company, Pacific Telephone and Telegraph Company and United States Long Distance Telephone and Telegraph Company.
444.	Huntington Land and Improvement Company <i>vs.</i> Southern Pacific Company.
445.	Town of Hayward <i>vs.</i> San Lorenzo Water Company.
446.	H. Brockmeier <i>vs.</i> Pacific Building Company.
447.	J. H. Bailes et al. <i>vs.</i> Del Mar Water, Light and Power Company.
448.	Chamber of Commerce of Redlands <i>vs.</i> Southwestern Home Telephone Company, Union Home Telephone and Telegraph Company, and The Pacific Telephone and Telegraph Company.
449.	Klein-Simpson Fruit Co. <i>vs.</i> Atchison, Topeka and Santa Fe Railway Company.
450.	Commission's investigation—To establish the status of various oil companies under the pipe line act.
451.	Charles Leroy Butler <i>vs.</i> Pacific Gas and Electric Company.
452.	A. Richard Thompson et al. <i>vs.</i> San Diego Electric Railway Company and San Diego and Southeastern Railway Company.
453.	J. P. Ramos <i>vs.</i> San Francisco-Oakland Terminal Railways.
454.	Belvedere Civic Association <i>vs.</i> Janss Company.
455.	B. B. Harlan et al. <i>vs.</i> Los Angeles and San Diego Beach Railway Company.
456.	E. F. Sawdey et al. <i>vs.</i> Yosemite Power Company.
457.	Robert W. Armstrong et al. <i>vs.</i> Pacific Electric Railway Company.
458.	City of Ontario <i>vs.</i> Ontario-Uplands Gas Company.



- | Case No. | Name of Litigants.  |
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| 459.     | Los Angeles Rate Association <i>vs.</i> Pacific Electric Railway et al.                                   |
| 460.     | Commission's investigation—Drinking cups on passenger trains.   |
| 461.     | San Mateo and Burlingame Merchants' Association <i>vs.</i> Southern Pacific Company.                      |
| 462.     | Commission's investigation—Rates, rules and practices of the Pullman Company.                             |
| 463.     | J. J. Chappell et al <i>vs.</i> Southern Pacific Company.   |
| 464.     | Commission's investigation—Wholesale rates for natural gas delivered in Los Angeles County.               |
| 465.     | M. Farrell et al. <i>vs.</i> The Pacific Telephone and Telegraph Company.                                 |
| 466.     | W. S. Junkin <i>vs.</i> Pacific Gas and Electric Company.   |
| 467.     | W. H. Daum <i>vs.</i> Southern Pacific Company et al.   |
| 468.     | City of Alameda <i>vs.</i> Southern Pacific Company.  |
| 469.     | A. C. Denman, Jr., et al. <i>vs.</i> West Coast Gas Company.  |
| 470.     | John I. Beck <i>vs.</i> Hermosa Beach Water Company.  |
| 471.     | E. Tracy Crane <i>vs.</i> San Francisco-Oakland Terminal Railways.  |
| 472.     | Frank Turnbull Company <i>vs.</i> Sweetwater Water Company.   |
| 473.     | Commission's investigation—Condition of bridge over American River, Northern Electric Railway Company.    |
| 474.     | Pacific Telephone Herald Company <i>vs.</i> The Pacific Telephone and Telegraph Company.                  |
| 475.     | Commission's investigation—Lumber rates of various carriers.  |
| 476.     | City of San Jose <i>vs.</i> San Jose Water Company.   |
| 477.     | City of San Jose <i>vs.</i> Pacific Gas and Electric Company.   |
| 478.     | City of San Jose <i>vs.</i> Pacific Gas and Electric Company.   |
| 479.     | Edgar L. Stewart <i>vs.</i> Great Western Power Company.  |
| 480.     | City of Huntington Beach <i>vs.</i> Huntington Beach Company.   |
| 481.     | City of Huntington Beach <i>vs.</i> West Coast Gas, Light and Fuel Company.                               |
| 482.     | E. E. Johnson et al. <i>vs.</i> Western Empire Suburban Farms Association.                                |
| 483.     | The Town of Ukiah <i>vs.</i> The Snow Mountain Water and Power Company.                                   |
| 484.     | Oakland, Antioch and Eastern Railway <i>vs.</i> Northern Electric Railway.                                |
| 485.     | San Francisco Chamber of Commerce <i>vs.</i> Southern Pacific Company and McCloud River Railroad Company. |
| 486.     | Commission's investigation—Through rates Glendale and Eagle Rock Railway Company.                         |
| 487.     | Francis S. Hale <i>vs.</i> Hermosa Beach Water Company.   |
| 488.     | John Monguier and C. H. M. Shibley <i>vs.</i> Van Nuys Water Company.                                     |
| 489.     | Gem City Packing Company <i>vs.</i> San Jose Water Company.   |
| 490.     | Simon W. Switzer <i>vs.</i> San Diego and Southeastern Railway Company.                                   |
| 491.     | Florence Locke <i>vs.</i> Bolinas Water and Power Company.  |
| 492.     | Commission's investigation—Service of Northwestern Pacific Railroad Company.                              |
| 493.     | Tidewater Southern Railway Company <i>vs.</i> Transcontinental Scrip Bureau.                              |
| 494.     | Angal Ferrasci et al. <i>vs.</i> Empire Water Company.  |
| 495.     | Salinas City <i>vs.</i> Coast Valleys Gas and Electric Company.   |
| 496.     | Charles F. Fleming <i>vs.</i> Peninsular Railway Company.   |
| 497.     | C. C. Woodworth et al. <i>vs.</i> Western States Gas and Electric Company.                                |
| 498.     | Commission's investigation—Service and equipment Madera Canal and Irrigation Company.                     |
| 499.     | City of Monterey <i>vs.</i> Coast Valleys Gas and Electric Company.                                       |
| 500.     | City of Monterey <i>vs.</i> The Monterey County Water Works.  |
| 501.     | F. E. Hornbuckle et al. <i>vs.</i> Crescent City Light, Water and Power Company.                          |
| 502.     | D. A. and H. K. Stewart <i>vs.</i> Great Western Power Company.   |
| 503.     | W. C. Duncan and Leon Lewin <i>vs.</i> Southern Pacific Company.  |
| 504.     | Pinney & Boyle Manufacturing Company <i>vs.</i> Atchison, Topeka and Santa Fe Railway.                    |
| 505.     | Lucy Boshier Long <i>vs.</i> Harry R. Atwood.   |
| 506.     | H. F. Seiler et al. <i>vs.</i> San Francisco-Oakland Terminal Railways.                                   |
| 507.     | Town of Sisson <i>vs.</i> Southern Pacific Company.   |
| 508.     | Calistoga Electric Company <i>vs.</i> Napa Valley Electric Company.                                       |
| 509.     | Lennox Improvement Association <i>vs.</i> Los Angeles Railway Corporation.                                |
| 510.     | Charles Michel Whitaker <i>vs.</i> Snowball-Sullivan Company.   |
| 511.     | Winifred F. Marr <i>vs.</i> Los Angeles and Arizona Land Company.   |
| 512.     | Swift & Wilcox <i>vs.</i> Southern Pacific Company.   |
| 513.     | J. W. Barnes et al. <i>vs.</i> Southern California Edison Company.  |

- | Case No. | Name of Litigants.  |
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| 514.     | Oakland, Antioch and Eastern Railway Company <i>vs.</i> Northern Electric Railway Company.  |
| 515.     | S. O. Fesler et al <i>vs.</i> The Pacific Telephone and Telegraph Company.  |
| 516.     | City of Taft <i>vs.</i> Westside Gas Company.   |
| 517.     | Foothill Improvement Club <i>vs.</i> Southern Pacific Company.  |
| 518.     | Mark W. Baker et al. <i>vs.</i> Southern Pacific Company.   |
| 519.     | Henry Warfield <i>vs.</i> Southern Pacific Company.   |
| 520.     | City of Crescent City <i>vs.</i> Crescent City Light, Water and Power Company et al.  |
| 521.     | John F. Escher <i>vs.</i> Harry R. Atwood.  |
| 522.     | Home Telephone and Telegraph Company of Santa Barbara <i>vs.</i> The Pacific Telephone and Telegraph Company.   |
| 523.     | City of Redlands <i>vs.</i> The Pacific Telephone and Telegraph Company, United States Long Distance Telephone and Telegraph Company and Southwestern Home Telephone Company. |
| 524.     | Klein-Simpson Fruit Company <i>vs.</i> Atchison, Topeka and Santa Fe Railway and Northwestern Pacific Railroad Company.   |
| 525.     | Ed. P. Reed <i>vs.</i> Pacific Electric Railway Company.  |
| 526.     | County of Sacramento <i>vs.</i> Northern Electric Railway Company.  |
| 527.     | Oakland, Antioch and Eastern Railway Company <i>vs.</i> Northern Electric Railway Company.  |
| 528.     | Elon Dunlap <i>vs.</i> Diamond Ridge Ditch Company et al.   |
| 529.     | State Commission in Lunacy <i>vs.</i> Atchison, Topeka and Santa Fe Railway Company.  |
| 530.     | A. J. Guglielmetti et al. <i>vs.</i> Chileno Valley Telephone Company.  |
| 531.     | Joseph J. McDermott <i>vs.</i> Great Western Power Company.   |
| 532.     | Benjamin W. Fenton <i>vs.</i> Wells Fargo and Company Express.  |
| 533.     | City of Monterey <i>vs.</i> Coast Valleys Gas and Electric Company.   |
| 534.     | Commission's investigation—Freight rates by boat between San Francisco and Sacramento and San Joaquin River points.   |
| 535.     | Saratoga Improvement Association <i>vs.</i> San Jose Water Company.   |
| 536.     | John Wall et al. <i>vs.</i> Nevada-California-Oregon Railway.   |
| 537.     | Commission's investigation—Annual report of Bay Point and Clayton Railroad Company.   |
| 538.     | Commission's investigation—Rates of Napa Valley Electric Company.   |
| 539.     | Riverside Portland Cement Company <i>vs.</i> San Pedro, Los Angeles and Salt Lake Railroad Company et al.   |
| 540.     | Vallejo Trades and Labor Council <i>vs.</i> Vallejo Electric Light Company and Board of Trustees, city of Vallejo.  |
| 541.     | George J. Birkel <i>vs.</i> Laurel Canyon Land Company.   |
| 542.     | City of Piedmont <i>vs.</i> San Francisco-Oakland Terminal Railways.  |
| 543.     | J. R. Gordon <i>vs.</i> Pacific Light and Power Corporation.  |
| 544.     | F. O. Sirard <i>vs.</i> Pacific Gas and Electric Company.   |
| 545.     | Ray A. Pratt et al. <i>vs.</i> Spring Valley Water Company.   |
| 546.     | Union Hollywood Water Company <i>vs.</i> Pacific Electric Railway Company.  |
| 547.     | Commission's investigation—Rates and service Encanto Mutual Water Company.  |
| 548.     | Mrs. Lilly Lay <i>vs.</i> Consolidated Securities Company.  |
| 549.     | Commission's investigation—Natural gas rates, Southern California Gas Company and Long Beach Consolidated Gas Company.  |
| 550.     | Commission's investigation—Rates Pacific Gas and Electric Company at San Jose.  |
| 551.     | Adolph Becker <i>vs.</i> W. H. Holabird, receiver of California Development Company.  |
| 552.     | F. W. Weeks, president board of trustees Holtville, et al. <i>vs.</i> California Development Company, W. H. Holabird, receiver.   |
| 553.     | J. H. Brockman <i>vs.</i> Inglewood Water Company.  |
| 554.     | Commission's investigation—Demurrage rules, common carriers.  |
| 555.     | E. T. Downs <i>vs.</i> The Calistoga Electric Company.  |
| 556.     | Commission's investigation—Rates of Bakersfield Gas and Electric Company.   |
| 557.     | Modesto Chamber of Commerce <i>vs.</i> Southern Pacific Company.  |
| 558.     | L. E. Cole et al. <i>vs.</i> South Feather Land and Water Company.  |
| 559.     | Montebello Chamber of Commerce <i>vs.</i> The Pacific Telephone and Telegraph Company and Home Telephone and Telegraph Company.   |
| 560.     | Commission's investigation—Rates of Nevada-California-Oregon Railway Company.   |

- | Case No. | Name of Litigants.   |
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| 561.     | Commission's investigation—Service of Tujunga Water and Power Company.   |
| 562.     | Commission's investigation—Wholesale rates of California Natural Gas Company at Taft.                          |
| 563.     | Commission's investigation—Local fares of Southern Pacific Company within the city of Oakland.                 |
| 564.     | R. L. Swanson <i>vs.</i> The Pacific Telephone and Telegraph Company.  |
| 565.     | Western States Gas and Electric Company <i>vs.</i> Sierra and San Francisco Power Company.                     |
| 566.     | Commission's investigation—Rates, rules and regulations of warehouses.   |
| 567.     | Sierra Madre Board of Trade <i>vs.</i> Pacific Electric Railway Company.                                       |
| 568.     | James M. Sharp <i>vs.</i> Sweetwater Water Company.  |
| 569.     | G. W. Faulkner <i>vs.</i> Ventura County Power Company.  |
| 570.     | R. E. Brakey <i>vs.</i> Ventura County Power Company.  |
| 571.     | J. J. Gill <i>vs.</i> San Francisco-Oakland Terminal Railways.   |
| 572.     | Ingram Hughes <i>vs.</i> The Union Water Company of California.  |
| 573.     | Louis J. Ivey <i>vs.</i> W. H. Holabird, receiver, California Development Company.                             |
| 574.     | San Mateo County Development Association <i>vs.</i> Southern Pacific Company.                                  |
| 575.     | City of Napa et al. <i>vs.</i> Theodore A. Bell and Napa City Water Company.                                   |
| 576.     | Golden State Portland Cement Co. <i>vs.</i> Atchison, Topeka and Santa Fe Railway Company.                     |
| 577.     | Reclamation District No. 551 <i>vs.</i> Great Western Power Company.   |
| 578.     | S. Raney et al <i>vs.</i> San Joaquin Light and Power Company.   |
| 579.     | J. D. Warren et al. <i>vs.</i> Murphy Water, Ice and Light Company.  |
| 580.     | The McCormick-Saeltzer Company et al. <i>vs.</i> Southern Pacific Company and McCloud River Railroad Company.  |
| 581.     | Associated Chambers of Commerce of Orange County <i>vs.</i> The Pacific Telephone and Telegraph Company et al. |
| 582.     | Yorba Linda Water Company <i>vs.</i> Pacific Electric Railway Company.   |
| 583.     | W. E. Barnard and Harry Butler <i>vs.</i> Sutter-Butte Canal Company.  |
| 584.     | Commission's investigation—Valuation of Tidewater Southern Railway Company.                                    |
| 585.     | Chas. W. Paine et al. <i>vs.</i> Southern California Gas Company.  |
| 586.     | F. E. Seaman et al. <i>vs.</i> Mount Whitney Power Company.  |
| 587.     | Commission's investigation—Service of Pacific Electric Railway Company at La Senda.                            |
| 588.     | County of Los Angeles <i>vs.</i> Pacific Electric Railway Company.   |
| 589.     | Geo. W. French et al. <i>vs.</i> Oakland, Antioch and Eastern Railway Company.                                 |
| 590.     | Commission's investigation—Rates and service of the Western States Gas and Electric Company, Stockton.         |
| 591.     | Steiger Terra Cotta and Pottery Works et al. <i>vs.</i> Southern Pacific Company.                              |
| 592.     | Pacific Coast Pottery and Terra Cotta Company <i>vs.</i> Southern Pacific Company.                             |
| 593.     | Palo Alto Chamber of Commerce <i>vs.</i> Peninsular Railway Company and Southern Pacific Company.              |
| 594.     | City of Los Angeles <i>vs.</i> Southern California Gas Company et al.  |
| 595.     | City of Palo Alto and Palo Alto Chamber of Commerce <i>vs.</i> Southern Pacific Company.                       |
| 596.     | Steiger Terra Cotta and Pottery Works <i>vs.</i> Southern Pacific Company.                                     |
| 597.     | W. J. Rogers and Central Pacific Land and Lumber Company <i>vs.</i> Sacramento Valley West Side Canal Company. |
| 598.     | Thomas L. Turner et al. <i>vs.</i> Sweetwater Water Company.   |
| 599.     | Pinney & Boyle Manufacturing Company <i>vs.</i> Atchison, Topeka and Santa Fe Railway Company et al.           |
| 600.     | Garnett A. Joslin <i>vs.</i> Southern Pacific Company.   |
| 601.     | W. S. Van Sciever <i>vs.</i> The Ocean Park Heights Land and Water Company and Anna Dell Segno.                |
| 602.     | Visalia Cooperative Creamery <i>vs.</i> Wells Fargo and Company Express.                                       |
| 603.     | Reedley Telephone Company <i>vs.</i> L. O. Clough et al.   |
| 604.     | City of Redlands <i>vs.</i> The Citrus Belt Gas Company.   |
| 605.     | City of Richmond <i>vs.</i> Southern Pacific Company.  |
| 606.     | Business Men's Chamber of Commerce of Healdsburg <i>vs.</i> Northwestern Pacific Railroad Company.             |
| 607.     | The Crescent City Light, Water and Power Company <i>vs.</i> George M. Keller and Hobbs, Wall & Company.        |
| 608.     | Rosenberg Company <i>vs.</i> Pacific Gas and Electric Company.   |
| 609.     | Richmond Club <i>vs.</i> Southern Pacific Company.   |



- | Case No. | Name of Litigants.  |
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| 610.     | Commission's investigation—Financial condition of United Railroads of San Francisco.  |
| 611.     | Town of San Anselmo <i>vs.</i> Marin Water and Power Company.   |
| 612.     | Los Molinos Citrus Farms Company et al. <i>vs.</i> Coneland Water Company.  |
| 613.     | William Paxton Montague et al <i>vs.</i> The Pacific Gas and Electric Company.  |
| 614.     | Macey Leake <i>vs.</i> Northwestern Pacific Railroad Company.   |
| 615.     | Barclay McCowan et al. <i>vs.</i> Pacific States Telephone and Telegraph Company and The Pacific Telephone and Telegraph Company. |
| 616.     | Fourth Street District Improvement Club <i>vs.</i> Southern Pacific Company.  |
| 617.     | City of Alameda <i>vs.</i> Peoples Water Company.   |
| 618.     | East Bakersfield Improvement Association <i>vs.</i> San Joaquin Light and Power Company and Bakersfield Gas and Electric Company. |
| 619.     | Joseph Manor <i>vs.</i> Southern Pacific Company.   |
| 620.     | Associated Jobbers of Los Angeles <i>vs.</i> Atchison, Topeka and Santa Fe Railway Company et al.                                 |
| 621.     | City of Redlands <i>vs.</i> Southwestern Home Telephone Company.  |
| 622.     | Wilmington Transportation Company <i>vs.</i> Southern Pacific Company.  |
| 623.     | City of Coalinga <i>vs.</i> Pleasant Valley Water Company and Coalinga Consolidated Water Company.                                |
| 624.     | City of Coalinga <i>vs.</i> Coalinga Gas and Power Company.   |
| 625.     | Barclay McCowan et al. <i>vs.</i> Kern Mutual Telephone Company.  |
| 626.     | Barclay McCowan et al. <i>vs.</i> Western Water Company, Domestic Water Company and Consumers Water Company.                      |
| 627.     | Security Investment Company <i>vs.</i> Palermo Land and Water Company.  |
| 628.     | Steiger Terra Cotta and Pottery Works <i>vs.</i> Southern Pacific Company.  |
| 629.     | Clara J. Wilson <i>vs.</i> McEwen Bros.   |
| 630.     | Commission's investigation—Switching charges of common carriers.  |



## SUMMARY OF FORMAL COMPLAINTS.

The following is a summary of various formal complaints that have been decided by the Commission during the fiscal year covered by this report. A brief outline only is given of the various cases decided, the complete findings being published in volumes three and four of decisions, which are issued semiannually.

Decision No. 765.

Case No. 388.

*Richard F. Robertson vs. Peninsular Railway Company.*

(Decided July 1, 1913.)

Complainant alleged that the one-way fares and various commutation rates of respondent between Los Gatos and San Jose were unreasonable and also brought into question the service of respondent between these points but failing to substantiate the allegations, complaint dismissed. Respondent directed to eliminate several slight discriminations found to exist.

Decision No. 772.

Case No. 370.

*P. A. Froelich vs. Los Angeles Railway Corporation.*

(Decided July 2, 1913.)

Complainant alleged discrimination in passenger rates of respondent between Los Angeles and Vernon Heights. One-way fare of 10 cents found to be fair and reasonable; thirty-ride commutation tickets reduced from \$2.70 to \$1.50.

Decision No. 773.

Case No. 337.

*City of Inglewood vs. Los Angeles Railway Corporation.*

(Decided July 2, 1913.)

Complainant attacks the passenger rates of respondent company between Inglewood and Los Angeles. Discrimination found to exist as against Inglewood and in favor of other communities situated at an equal distance. One-way fares reduced from 15 cents to 10 cents, and thirty-ride commutation tickets from \$3.00 to \$1.50.

Decision No. 774.

Case No. 373.

*Hugh A. Boyle vs. Belvedere Land and Water Company et al.*

(Decided July 2, 1913.)

Complainant alleged invasion of his territory by respondents. At the hearing it developed that the Belvedere Company had laid no pipes into complainant's territory, but that several of complainant's former consumers had laid pipes themselves so as to obtain water from the Belvedere Company and were operating as a mutual concern. Complaint dismissed.

Decision No. 775.

Case No. 389.

*J. S. Moffit et al vs. Nevada-California-Oregon Railway Company.*

(Decided July 3, 1913.)

Complainants attacked the station service of respondent at New Pine Creek from which point the agent had been removed to Fairport. At the hearing respondent agreed to put the road leading to Fairport, which is only 2,000 feet from the former agency, into first class condition and reduce the rates so as to take care of the additional wagon haul. Complaint dismissed.

## Decision No. 780.

## Case No. 381.

*J. H. Miller and E. Donaldson vs. Wilmington Transportation Company.*

(Decided July 9, 1913.)

Opinion on jurisdiction of Commission over vessels plying between points within the State of California though traveling over the high seas en route:

That the Railroad Commission has authority to fix the rates charged by vessels plying between San Pedro and Catalina Island, in Los Angeles County, even though twenty-one miles of high seas are traversed in the voyage.

That the voyage from San Pedro directly to Catalina Island, both points being within Los Angeles County, and there being no exchange of goods with foreign vessels, and no stopping at a foreign port, is not commerce "with foreign nations" under the federal constitution.

That the federal government has assumed no jurisdiction over the rights of vessels plying between California ports, and that, in the absence of such action, the State of California has the right to regulate such rates, even if the commerce be regarded as commerce "with foreign nations."

Motion to dismiss complaint charging that rates for freight and passengers on vessels plying between San Pedro and Avalon, Catalina Island, are unreasonable, on the ground of lack of jurisdiction on the part of the Railroad Commission, dismissed and defendant directed to satisfy the complaint or answer within ten days.

## Decision No. 782.

## Case No. 402.

*John Niven vs. San Diego Electric Railway Company and Point Loma Railway.*

(Decided July 10, 1913.)

Complainant attacked the reasonableness of the rates of respondent companies and also alleged inadequate service. In view of the fact that both roads operate entirely within the city limits of San Diego the Commission had no authority to interfere with present rates. Respondents directed to file, within ten days, time-table establishing and maintaining a twenty-minute headway between San Diego and Point Loma and Ocean Park.

## Decision No. 793.

## Case No. 392.

## Case No. 394.

*City Lumber Company et al. vs. San Pedro, Los Angeles and Salt Lake Railroad Company and Atchison, Topeka and Santa Fe Railway Company.**California Hardwood Lumber Company et al. vs. Southern Pacific Company and Atchison, Topeka and Santa Fe Railway Company.*

(Decided July 19, 1913.)

Complaint of various lumber companies alleging rates on lumber between East San Pedro and East Wilmington to points on the line of Santa Fe Railway west of Nadeau Park are unreasonable. Salt Lake Railroad and Santa Fe Railway directed to publish and file, within twenty days, a joint rate between these points of \$1.00 per ton on lumber in carload lots. Complainants being unable to show that they suffered damages under rate of \$1.20 per ton, no reparation awarded.

Complaint against the joint rates of the Southern Pacific Company and the Santa Fe Railway to points west of Nadeau Park dismissed.

## Decision No. 796.

## Case No. 393.

*Higman Lumber Company vs. Pacific Electric Railway Company and San Pedro, Los Angeles and Salt Lake Railroad Company.*

(Decided July 19, 1913.)

Complainant alleged excessive rates on lumber on the lines of Salt Lake Railroad Company and Pacific Electric Railway Company between East San Pedro and Florence avenue, outside the city limits of Los Angeles.

Lumber rate of 6 cents per 100 pounds between these points held to be excessive and discriminatory. Defendants directed to publish and file, within twenty days, a rate of \$1.00 per ton on lumber in carload lots between points named.

Decision No. 804.

Case No. 416.

*In the matter of the investigation of the wreck occurring on June 19, 1913, on the line of the San Francisco, Napa and Calistoga Railway Company.*

(Decided July 21, 1913.)

(The following was the first formal inquiry conducted by the Commission following a serious accident.)

(Partial report of investigating engineer.)

"Circumstantial evidence indicated that Conductor Richmond (train No. 6) failed to call for his clearance before leaving Vallejo, as required by custom of the company. Motorman Hough failed to obtain a copy of this clearance or verbal confirmation of it from the conductor before starting his train. Dispatcher O'Leary violated the rules in allowing an inferior train to move before restricting the superior train. The officers of the company were negligent in their duties in allowing singletrack, highspeed operation to be conducted without maintaining the proper observation of the rules on the part of all employees.

"It is necessary to make mention of the fact that had the railroad been equipped with automatic block signals the accident would have been prevented, assuming that sufficient discipline was maintained to obtain observance of signals."

## CAUSES OF ACCIDENT.

*Direct—*

(1) Failure of Conductor Richmond to call the dispatcher for a clearance before leaving Vallejo with train.

(2) Failure of Motorman Hough to obtain the clearance from his conductor.

(3) Dispatcher O'Leary's violation of the rule requiring him to first restrict the superior train before moving the inferior train.

(4) Failure of the officers of the company to correct the above violations of the rules, which had been occurring daily and had become an established practice.

*Indirect—*

General violation of the rules, which ultimately results in such disasters as this

*Recommendations—*

The company should require its officers to operate the railroad under safe rules. They should examine men as to their fitness before allowing them to occupy positions that involve the handling of trains and train orders and should employ only competent men in such positions, who are qualified to fill them. They should *know* that all rules are being observed.

Most of these interurban lines should be protected by block signals and our engineer has been directed to have a thorough investigation made of all these roads with a view to requiring the installation of block signals at once in the more urgent cases and gradually in all cases. If the installation of safety devices requires an increase in the rates of these utilities, such increase will be allowed. The traveling public has a right to be protected and should be willing to pay for such protection. Up to the present time, however, in this state, it can not be said by any public utility that its failure to install proper safety devices is due to inadequate rates. No suggestion has come from any one of them that this Commission permit an increase in rates for this purpose. The Commission stands ready at all times, however, to permit rates high enough to pay a reasonable return upon the fair value of the property devoted to the public service, good wages to experienced men, and installation of such appliances as may be necessary to promote the safety of the traveling public and employees of the utility under its jurisdiction.

Decision No. 805.

Case No. 349.

*City of Santa Paula vs. Santa Clara Water and Irrigation Company.*

(Decided July 23, 1913.)

Complainant alleged defendant maintained an open water ditch which was unsanitary and a menace to public health.

*Held*, Complaint dismissed, as city and not the Commission has jurisdiction to grant relief asked.



Decision No. 807.

Case No. 401.

*Mexico and San Diego Railway Company vs. San Diego and Southeastern Railway Company.*

(Decided July 23, 1913.)

Complainant petitioned Commission to compel defendant to operate jointly a portion of its railway and to establish rates for said service.

*Held*, That complainant's line was built primarily to promote real estate operations and that the Commission will not permit any attempt on its part to evade its duty to the public. Complainant permitted to operate its cars over the connecting line of respondent's track and joint rates established giving respondent its full present line fare according to its present schedule. Complaint in all other respects dismissed.

Decision No. 815.

Case No. 397.

*L. Y. Montgomery et al. vs. The Fresno Canal and Irrigation Company.*

(Decided July 24, 1913.)

Complainant alleged poor service and unequal distribution of water on the part of respondent.

*Held*, That during subsequent seasons respondent shall proportion its supply of water among its consumers in the amount to which each person is ratably entitled and shall maintain its ditches in proper condition, and shall enter into no additional contracts with consumers not now receiving service without the consent of the Commission.

Decision No. 831.

Case No. 247.

*Clayburg & George et al. vs. Southern Pacific Company.*

(Decided July 29, 1913.)

Complainants alleged that respondent had charged and collected excessive rates on shipments of live stock moving between points within this state and, it appearing that such shipments moved prior to October 10, 1911, prior to which date this Commission has no authority to award reparation, the complaint was dismissed.

Decision No. 834.

Case No. 372.

*V. A. Solari et al. vs. Tuolumne County Electric Power and Light Company.*

(Decided July 29, 1913.)

Complainants alleged defendant's rates for electrical energy were unjust and discriminatory and petitioned the Commission to establish just rates. The Commission found that defendant's plant had a valuation of \$34,475.00, on which it is entitled to earn a reasonable return.

*Held*, That the rates of defendant were excessive and unjust. Defendant ordered to publish and put into effect within twenty days the schedule established by the Commission.

Decision No. 836.

Case No. 210.

*In the matter of ascertaining the value of the property of the Tonopah and Tidewater Railroad Company within the State of California.*

(Decided July 29, 1913.)

Proceeding on motion of Commission to ascertain various elements entering into the value of respondent's property. Findings made as to facts but not on the question of the value of the property, irrespective of the purposes for which the value is ascertained.

**FINDINGS OF FACT:** (1) that the reproduction value of the operative property of respondent, as of June 30, 1912, is the sum of \$2,650,143.35; (2) that the present value of the operative property of respondent, as of June 30, 1912, is the sum of \$2,304,075.03. (See engineers' valuation tables.)



Decision No. 841.

Case No. 122.

*In the matter of the schedules or tariffs of rates of charges of Wells Fargo & Company.*

Case No. 279.

*Merchants and Manufacturers Association of Los Angeles vs. Wells Fargo & Company and American Express Company.*

Case No. 307.

*California Central Creameries vs. Wells Fargo & Company.*

(Decided August 1, 1913.)

*Held.* In this proceeding, upon the Commission's own initiative, that all rates of charges of Wells Fargo & Company for transportation within the State of California are unjust, unreasonable and discriminatory in so far as they differ from the rates prescribed and found to be just and reasonable.

*Held.* An entirely new classification and system of rates prescribed for the State of California.

*Held.* Rules and regulations modified and new rules and regulations established.

*Held.* Rates, classifications, rules and regulations prescribed shall be effective not later than October 1, 1913, before which time Wells Fargo & Company shall print and file tariffs embodying said rates, classifications, rules and regulations.

*Held.* Wells Fargo & Company may keep accounts and submit statements showing effect of decision on its revenues, whereupon, if injustice has resulted, the Commission will make such further order as the evidence submitted shall justify.

Decision No. 842.

Case No. 363.

*G. M. Simpson Lumber Company et al. vs. Southern Pacific Company and San Pedro, Los Angeles and Salt Lake Railroad Company.*

Case No. 375.

*San Gabriel Valley Lumber Company vs. Southern Pacific Company and Pacific Electric Railway Company.*

(Decided August 2, 1913.)

Supplemental order establishing a minimum carload weight of 40,000 pounds in connection with rate of six cents on lumber between San Pedro and Alhambra, San Gabriel and South Pasadena.

Decision No. 844.

Case No. 393.

*Higman Lumber Company vs. Pacific Electric Railway Company and San Pedro, Los Angeles and Salt Lake Railroad Company.*

(Decided August 2, 1913.)

Supplemental order establishing a minimum carload weight of 40,000 pounds, in connection with rate of six cents on lumber, between East San Pedro and East Wilmington to Florence avenue.

Decision No. 845.

Case No. 295.

*Grayson-Owen Company et al. vs. Southern Pacific Company.*

(Decided August 2, 1913.)

Complainants awarded reparation in the sum of \$153.75, representing the difference between the through rate and combination of locals on carload shipments of cattle.

Decision No. 846.

Case No. 228.

*Scott, Magner & Miller et al. vs. Southern Pacific Company.*

(Decided August 2, 1913.)

*Held.* That the Commission has no power to award reparation on claims arising prior to October 10, 1911; that rates charged and collected prior to this date were established by the Commission and were deemed "conclusively just and reasonable." Complaint dismissed.

Decision No. 847.

Case No. 296.

*Livermore Warehouse Company et al. vs. Southern Pacific Company.*

(Decided August 2, 1913.)

Complainant asked reparation on shipments of hay moving between points west of Tracy to Oakland, San Francisco and San Jose.

*Held*, Complainant not entitled to reparation; complaint dismissed.

Decision No. 858.

Case No. 422.

*W. H. Frazine vs. The Atchison, Topeka and Santa Fe Railway Company.*

(Decided August 11, 1913.)

Complainants alleged that defendant, intending to construct a depot in the town of Empire, had selected a site approximately one fourth of a mile from the intersection of the main street with its line of railway; that such proposed site was extremely inconvenient and unsuitable to the needs of the community and petitioned the Commission to compel defendant to construct proposed depot at a site more suitable adequately to serve both shippers and passengers.

*Held*, That defendant file, for the Commission's approval, within ninety days, plans for a passenger and freight depot to cost not less than \$10,000.00, to be erected on property of defendant 800 feet south of Main street in the town of Empire.

Decision No. 878.

Case No. 308.

*In the matter of the application of San Geronio Water Company and Beaumont Land and Water Company for a rehearing.*

(Decided August 15, 1913.)

Application of the San Geronio Water Company and the Beaumont Land and Water Company for a rehearing granted.

Decision No. 879.

Case No. 287.

*Stephen A. D. Clark et al. vs. Hermosa Beach Water Company and Quintin J. Rowley.*

(Decided August 15, 1913.)

Complaint being made to the Commission that the defendant had not complied with the requirements of the Commission's order in this case.

*Held*, That defendant be declared in contempt of the Commission and fined the sum of \$500.00; said fine to be remitted if defendant comply with all terms of Commission's order within thirty days.

Decision No. 881.

Case No. 399.

*E. Percival Lewis vs. Peoples Water Company.*

(Decided August 15, 1913.)

Complainant alleged that defendant water company maintained a two-inch pipe only along a certain street within the city limits of Berkeley, whereon there are a number of residences, including complainant's; that such pipe did not afford sufficient fire protection, and petitioned the Commission to compel defendant to lay, at least, a six-inch pipe along this street.

*Held*, That the Commission has no jurisdiction over the complaint of individual residents of Berkeley to order Peoples Water Company to increase the size of its mains solely for the purpose of furnishing water for fire protection.

Decision No. 887.

Case No. 431.

*In the matter of the investigation into methods and equipment of Pacific Electric Railway Company in the operation of its lines of railway. (On the Commission's own initiative.)*

(Decided August 15, 1913.)

Following a serious accident upon the lines of defendant company, the Commission

conducted an investigation into the causes thereof, which included the methods and equipment used in the operation of its lines.

*Held*, That this accident was caused by the incompetence of the employees, said incompetence due to insufficient instruction.

*Held*, That defendant's method of examining and testing employees is insufficient and inadequate; that such methods do not provide for the safe operation of trains; that said road is not sufficiently provided with signals or safety devices.

*Held*, That defendant file with this Commission a comprehensive plan for the instruction and testing of employees; also a list of all grade crossings; signals provided at such crossings, and an estimate of the cost of installing adequate interlocking plants at said crossings and a complete automatic block system over its entire lines operated outside the limits of incorporated cities.

Decision No. 898.

Case No. 410.

*Town of Mayfield vs. Southern Pacific Company.*

(Decided August 22, 1913.)

The town of Mayfield, desiring to open Stanford avenue across the tracks of the Southern Pacific Company, applied to the Commission for an order directing the said railroad company to permit such construction.

After thorough investigation into the necessity for proposed crossing and adjacent crossings.

*Held*, That public convenience does not require a grade crossing at the intersection of Stanford avenue with the track of defendant; that said crossing would be extremely dangerous. Application denied.

*Held*, That defendant be required to install suitable safety and warning devices at its crossing at Lincoln avenue in the town of Mayfield.

Decision No. 909.

Case No. 404.

*Fred Gunther Company vs. Southern Pacific Company.*

(Decided August 25, 1913.)

Complainant alleged unreasonable rates on mineral water, carload lots, between Williams and Bakersfield, California; also that defendant collected on six certain shipments overweight to the total amount of 6,600 pounds.

*Held*, Parties to this action agreed as to a method of determining the correct weight of these shipments, and defendant agreed to refund if overweight had been collected, and there being no discrimination shown as to the rates complained of, complaint was dismissed.

Decision No. 910.

Case No. 405.

*L. C. Ross vs. Southern Pacific Company.*

(Decided August 25, 1913.)

Complainant petitioned for reparation on shipments moving prior to October 10, 1911, over which shipments the Commission has no jurisdiction to award reparation. Complaint dismissed.

Decision No. 921.

Case No. 409.

*R. H. Knox et al. vs. San Jose and Santa Clara County Railroad Company and San Jose Railways.*

(Decided August 30, 1913.)

Complaint of certain residents of the east side district of San Jose alleged unsafe and inadequate service on the Alum Rock line of defendant, and protested against the intention of defendant to abandon a certain portion of said line. Defendant contended that it had been notified that it would be required to remove a considerable portion of its tracks along this right of way by the property owners thereof; that the Peninsular Railway Company, under the same ownership as defendant, had secured a private right of way via a different route between this same termini.

*Held*, That defendant reconstruct its narrow gauge road between San Jose and Alum Rock as a standard gauge road; that defendant reconstruct that portion of its road between Linda Vista and Toyon Station, and further extend such road so as to connect with the Peninsular Railway at or near Toyon Station.



*Held*, That defendant be permitted to abandon and remove that portion of its road from Toyon Station one half mile toward Alum Rock Canyon.

Decision No. 923.

Case No. 414.

*Red Line Tourists Agency vs. Southern Pacific Company and Union Transfer Company.*

(Decided August 30, 1914.)

Complainant alleged discrimination on the part of defendant as to its contract with the Union Transfer Company, permitting said transfer company the exclusive right of soliciting and checking baggage upon and for its trains and steamers.

*Held*, Railroad has right to make exclusive contract for soliciting of baggage on trains. Complaint dismissed.

Decision No. 954.

Case No. 376.

*W. C. Penoyar et al. vs. Southern Pacific Company.*

(Decided September 19, 1913.)

Complainant alleged discrimination on part of defendant, namely, the furnishing of inferior equipment, and asked reparation in the sum of \$10,000.00 to cover losses sustained thereby; complainant also alleged discrimination in rates, and asked reparation in the sum of \$8,444.66, and also petitioned the Commission to establish a just and reasonable rate for such services as were required by complainant prior to its suspension of operation.

*Held*, That the Commission has no jurisdiction either to compel carriers to make reparation for losses sustained through the furnishing of inferior equipment, or to make reparation on rates established by the Commission prior to October 10, 1911.

*Held*, That as complainant is not operating at present and has no immediate intention of resuming operation, there is no necessity at this time of establishing new rates for this service. Complaint is therefore dismissed.

Decision No. 969.

Case No. 281.

*Long Beach Chamber of Commerce vs. Pacific Electric Railway Company.*

(Decided September 25, 1913.)

Complainant alleged unjust rates and inadequate service on part of defendant within the city limits of Long Beach; also, that defendant refused to issue transfers and to pave the streets adjacent to its tracks as required by said city.

*Held*, That the charter of the city of Long Beach invested the power of control over its utilities in the city itself; that the Commission had no jurisdiction therein. Complaint was therefore dismissed.

Decision No. 974.

Case No. 451.

*Charles LeRoy Butler vs. Pacific Gas and Electric Company.*

(Decided September 30, 1913.)

Complainant petitioned the Commission to compel defendant to extend its distributing system for gas and electric service to the house owned by complainant in North Cragmont.

*Held*, That defendant be required to extend service as prayed for on condition that complainant agree to pay for one year the sum of \$2.25 per month in addition to the regular rates for such service, said sum to be reduced 50 cents on the addition of each new consumer in this district.

Decision No. 977.

Case No. 473.

*In the matter of the investigation of the failure of the bridge of the Northern Electric Railway Company across the American River, occurring September 9, 1913.*

(Decided September 30, 1913.)

The bridge owned and operated by the Northern Electric Railway over the American River collapsed, carrying into the river an engine, switching gravel cars, killing the engineer and injuring the fireman. Investigation showed that though the



bridge had been inspected, owing to unusually heavy deposits of gravel a short time before, the real water line, continuously exposed to deterioration, had been covered up and the solid piling above was reported upon, the piles fracturing from two to three feet below place of inspection.

Decision No. 978.

Case No. 187.

*In the matter of ascertaining the value of the property of Sacramento Valley and Eastern Railway Company.*

(Decided September 30, 1913.)

Proceeding on motion of Commission to ascertain various elements entering into the value of respondent's property. Findings made as to facts, but not on the question of the value of the property, irrespective of the purposes for which the value is ascertained.

**FINDINGS OF FACT:** (1) that the reproduction value of the operative property of respondent as of June 30, 1912, is the sum of \$475,002.04; (2) that the present value of the operative property of respondent as of June 30, 1912, is the sum of \$424,678.07. (See engineer's valuation tables.)

Decision No. 983.

Case No. 425.

*A. M. Buchanan vs. Southern Pacific Company.*

(Decided October 2, 1913.)

Complainant alleged inadequate service in the maintaining of a station agent at the town of Traver and petitioned Commission to establish an agency station at said town.

*Held.* That defendant be required to maintain an agency station at Traver until it was determined whether or not conditions justify a modification of this order.

Decision No. 995.

Case No. 460.

*The Commission on its own initiative in the matter of sanitary drinking cups on passenger cars.*

(Decided October 8, 1913.)

Upon the receipt of numerous informal complaints the above entitled investigation was initiated and the following general order to all roads resulted:

*Held.* That all steam or electric interurban railroads whose running time between termini exceeds one hour and thirty minutes shall provide, for the use of passengers, sanitary paper drinking cups at a cost not to exceed 1 cent each.

Decision No. 1008.

Case No. 387.

*City of San Jose vs. The Pacific Telephone and Telegraph Company.*

(Decided October 9, 1913.)

The city of San Jose, an incorporated city, whose control over public utilities had been voted transferred to the Railroad Commission, filed the above entitled complaint, bringing into question all of the rules, rates and practices of respondent company in said city. After hearing, the following adjustments were directed:

*Held.* Practice of telephone company in requiring deposit before installing telephone was unjust, unreasonable and discriminatory.

*Held.* Rates complained of in San Jose exchange area were unjust and unreasonable. Rates fixed by Commission ordered into effect in San Jose, Santa Clara, Sunnyvale and Campbell exchanges.

*Held.* That a 6½ per cent depreciation fund was too great; a depreciation fund of 5½ per cent was allowed until such time as this amount is shown to be either too high or too low.

*Held.* Payment of 4½ per cent of gross revenue to American Telephone and Telegraph Company was excessive and not proper expenditure; that this charge must be limited to the lowest fair value of the service actually rendered by the American Company.

Decision No. 1017.

Case No. 408.

*Edward A. Colby vs. Southern Pacific Company.*

(Decided October 16, 1913.)

After investigation of defendant's rates to and from Redlands and Los Angeles and discrimination appearing in favor of the rate from Los Angeles as against the rate from Redlands,

*Held*, Defendant ordered to remove discrimination arising from failure to establish a passenger fare from Redlands to Los Angeles and return the same as the passenger fare from Los Angeles to Redlands and return.

Decision No. 1018.

Case No. 437.

*O. E. Slinack vs. Inglewood Water Company.*

(Decided October 26, 1913.)

Complainant objects to the methods used by defendant in collecting bills, consumers not being notified of the amount due and there being an additional 15 cents added to all bills if not paid before the fifteenth of the month.

*Held*, Defendant directed to adopt a method of informing consumers of the amount of water used each month and amount due therefor, also to eliminate certain discrimination found to exist as affecting residences maintaining lawns. That defendant's rule of adding 15 cents to delinquent bills was a just and reasonable rule which may be continued.

Decision No. 1021.

Case No. 287.

*Stephen A. D. Clark et al. vs. Hermosa Beach Water Company.*

(Decided October 16, 1913.)

*Held*, Fine of \$500.00 imposed on Hermosa Beach Water Company remitted upon compliance by company with order of Commission regulating service of water.

Decision No. 1028.

Cases Nos. 433, 434 and 441.

*Tujunga Valley Improvement Association vs. Tujunga Water and Power Company; Noboru Omura vs. Tujunga Water and Power Company; Tujunga Terrace Improvement Association vs. Tujunga Water and Power Company.*

(Decided October 16, 1913.)

All three of above entitled complaints involved the adequacy of service of defendant company and were consolidated for hearing and decision. Complainants alleged that defendant company had agreed to furnish a certain amount of water for irrigation purposes which it had so far failed to do and petitioned the Commission to compel the installation of pumping machinery so as adequately to meet the needs of defendant consumers. After investigation the following order resulted:

*Held*, That defendant be required to put into effect such rules and regulations as will insure an equitable distribution of water to all of its consumers and to facilitate the construction of certain improvements and take immediate steps to increase the available supply of water.

*Held*, That defendant install meters for each consumer not so provided, and to supply no new consumers until further order of the Commission.

Decision No. 1042.

Case No. 453.

*J. P. Ramos vs. San Francisco-Oakland Terminal Railways.*

(Decided October 25, 1913.)

Complainant alleged that the present monthly commutation rate of \$4.50 between Ashland and Oakland is unjust and petitioned the Commission to place in effect a rate of \$3.00 per month.

*Held*, That defendant's rate of \$4.50 between points named is unjust and unreasonable. Monthly commutation rate of \$3.75 ordered effective by December 1, 1913, between points named.

## Decision No. 1045.

Case No. 396.

*East Oakland Protective League vs. Southern Pacific Company.*

(Decided October 28, 1913.)

*Held*, That defendant's commutation rate of \$3.50 from Fremont way and Fairfax avenue to San Francisco, and the commutation rate of \$4.50 from Seminary avenue to San Francisco, and the one-way fare of 15 cents between these points are unjust and discriminatory.

*Held*, That defendant publish and put in effect within twenty days a monthly commutation rate of \$3.00 and a one-way fare of 10 cents between points named.

## Decision No. 1055.

Case No. 385.

*San Francisco Chamber of Commerce vs. Southern Pacific Company.*

(Decided October 30, 1913.)

Complainant attacked as unreasonable the rates of defendant company on clay from clay pits to points of manufacture at South San Francisco, East Oakland and Alameda, contending that defendant maintained similar rates on the manufactured products on like movements.

*Held*, That the rate of \$1.25 per ton on clay in carload lots of 60,000 pounds from Ione, Clarksona, Yaru, Carbondale, Lincoln, Clayton and Valley Springs, to South San Francisco, East Oakland and Alameda, was unjust and excessive.

*Held*, That defendants publish and file with this Commission, within twenty days, a rate of 85 cents per ton on clay in carload lots of 60,000 pounds between these points.

## Decision No. 1056.

Case No. 358.

*Joseph S. Anderson vs. De Pue Warehouse Company et al.*

(Decided October 30, 1913.)

Complaint alleging that the rates of defendants for the storage of mineral waters in the city of San Francisco were unjust and unreasonable, dismissed.

## Decision No. 1069.

Case No. 214.

*In the matter of the provisions of section 21 of article XII of the Constitution of California, relating to long and short hauls and through rates exceeding the aggregate of intermediate rates.*

(Decided November 5, 1913.)

Application of the San Pedro, Los Angeles and Salt Lake Railroad Company for permission to deviate from certain published rates, in violation of the long and short haul provisions of the constitution, denied.

## Decision No. 1073.

Case No. 214.

*In the matter of the provisions of section 21, article XII, of the Constitution of California, relating to long and short hauls and through rates exceeding the aggregate of intermediate rates.*

(Decided November 7, 1913.)

Application of the Southern Pacific Company to add 5 cents to its one-way fares between Lathrop and the following points: Niles, Sunol, Pleasanton and Livermore, so as to comply with the long and short haul provisions of the constitution, granted.

## Decision No. 1080.

Case No. 492.

*In the matter of the service of Northwestern Pacific Railroad Company between Belvedere and San Francisco.*

(Decided November 14, 1913.)

On receipt of informal complaints as regards service of defendant between points named, an investigation was instituted upon the Commission's own initiative. Problems of transportation between these points analyzed and though no order was rendered, certain suggestions as to improvements recommended.



## Decision No. 1082.

## Case No. 407. (Application No. 2.)

*In the matter of the application of The Pacific Telephone and Telegraph Company for leave to continue to charge the toll rates in effect on the tenth day of October, 1911, until the further order of the Commission.*

*In the matter of the rates, charges, rules and regulations in connection with the interchange of telephone service of The Pacific Telephone and Telegraph Company within the State of California.*

(Decided November 14, 1913.)

Defendant company having been directed to eliminate all violations of the long and short haul clause then existing in its published schedules of rates filed its application for permission to continue in effect all existing violations until such time as a new schedule arranged upon a basis submitted by applicant should have been approved and ordered effective.

The Commission thereupon instituted an investigation covering all toll charges of defendant company within the State of California and after thorough investigation of toll rates then effective, the following order was issued:

*Held*, The Pacific Telephone and Telegraph Company ordered to put into effect by February 16, 1914, specified schedules of rates found by the Commission to be just and reasonable, these rates providing for a two-minute initial period.

*Held*, Thirty per cent instead of 15 per cent of toll revenues shall be apportioned to exchange accounts.

*Held*, Application of The Pacific Telephone and Telegraph Company for permission to revise toll rate schedules on a basis of \$0.005 per air line mile, plus a \$0.05 terminal charge, initial period of one minute, 50 per cent overtime, denied.

## Decision No. 1099.

## Case No. 452.

*A. Richard Thompson et al. vs. The San Diego Electric Railway Company and The San Diego and Southeastern Railway Company.*

(Decided December 3, 1913.)

Complainants petitioned Commission to require respondents to exchange transfers at points of intersection of their respective lines, and the Commission having no jurisdiction to grant the relief prayed for, dismissed complaint.

## Decision No. 1100.

## Case No. 490.

*Simon W. Switzer vs. The San Diego and Southeastern Railway Company.*

(Decided December 3, 1913.)

Defendant having satisfied complaint in every particular with the exception of stopping its cars at Division street, and said stop being found to be impracticable, complaint dismissed.

## Decision No. 1109.

## Case No. 442.

*Edmond Thomas Dooley et al. vs. Peoples Water Company.*

(Decided December 3, 1913.)

Complainants residing in what is known as Hopkins Terrace, situated in the foothill region within the city limits of Berkeley, petitioned the Commission to compel defendant water company to extend its water main along Kieth avenue in said city so as to serve complainants with water.

After exhaustive review of the various authorities bearing upon the subject of extensions of mains or service connections by public utilities:

1. As a general rule, it is the duty of a water utility in this state to install, at its own expense, such extensions to its mains as may be necessary to serve the inhabitants of any community which it is serving.

2. While it may be that in certain cases exceptions to this rule may be established in the first instance by the utility, the justification for the exception must be clear and the exception must not result in discrimination.

3. Any rule, regulation or custom which the utility may establish in this connection is subject to alteration or amendment by the Railroad Commission in all portions of this state other than those where incorporated cities and towns may, under their freeholders' charters, have power over public utility extensions vested in them,



and in all such territory, the Railroad Commission has the power, when an extension ought reasonably to be made, to compel such extension, both within and without city limits, after notice and hearing, in such manner and within such time as the Railroad Commission may in its order specify.

Respondent directed to install a 2-inch main along Kieth avenue so as to serve the property of respondents as soon as the necessary permit was obtained from the city authorities.

Decision No. 1111.

Case No. 471.

*E. Tracy Crane vs. San Francisco-Oakland Terminal Railways.*

(Decided December 3, 1913.)

Complainant contended that the commutation rate of \$4.50 per month between San Lorenzo and Oakland, a distance of 12.25 miles, was greater than the rate from Hayward to Oakland, a distance of 14.6 miles, and petitioned the Commission to fix such commutation rate at \$3.75.

*Held*, rate held to be discriminatory. Defendant directed to publish and place in effect a monthly commutation rate between points named of \$4.00 per month, good each day except Sunday.

Decision No. 1116.

Cases Nos. 418 and 498.

*G. W. Mordecai et al. vs. The Madera Canal and Irrigation Company and C. S. Moses.*

*In the matter of the investigation into the service, equipment and facilities of Madera Canal and Irrigation Company on the Railroad Commission's own initiative.*

(Decided December 5, 1913.)

The complaint of G. W. Mordecai et al. alleged that the service of defendant company was insufficient and inadequate, that defendant took no care of its ditches and had undertaken to serve more consumers than its supply of water permitted.

Considering the provisions of chapter 80, statutes of 1913, empowering the Commission to confine a water utility to its present consumers in cases of this nature, Commissioner Thelen said in part:

"As great injustice may be done by a water company which undertakes to serve lands beyond its real capacity to serve, as by a company which, while having the capacity to serve additional customers, unreasonably refuses to do so. In order to remedy this condition, the legislature of 1913 enacted chapter 80. Section 5 thereof reads as follows:

"Whenever the Railroad Commission, after a hearing had upon its own motion or upon complaint, shall find that any water company which is a public utility operating within this state has reached the limit of its capacity to supply water and that no further consumers of water can be supplied from the system of such utility without injuriously withdrawing the supply wholly or in part from those who have theretofore been supplied by such corporation, the Railroad Commission may order and require that no such corporation shall furnish water to any new or additional consumers until such order is vacated or modified by the said commission. The commission shall likewise have the power after hearing upon its own motion or upon complaint, to require any such water company to allow additional consumers to be served when it shall appear that to supply such additional consumers will not injuriously withdraw the supply wholly or in part from those who theretofore had been supplied by such public utility."

"I find that the Madera Canal and Irrigation Company has under present conditions reached the limit of its capacity to supply water, and that no further lands not heretofore irrigated from this system may be supplied therefrom under existing conditions without injuriously withdrawing the supply wholly or in part from those who have heretofore been supplied by the company. I shall accordingly recommend that the order in these proceedings provide that until the further order of this Commission the Madera Canal and Irrigation Company shall furnish water to no lands which have not heretofore actually received water from the system or which do not have located thereon a water right on which payments are being kept up. If the company so improves its system of transmitting and distributing water as to conserve water in excess of that necessary to irrigate the lands hereinbefore referred to, the company may hereafter ask for a modification of the order."

*Held*, Defendant directed to install certain improvements in its south slough; to

remove grass and other obstructions from all its canals and laterals and to place same in first class condition.

*Held*, Defendant to formulate and enforce such rules and regulations as will secure a ratable distribution of water and to prevent the taking of water by persons not entitled thereto; to supply no new lands with water not heretofore served or under contract.

Decision No. 1121.

Case No. 461.

*San Mateo and Burlingame Merchants' Associations vs. Southern Pacific Company and Southern Pacific Railroad Company.*

(Decided December 11, 1913.)

Upon complaint of the merchants' associations of San Mateo and Burlingame alleging inadequate depot facilities at the latter named town and also that present depot was situated so as to compel all vehicular traffic desiring access thereto to run for a considerable distance along defendant's right of way, which inadequacies were admitted by officials of defendant,

*Held*, Defendant required to submit within sixty days for the approval of the Commission, plans for an adequate depot to be situated at a more advantageous location.

Decision No. 1129.

Case No. 359, Case No. 379, and Case No. 380. Application No. 301.

*In the matter of the application of The Atchison, Topeka and Santa Fe Railway Company (coast lines), Sierra Railway Company of California and Southern Pacific Company, for permission to increase class rates between San Francisco, Sacramento, Stockton and other points on The Santa Fe and Southern Pacific and points on the line of Sierra Railway Company of California.*

*The county of Tuolumne and the city of Sonora vs. Sierra Railway Company of California, The Atchison, Topeka and Santa Fe Railway Company and Southern Pacific Company.*

*The county of Calaveras and the city of Angels, intervenors, Angels Lumber Company vs. Sierra Railway Company of California, The Atchison, Topeka and Santa Fe Railway Company, and Southern Pacific Company.*

*Utica Gold Mining Company and Hobart Estate Company vs. Sierra Railway Company of California, The Atchison, Topeka and Santa Fe Railway Company, and Southern Pacific Company.*

(Decided December 13, 1913.)

After a very careful review of all the evidence presented in this case;

That the application of the Southern Pacific Company, The Atchison, Topeka and Santa Fe Railway Company and Sierra Railway Company to increase joint class rates to the full combination of rates over Oakdale, is unjustified and Application No. 301 was denied. (See Rate Application.)

That the joint class rates between San Francisco, San Jose, Stockton, Sacramento and points between, on lines of the Southern Pacific Company and The Atchison, Topeka and Santa Fe Railway Company on the one hand and the Sierra Railway Company on the other, are excessive and unreasonable.

That the local class rates of the Sierra Railway Company and the commodity rates on lumber from Angels to Oakdale, on fuel oil from Oakdale to Angels, and on ore and concentrates from points on the Sierra Railway Company to Oakdale are excessive, unreasonable and discriminatory.

That the commodity rates on forest products from Sonora, Ralph, Standard, and Tuolumne to Oakdale are unreasonably low and insufficient.

Schedule of rates established and ordered into effect by the Commission within twenty days, covering joint rates for the transportation of freight between points on the line of The Atchison, Topeka and Santa Fe Railway Company and the Southern Pacific Company and local class rates of the Sierra Railway Company, and commodity rates on forest products, fuel oil and concentrates.

*Held*, Three railroads involved shall agree on basis of division of joint rates.

Decision No. 1133.

Case No. 435.

*The City of Eagle Rock vs. Eagle Rock Water Company.*

(Decided December 13, 1913.)

Complainant in above entitled case, having voted control of its utilities to the Commission, filed its complaint alleging unjust and unreasonable rates on the part of the defendant water company.

After valuation of defendant's system the present rates were found to be insufficient to produce a fair return upon plant investment. Compensatory rates prescribed and defendant directed to install all service connections and meters at its own expense.

Decision No. 1139.

Case No. 439.

*W. T. Lucot vs. Southern Pacific Company.*

(Decided December 18, 1913.)

Complainant alleged unreasonable class and commodity rates on lines of Southern Pacific Company between various points in California to points north of Stockton to and including Sacramento, and branch lines.

*Held*, Defendant ordered to publish and file within twenty days a rate of \$2.30 per ton on crude oil from Bakersfield to Ione and Valley Springs. Complaint in all other respects dismissed.

Decision No. 1142.

Case No. 440.

*W. T. Lucot vs. Amador Central Railroad Company.*

(Decided December 18, 1913.)

Complainant alleged unreasonable and excessive class and commodity rates on the lines of the Amador Central Railroad Company; and being unable to substantiate same, the complaint was dismissed.

Decision No. 1145.

Case No. 464.

*In the matter of the charges of public utility gas corporations for natural gas delivered at wholesale at points in Los Angeles County outside the limits of incorporated cities and towns.*

(Decided December 20, 1913.)

This investigation on the Commission's own initiative was instituted following a resolution adopted by the city council of Los Angeles requesting the Commission to fix reasonable rates for natural gas delivered in wholesale quantities at the West Glendale terminus of the Southern California Gas Company's pipe line.

The Commission made exhaustive investigations into the subject and has tried to secure and analyze all available data bearing on the many different angles in connection with natural gas production and distribution, this data being divided into twelve heads and considered as follows:

1. History of project.
2. Production, transmission and delivery.
3. Character and uses of natural gas.
4. Extent of field.
5. Period of available supply.
6. Analysis of contracts.
7. Investment.
8. Operating expenses.
9. Depreciation.
10. Royalties.
11. Rate of return.
12. Rate.

With full consideration of the several unusual elements entering into the present proceeding, such as the hazard of the enterprise, as regards the source of supply,

*Held*, Southern California Gas Company directed to establish and file with the Commission within thirty days a rate of 14 cents for each 1,000 cubic feet of natural gas delivered by said company at the West Glendale terminus of the Midway Gas Company's transmission main.



Rate established being a reduction of 4 cents per 1,000 cubic feet from the rate formerly in effect.

Decision No. 1148.

Case No. 481.

*The city of Huntington Beach vs. West Coast Gas, Light and Fuel Company.*

(Decided December 20, 1913.)

Complainant, city of Huntington Beach, attacked the service rendered by defendant gas company in said city, alleged that such service was extremely inadequate, the pressure very uncertain and at times no service at all; also, that the gas was impure and of very poor quality.

*Held*, That the poor service rendered by defendant was largely chargeable to poor management. Defendant directed to analyze its gas at stated periods and to keep an adequate supply of oil and other necessary materials on hand, also to install within ninety days an additional generating unit of not less than 100,000 cubic feet capacity, and, if conditions warranted during the next twelve months, a container of not less than 40,000 cubic feet capacity.

Decision No. 1149.

Case No. 469.

*A. C. Denman, Jr., et al. vs. West Coast Gas Company.*

(Decided December 20, 1913.)

Causes of complaint having been remedied by Commission's Decision No. 1148, complaint dismissed.

Decision No. 1150.

Case No. 455.

*D. D. Harlan et al. vs. Los Angeles and San Diego Beach Railway Company.*

(Decided December 20, 1913.)

Complainant attacked the service of defendant company, alleging that the roadbed was unsafe and that the equipment used was old and worn out.

It appearing that defendant attempted on a number of occasions to arrange to electrify its road, but owing to the limited time its franchise has to run, such attempts to raise the necessary funds have been unsuccessful.

*Held*, Defendant to make application for extension of its franchise, agreeing if such extension was granted to apply for permission to issue bonds, proceeds of which shall be used to electrify its road and provide adequate and efficient service.

Decision No. 1153.

Case No. 456.

*E. F. Sawdey et al. vs. Yosemite Power Company.*

(Decided December 20, 1913.)

This complaint alleged that defendant company refused service unless prospective consumers agreed to pay the cost of the necessary transformers, and was originally signed by twenty-seven residents. After investigation it appeared that only four of these signers were in position to take or desired service.

Defendant directed to serve the four prospective consumers desiring service and to provide the necessary equipment at its own expense, provided that each of said prospective consumers agreed to pay a minimum monthly sum of not less than \$3.00 and for all energy consumed at the regular rates.

Decision No. 1162.

Case No. 463.

*J. J. Chappell vs. Southern Pacific Company.*

(Decided December 23, 1913.)

Complainant alleged excessive rates for cotton and cotton linters on lines of defendant from Imperial Valley points to Los Angeles, San Pedro, San Francisco, Oakland and East Oakland.

*Held*, That defendant's rate of 65 cents per 100 pounds minimum carload of 16,000 pounds between Imperial Valley points and Los Angeles and San Pedro is excessive. Defendant ordered to publish and file within twenty days a rate of 40 cents per 100 pounds minimum carload of 20,000 pounds between these points.

*Held*, Complaint as to rates between Imperial Valley points and San Francisco, Oakland and East Oakland, dismissed.



Decision No. 1163.

Case No. 513.

*J. W. Barnes et al. vs. Southern California Edison Company.*

(Decided December 24, 1913.)

Complainants alleged that defendant company had refused to supply electric energy to operate a pumping plant owned and operated by sixty-eight individuals in common, thereby depriving them of water necessary for domestic and irrigation purposes. Defendant contended that as the operation of the pumping plant was in dispute between the various parties interested and no competent person was in charge to operate same, service had been discontinued.

*Held*, Defendant directed to resume service to complainants as soon as a competent person was agreed upon to operate said plant.

Decision No. 1164.

Case No. 479.

*Edgar L. Stewart vs. Great Western Power Company.*

(Decided December 27, 1913.)

Complainant alleged refusal of defendant to install service connections at its own expense.

*Held*, That the annual income to be derived from such connection would not justify defendant in constructing same. Defendant to install connection at its own expense provided complainant agreed to pay, for a period of five years, a monthly sum of \$9.10 in addition to regular rates for such service, or complainant could, at its own expense, construct a service connection and receive service at the regular rates.

Decision No. 1169.

Case No. 465.

*M. Farrell et al. vs. The Pacific Telephone and Telegraph Company.*

(Decided December 27, 1913.)

Complainants alleged that the equipment furnished in what is known as the Mountain View and Los Altos district was antiquated and unserviceable, that the toll rates of defendant were unjust and unreasonable and also petitioned the Commission to direct that their exchange serving districts named be connected with either the Palo Alto or San Jose exchanges.

*Held*, That the interexchange switching privileges afforded Mountain View and Los Altos exchange subscribers constitutes a just and reasonable exchange area. Complainant's petition to be incorporated with either the Palo Alto or San Jose exchanges denied.

*Held*, Defendant required to install, within three months, battery equipment in place of magneto type now in use in Mountain View. No ruling made as to toll rates, relief being afforded by prior decisions of the Commission.

Decision No. 1170.

Case No. 193.

*In the matter of ascertaining the value of the property of Sierra Railway Company of California within the State of California.*

(Decided December 27, 1913.)

Proceeding on motion of Commission to ascertain various elements entering into the value of respondent's property. Finding made as to facts, but not on the question of the value of the property irrespective of the purposes for which the value was ascertained. History of respondent reviewed.

**FINDINGS OF FACT:** (1) That the reproduction value of the operative physical property of respondent, as of June 30, 1912, is the sum of \$2,697,589.40. (2) That the present value of the operative physical property of respondent, as of June 30, 1912, is the sum of \$2,432,792.00. (See engineer's valuation tables.)

Decision No. 1185.

Case No. 167.

*In the matter of ascertaining the value of the property of California Western Railroad and Navigation Company.*

(Decided December 31, 1913.)

Investigation on Commission's own initiative to ascertain the various elements

entering into the value of respondent's property. Findings made as to facts, but not on the question of the value of the property irrespective of the purposes for which the value was ascertained.

**FINDINGS OF FACT:** (1) That the reproduction value of the operative physical property of respondent as of June 30, 1912, is the sum of \$1,724,900.05. (2) That the present value of the operative physical property of respondent as of June 30, 1912, is the sum of \$1,584,764.77. (See engineer's valuation tables.)

Decision No. 1189.

Case No. 458.

*City of Ontario vs. Ontario Uplands Gas Company.*

(Decided January 3, 1914.)

Upon complaint of the city of Ontario, alleging that the rates of defendant gas company were unjust and unreasonable, the Commission proceeded to fix a just and reasonable rate for this class of service.

*Held.* That the rate of defendant of \$1.75 per thousand cubic feet was unjust and unreasonable. Minimum monthly rate of 50 cents established and a rate of \$1.25 per thousand cubic feet ordered into effect.

Decision No. 1199.

Case No. 521.

*John F. Escher vs. Harry R. Atwood.*

(Decided January 15, 1914.)

Complainant petitioned the Commission to compel defendant, operating a water utility, to serve him with water, and it appearing that complainant was not within the district defendant holds out as serving, complaint dismissed.

Decision No. 1202.

Case No. 505.

*Lucy Boshier Long vs. Harry R. Atwood.*

(Decided January 15, 1914.)

Complainant petitioned the Commission to compel defendant to install a service connection at his own expense to serve her property with water. It appearing that property desired to be served by complainant was not situated within the district defendant holds himself out as serving, complaint dismissed.

Decision No. 1222.

Case No. 537.

*In re order of the Commission to Bay Point and Clayton Railroad Company and S. H. Cowell, president thereof, and W. H. George, secretary-treasurer and general manager thereof, to file annual report.*

(Decided January 22, 1914.)

Order directed Bay Point and Clayton Railroad Company, and certain of its officials, to fill out a copy of the annual report blank furnished by this Commission, and to file same with the Commission on or before February 2, 1914.

Decision No. 1224.

Case No. 409.

*R. H. Knorr et al. vs. San Jose and Santa Clara County Railroad Company and San Jose Railroads.*

(Decided January 23, 1914.)

Defendant filed an amended application requesting an extension of time in which to comply with the order of this Commission relative to the reconstruction and extension of certain portions of its road.

*Held.* Applicant granted an extension of one year from date of original order, August 30, 1913, in which to construct its road from Twenty-sixth street, San Jose, to Kings road, and an extension of one and one half years, from August 30, 1913, in which to reconstruct its road from Kings road to Linda Vista, after which applicant may apply for a further extension in which to reconstruct its road from Linda Vista to Toyon.

Decision No. 1236.

Case No. 183.

*In the matter of ascertaining the value of the property of Camino, Placerville and Lake Tahoe Railroad Company, within the State of California, as of June 30, 1912.*

(Decided January 28, 1914.)

Proceeding on Commission's own initiative to ascertain various elements entering into the value of respondent's property.

**FINDINGS OF FACT:** (1) That the reproduction value of the operative physical property of respondent as of June 30, 1912, is the sum of \$173,862.13. (2) That the present value of the operative property of respondent as of June 30, 1912, is the sum of \$135,783.86. (See engineer's valuation tables.)

Decision No. 1244.

Case No. 472.

*Frank Turnbull Company vs. Sweetwater Water Company.*

(Decided January 30, 1914.)

Complainant petitioned the Commission for an order compelling defendant to take over and operate a certain water distributing system adjacent to San Diego.

*Held.* That public convenience and necessity will be best served by the defendant company taking over and operating said system. Complainant directed to convey to defendant its certain water distributing system, together with a suitable tract of land for the erection of a 30,000-gallon water tank. Defendant directed to accept said conveyance, and to operate same as part of its present system.

Decision No. 1248.

Case No. 464.

*In the matter of the charges of public utility gas corporations for natural gas delivered at wholesale at points in Los Angeles County outside the limits of incorporated cities and towns.*

(Decided February 3, 1914.)

Supplemental order amended original order of the Commission so as to permit the Southern California Gas Company to sell its surplus supply of natural gas, not required for domestic purposes, at a rate of 12 cents per 1,000 cubic feet for industrial purposes only.

Decision No. 1254.

Case No. 387.

*City of San Jose vs. The Pacific Telephone and Telegraph Company.*

(Decided February 4, 1914.)

Application of The Pacific Telephone and Telegraph Company and certain of its stockholders for a rehearing, based principally upon that portion of the Commission's decision limiting the American Telephone and Telegraph Company to 2½ per cent instead of 4½ per cent of the gross receipts, for services performed, under its contract with The Pacific Telephone and Telegraph Company.

*Held.* That the services performed by the American Telephone and Telegraph Company, of benefit to The Pacific Telephone and Telegraph Company, do not justify a contract calling for 4½ per cent of gross; that 2½ per cent is a just and reasonable allowance for such services; application for rehearing therefore denied.

Decision No. 1258.

Case No. 412.

*T. D. Johnston vs. San Francisco-Oakland Terminal Railways.*

(Decided February 6, 1914.)

Complaint of T. D. Johnston, petitioning the Commission to compel the San Francisco-Oakland Terminal Railways to enclose all of their cars running on their suburban lines with vestibule doors, dismissed.

Decision No. 1261.

Case No. 512.

*Swift & Wilson vs. Southern Pacific Company.*

(Decided February 7, 1914.)

Complaint alleged that defendant's rates on sand from Lapis and Seaside to Berkeley, and on line from Felton to Berkeley, were excessive and discriminatory, and asked reparation on shipments which moved during the past three years. Complaint dismissed.

Decision No. 1265.

Case No. 361.

*J. A. Andrew Francioni et al. vs. Soledad Land and Water Company.*

(Decided February 9, 1914.)

Complaint alleged unjust and discriminating rates, rules and service of defendant.

*Held*, That defendant should cease all discrimination between its stockholders and outside consumers; shall properly maintain and operate the ditches and laterals used in the distribution of water from its pumping plant; should put into effect, within thirty days, a yearly rate of \$2.25 per acre, payable in advance, with an additional rate of 25 cents per acre inch for amounts delivered.

Decision No. 1269.

Cases Nos. 122, 279, 307, 312.

*In the matter of the schedule or tariffs of rates of charges of Wells Fargo & Company; Merchants and Manufacturers' Association of Los Angeles vs. Wells Fargo & Company; California Central Creameries vs. Wells Fargo & Company; The County of Orange vs. Wells Fargo & Company.*

(Decided February 9, 1914.)

Order directing Wells Fargo & Company to publish and make effective on and after March 1, 1914, for California intrastate traffic, the rates prescribed by the Interstate Commerce Commission for interstate business with certain prescribed changes for initial charges, so as to place interstate and intrastate business upon a uniform basis.

Said rates to be only tentative until such time as they are shown to either bring about the result intended under the original order or substantially to vary from the reduction formerly intended to be brought about by the Commission.

Decision No. 1275.

Case No. 356.

*Grayson-Owen Company vs. Southern Pacific Company.*

(Decided February 9, 1914.)

Complainant having been awarded reciprocal demurrage in the sum of \$654.00, defendant applied for a rehearing, which application was denied, in connection with which the Commission contended:

"The reciprocal feature of our rule (General Order No. 2) would seem to us to be absolutely worthless if carriers could only be compelled to furnish cars when they are plentiful. When cars are plentiful, carriers are only too willing to furnish them. Consequently, the reciprocal feature is of no advantage to the shipping public at such a time, and it is only in times of car shortage—and by this we do not mean a dearth of cars, but such a shortage as requires extra effort upon the part of the carriers to provide equipment—that the reciprocal feature is supposed to cover and be of benefit to the shipping public."

Decision No. 1283.

Case No. 477.

*Thomas Monahan, as mayor of the city of San Jose, vs. Pacific Gas and Electric Company.*

(Decided February 17, 1914.)

Motion of defendant to dismiss complaint on the grounds that said complaint was brought in the name of the mayor instead of the city of San Jose, and alleging that said complaint did not establish a prima facie case, denied.



Decision No. 1291.

Case No. 479.

*Edgar L. Stewart vs. Great Western Power Company.*

(Decided February 19, 1914.)

Application of defendant for a rehearing in the above entitled matter denied. Additional provision made directing defendant to serve complainant over the line of the Solano Irrigated Farms Company under present conditions only so long as no extra charge was made for the use of said line.

Decision No. 1295.

Case No. 463.

*J. J. Chappell et al. vs. Southern Pacific Company.*

(Decided February 19, 1914.)

Application of defendant for rehearing in above entitled case denied.

Decision No. 1300.

Case No. 424.

*Merchants Traffic Association, Independent Sewer Pipe Company, Pacific Sewer Pipe Company, St. Louis Fire Brick and Clay Company, Ingleswood Brick and Tile Company vs. The Atchison, Topeka and Santa Fe Railway Company (coast lines), Southern Pacific Company, Corona Chamber of Commerce, intervenor.*

(Decided February 27, 1914.)

Complaint of certain clay products manufacturers alleged unjust and discriminatory rates on clay in carload lots from Elsinore, Alberhill and Corona to Los Angeles and Los Nietos, and from Elsinore and Alberhill to Corona and Ingleswood, and from Los Angeles to Tropic.

*Held*, That the rates from Alberhill and Corona to Los Angeles and Los Nietos and from Los Angeles to Tropic are unjust and discriminatory; just and reasonable rates, prescribed to become effective within twenty days from date of order. Complaint in all other respects dismissed.

Decision No. 1302.

Case No. 523.

*City of Redlands vs. The Pacific Telephone and Telegraph Company, United States Long Distance Telephone and Telegraph Company, Southwestern Home Telephone Company.*

(Decided February 27, 1914.)

Complaint of the city of Redlands alleged discrimination in that a switching charge of 5 cents was collected on outgoing toll messages and none on incoming messages.

*Held*, After preliminary hearing, defendant having filed revised rate schedule removing the discrimination complained of, complaint dismissed without prejudice.

Decision No. 1304.

Cases Nos. 429, 430, 432.

*Mt. Shasta Milling Company vs. Southern Pacific Company; Mt. Shasta Milling Company vs. Southern Pacific Company and McCloud River Railroad Company; S. Alexander vs. Southern Pacific Company and McCloud River Railroad Company.*

(Decided February 27, 1914.)

Subsequent to hearing, interested parties having agreed upon adjustment of rates, complaints dismissed.

Decision No. 1306.

Case No. 470.

*John I. Beck vs. Hermosa Beach Water Company.*

(Decided February 27, 1914.)

Complaint of John I. Beck petitioning the Commission to compel defendant water company to install at its own expense a service connection approximately one hundred feet in length.

*Held*, Rules governing the apportionment of such expenses having been approved by the Commission in defendant's Application No. 919, complaint dismissed.

Decision No. 1307.

Case No. 487.

*Francis S. Hale vs. Hermosa Beach Water Company.*

(Decided February 27, 1914.)

Complainant petitioned the Commission to compel defendant to install at its own expense a service connection approximating four hundred feet in length.

*Held*, Commission having approved rules and regulations governing the apportionment of expenses in such extensions in defendant's Application No. 919, complaint dismissed.

Decision No. 1309.

Case No. 483.

*The Town of Ukiah vs. The Snow Mountain Water and Power Company.*

(Decided February 27, 1914.)

Complainant, operating a municipal electric distributing system, obtains its energy from defendant company, who also delivers energy in wholesale quantities to several other distributing companies. Complainant alleged that defendant was charging it a rate considerably in excess of that charged other consumers purchasing energy in wholesale quantities. Defendant contended that the present rates were entered into under contract between complainant and the defendant and that the Commission has no jurisdiction to alter or annul any of the provisions of said contract.

*Held*, After exhaustive review of authorities that a public utility can not contract with its customers in such a way as to preclude the state, acting through the Railroad Commission, from inquiring into the reasonableness of the rates named in the contract, directing the removal of discrimination caused by the contract, or otherwise completely supervising the regulation of the utility. This principle applies to a contract between a public utility and a municipality unless the state has expressly given to the municipality the right to contract away the state's right under the police power to regulate and supervise public utilities. The state has not given this right to the town of Ukiah.

*Held*, That the Snow Mountain Water and Power Company eliminate the unreasonable difference as to rates and charges found in this case to exist against the town of Ukiah and in favor of Cloverdale Light and Power Company, Mount Konocti Light and Power Company and Napa Valley Electric Company.

Decision No. 1310.

Case No. 528.

*Elon Dunlap vs. Diamond Ridge Ditch Company.*

(Decided February 28, 1914.)

Complainant alleged that the ditches and flumes of defendant water company are in such a condition as to greatly endanger the supply of water, and it appearing that repairs were necessary to insure a supply of water during the coming irrigation season, defendant directed to file within fifteen days, for the Commission's approval, plans for the repair and maintenance of its flumes and ditches.

Decision No. 1314.

Case No. 486.

*In the matter of establishing a through route and joint rates between Glendale and Los Angeles for the Glendale and Eagle Rock Railway Company and the Los Angeles Railway Company.*

(Decided March 2, 1914.)

Commission's investigation in the matter of through route and joint rates between the Glendale and Eagle Rock Railway and the Los Angeles Railway, dismissed.

Decision No. 1315.

Case No. 497.

*C. C. Woodworth et al. vs. Western States Gas and Electric Company.*

(Decided March 2, 1914.)

Complainant alleged discrimination as regards the agricultural power rates of defendant.

*Held*, That defendant has discriminated by entering into contract to supply power to groups of individuals at a lower rate than they would be entitled to individually, and denying this lower rate to other groups and individuals.

*Held*, Defendant directed to remove such discrimination and to file with the Commission within two weeks an agricultural power rate as low as that voluntarily contracted for.

Decision No. 1318.

Application No. 2.

*In the matter of the application of The Pacific Telephone and Telegraph Company for leave to continue to charge the toll rates in effect on the tenth day of October, 1911, until the further order of the Commission.*

Case No. 407.

*In the matter of the investigation into the rates, charges, rules and regulations in connection with the interexchange telephone service of The Pacific Telephone and Telegraph Company within the State of California.*

(Decided March 2, 1914.)

Application of The Pacific Telephone and Telegraph Company for a modification of the original order of the Commission in the above entitled matter, as regards the first three multiples embodied in the Commission's schedule of toll rates, and to make this modified schedule applicable also to its two-number rates.

*Held*, Application granted, subject to the condition that the present rates between San Francisco and Oakland, Alameda and Berkeley will not be affected thereby.

Decision No. 1322.

Case No. 507.

*Town of Sisson vs. Southern Pacific Company.*

(Decided March 9, 1914.)

Complaint of the town of Sisson alleged that the present depot maintained by defendant in said town was inadequate and unsuitable to handle the volume of passenger traffic at that point.

*Held*, Defendant directed to file, for the approval of the Commission, within thirty days, plans for a passenger depot to cost not less than \$6,000.00, and to construct said depot within sixty days after the approval of such plans. Defendant also directed to install, within sixty days, automatic crossing gates on both sides of its main line track crossing at Alma street.

Decision No. 1333.

Case No. 505.

*Lucy Boshier Long vs. Harry R. Atwood.*

(Decided March 11, 1914.)

Application of complainant for a rehearing in the above entitled matter, denied.

Decision No. 1334.

Case No. 446.

*H. Brockmeier vs. The Pacific Building Company.*

(Decided March 11, 1914.)

Complaint alleged that defendant's distributing system was unsatisfactory and did not give good service, that its rates were discriminatory and that its water was not filtered and was impure.

*Held*, Satisfactory arrangements as regards the improvement of this system having been agreed upon by interested parties at the hearing, defendant directed to begin installation of such improvements within thirty days.

Decision No. 1336.

Case No. 173.

*In the matter of ascertaining the value of the property of the Klamath Lake Railroad Company within the State of California.*

(Decided March 11, 1914.)

Respondent company having filed an application with the Commission for permission to abandon its property and said application having been granted, case dismissed.

## Decision No. 1343.

Case No. 504.

*Pinney & Boyle Manufacturing Company vs. The Atchison, Topcka and Santa Fe Railway Company.*

(Decided March 13, 1914.)

Complaint alleged that defendant charged and collected an excessive rate of \$46.97 on a certain carload of heaters moving between Los Angeles and Oakland, by giving said shipment a higher classification than that to which it was rightfully entitled.

*Held*, That the classification was correct and that as the rates themselves were not brought into question, complaint dismissed.

## Decision No. 1344.

Case No. 406.

*Rivers Brothers Company, Inc., vs. Southern Pacific Company.*

(Decided March 13, 1914.)

Complaint alleged that defendant had maintained and collected an unjust and discriminatory rate on apples in carload lots from Beaumont and Crafton to Los Angeles.

*Held*, That the rate charged complainant covering certain shipments of apples in carload lots was unjust and discriminatory, and defendant directed to refund to complainant all sums collected in excess of \$1.75 per ton moving subsequent to October 10, 1911, between the points in question.

*Held*, Defendant directed to remove from its tariffs the restrictive clause "for canneries and driers only," applicable to apples in carload lots between points named.

## Decision No. 1381.

Case No. 507.

*Town of Sisson vs. Southern Pacific Company.*

(Decided March 30, 1914.)

Supplemental order extended time in which defendant shall be required to construct its new depot in the town of Sisson, and modified previous order so as not to require the installation of safety gates at Alma street crossing.

## Decision No. 1382.

Case No. 131.

*In the matter of ascertaining the value of the property of the Los Angeles and San Diego Beach Railway Company.*

Proceeding on motion of Commission to ascertain various elements entering into the value of respondent's property.

**FINDINGS OF FACT:** (1) That the reproduction value of the operative physical property of respondent as of June 30, 1912, is the sum of \$554,589.77. (2) That the present value of the operative physical property of respondent as of June 30, 1912, is the sum of \$461,015.91. (See engineer's valuation tables.)

## Decision No. 1383.

Case No. 189.

*In the matter of ascertaining the value of the property of the San Diego and Southeastern Railway Company.*

(Decided March 30, 1914.)

Proceeding on motion of Commission to ascertain various elements entering into the value of respondent's property.

**FINDINGS OF FACT:** (1) That the reproduction value of the operative physical property of respondent as of June 30, 1912, is not in excess of the sum of \$2,285,874.61. (2) That the present value of the operative physical property of respondent as of June 30, 1912, is the sum of \$1,912,754.20. (See engineer's valuation tables.)



Decision No. 1384.

Case No. 178.

*In the matter of ascertaining the value of the property of the Nevada County Narrow Gauge Railroad Company within the State of California, as of June 30, 1912.*

(Decided March 30, 1914.)

Proceeding on motion of Commission to ascertain various elements entering into the value of respondent's property.

FINDINGS OF FACT: (1) That the reproduction value of the operative physical property of respondent as of June 30, 1912, is the sum of \$682,700.67. (2) That the present value of the operative physical property of respondent as of June 30, 1912, is the sum of \$572,449.24. (See engineer's valuation tables.)

Decision No. 1385.

Case No. 397.

*L. Y. Montgomery et al. vs. The Fresno Canal and Irrigation Company.*

(Decided March 28, 1914.)

Supplemental order approved rules and regulations of the Fresno Canal and Irrigation Company filed in accordance with this Commission's order of July 24, 1913, in the above entitled proceeding.

Decision No. 1386.

Case No. 547.

*In the matter of the rates charged and service rendered by H. R. Atwood, also doing business under the name of Eucanto Mutual Water Company, for water supplied to his customers at Eucanto, San Diego County, California.*

(Decided March 28, 1914.)

After careful investigation of the circumstances surrounding the construction of this plant.

*Held.* That such rates should not be established as would permit of a return upon capital invested, as such capital was obtained from consumers in increased prices paid for land purchased from company building this system.

*Held.* That the following rates are just and reasonable rates to be charged by defendant company: 25 cents per thousand gallons, with a minimum monthly bill of \$1.25; 20 cents per thousand for a monthly consumption through one meter in excess of 15,000 gallons.

Decision No. 1390.

Case No. 390.

*D. E. Brown et al. vs. Consolidated Canal Company.*

(Decided March 30, 1914.)

Supplemental order approved rules and regulations filed for the approval of the Commission by respondent, in accordance with the original order in the above entitled proceeding.

Decision No. 1391.

Case No. 309.

*In the matter of the Commission's investigation on its own initiative of the rates and practices of the East Side Canal and Irrigation Company.*

(Decided March 31, 1914.)

In consideration of a large number of informal complaints the Commission instituted, upon its own initiative, an investigation into the rates, rules, regulations and practices of defendant company. The various complaints alleged in part that the supply of water was inadequate though nevertheless defendant intended supplying additional consumers, thereby further diminishing the supply; that defendant discriminated in the distribution of water and in rates charged and compelled consumers to maintain and operate all laterals. This action was bitterly contested on both sides, the hearings taking up a considerable amount of two commissioners' time. The following order resulted:

*Held.* That within twenty days defendant shall take over and operate all laterals supplied from its ditches, thereby permitting a more equitable distribution of water between consumers situated at a distance from the intake of such laterals and those more favorably situated.

*Held*, That the rates, rules and regulations of defendant are unjust and discriminatory: just and reasonable rules and regulations prescribed and a rate of \$1.50 per acre per year, payable on or before February 1st, for the ensuing season established.

*Held*, That defendant has reached the limit of its capacity as to its ability to supply water, and shall hereafter supply no additional lands, with the exception of certain districts named herein and now being supplied from defendant's ditches.

As to defendant's contention that it is entitled to return upon excessive expenditures made in defense of its title to water rights, such title not being as yet fully established:

"We do not believe that defendant should be allowed to take from the consumers reimbursements for these enormous expenditures. We do not question the good faith of defendant in defending its water rights, nor do we propose to pass upon the question of the reasonableness of the attorneys' fees paid. However, we think that consumers can justly be charged only with such property the title and possession of which may be maintained at reasonable expense. Even though it be determined that water rights as such have a value upon which consumers should pay a return, still such water rights so to be valued should be stable and not enormously costly to maintain."

In this action, as in all investigations affecting the rates of a utility, the Commission has given particular and careful attention to the many and varied claims upon which a utility contends that it is entitled to a return, eliminating the unjust, and endeavoring to include every rightful expenditure, honestly and wisely made, upon which can be based just and equitable rates.

Decision No. 1392.

Case No. 555.

*E. T. Downs vs. Calistoga Electric Company.*

(Decided March 31, 1914.)

Complainant petitioned Commission to compel defendant to install, at its own expense, a service connection to supply him with electrical energy.

*Held*, That as the Napa Valley Electric Company had been granted a certificate of public convenience and necessity to serve the territory in which complainant resides, and had agreed to install all connections at its own expense, complaint dismissed without prejudice.

Decision No. 1397.

Case No. 418.

*G. W. Mordecai et al. vs. The Madera Canal and Irrigation Company and C. S. Moses.*

Case No. 498.

*In the matter of the investigation into the service, equipment and facilities of Madera Canal and Irrigation Company on the Commission's own initiative.*

(Decided April 3, 1914.)

Supplemental order approving rules and regulations filed for the approval of Commission by defendant in accordance with original order of the Commission in the above entitled proceeding.

Decision No. 1399.

Case No. 509.

*Lennox Improvement Association vs. Los Angeles Railway Company and Los Angeles Railway Corporation.*

(Decided April 4, 1914.)

Complaint alleged that the rates of defendant were exorbitant and discriminatory, and that the service was unsatisfactory.

*Held*, That the rates and service of defendant between Lennox and Los Angeles were just and reasonable, with the exception of its 30-ride commutation rate of \$3.30; that a just and reasonable rate for this commutation service was \$2.25, which rate was ordered into effect within twenty days.

Decision No. 1400.

Case No. 148.

*In the matter of ascertaining the value of the property of Ventura County Railway Company.*

(Decided April 4, 1914.)

Investigation on motion of Commission to ascertain various elements entering into the value of respondent's property.

**FINDINGS OF FACT:** (1) That the reproduction value of the operative physical property of respondent as of June 30, 1912, was the sum of \$307,866.39. (2) That the present value of the operative physical property of respondent as of June 30, 1912, was the sum of \$250,812.65. (See engineer's valuation tables.)

Decision No. 1401.

Case No. 214. (Application No. 3.)

*In the matter of the application of Southern Pacific Company for relief from the provisions of section 21 of article XII of the Constitution of California relative to long and short hauls.*

(Decided April 4, 1914.)

Application of the Southern Pacific Company for relief from the provisions of section 21 of article XII of the Constitution of California, or, if such application was denied to increase its fare 5 cents between San Francisco and points taking the San Francisco fare, on the one hand and Merced on the other, denied.

Decision No. 1402.

Case No. 214. (Application No. 2.)

*In the matter of the application of Southern Pacific Company for relief from the provisions of section 21, article XII, of the Constitution of California, relating to long and short hauls.*

(Decided April 4, 1914.)

Application of the Southern Pacific Company to increase its passenger rates 5 cents between Fresno and Goshen Junction, and to maintain a lower rate to Hanford, a more distant point, denied.

Decision No. 1403.

Case No. 214. (Application No. 5.)

*In the matter of the application of Southern Pacific Company for relief from the provisions of section 21, article XII of the Constitution of California, relating to long and short hauls.*

(Decided April 4, 1914.)

Application of the Southern Pacific Company for general relief from the long and short haul provisions of the constitution of California until such time as any violation thereof, at that time existing, might be corrected, denied.

Decision No. 1404.

Case No. 214. (Application No. 6.)

*In the matter of the application of Southern Pacific Company for relief from the provisions of section 21, article XII of the Constitution of California, relating to long and short hauls.*

(Decided April 4, 1914.)

Application of the Southern Pacific Company for authorization to continue "the principles, bases and adjustments upon which were constructed passenger fares," etc., thereby being exempted from provisions of section 21, article XII of the constitution in making changes or adjustments, denied.

Decision No. 1406.

Case No. 188.

*In the matter of ascertaining the value of the property of the San Diego and Arizona Railway Company.*

(Decided April 4, 1914.)

Investigation on motion of Commission to ascertain various elements entering into the value of respondent's property. Owing to the fact that this road was still in



course of construction, considerable discrepancies appeared between Commission's and respondent's figures, due to the inclusion by respondent of non-operative property.

**FINDINGS OF FACT:** (1) That the original cost of the operative physical property of respondent within the State of California, as of June 30, 1912, is the sum of \$1,192,704.40, and the book cost of respondent's entire property, the sum of \$4,504,040.73. (2) That the reproduction value of the operative physical property of respondent within the State of California, as of June 30, 1912, is the sum of \$1,557,156.47 and of the entire property the sum of \$5,904,040.73. (3) That the present value of the operative physical property of respondent as of June 30, 1912, is the sum of \$1,535,106.49, and of the entire operative and nonoperative property the sum of \$5,881,990.75. (See engineer's valuation tables.)

Decision No. 1408.

Case No. 333.

*In the matter of the one-way, round-trip and commutation fares and the rules and regulations affecting the same of the Northwestern Pacific Railroad Company for the transportation of passengers between all points on the southern division of said Northwestern Pacific Railroad Company, and of the practice of the Northwestern Pacific Railroad Company in charging for the transportation of passengers, fares less than the fares provided in its passenger fare schedules on file with the Railroad Commission of the State of California.*

(Decided April 7, 1914.)

On May 14, 1913, the Commission issued an order in the above entitled action directing defendant to establish a schedule of commutation rates effective on its southern division as therein found to be just and reasonable, also to file within ninety days, for the approval of the Commission, a tariff eliminating all inequalities and inconsistencies in the southern division rates not therein adjusted.

*Held*, That the basis for readjustment of passenger rates on its southern division, filed by Northwestern Pacific Railroad Company for the approval of Commission in accordance with the previous order herein, does not eliminate the discrimination existing therein. Just and reasonable commutation and one-way rates prescribed by the Commission to become effective within thirty days.

*Held*, Northwestern Pacific Railroad Company directed to prepare and file, for certain prescribed months, a record of traffic and a statement of revenues under the present rates and the new rates ordered into effect, and also an estimate under a tentative schedule for consideration of the Commission.

Decision No. 1419.

Case No. 515.

*S. O. Fesler et al. vs. The Pacific Telephone and Telegraph Company.*

(Decided April 10, 1914.)

Complainants alleged that the farmer line rates of defendant at its Modesto exchange were discriminatory and unjust.

*Held*, Defendant directed to place all of its farmer line rates of the Modesto exchange upon a uniform schedule, based upon the \$3.00 rate as now charged certain subscribers for this class of service, and if such a rate is protested by defendant as being unfair, defendant may file, within thirty days, an application to increase such rates, stating its reasons therefor.

*Held*, That in the future where discrimination is proven to exist and the defendant desires to eliminate such discrimination by raising the lower rate, the burden of proving that the lower rate is unjust shall rest with the defendant.

Decision No. 1423.

Case No. 526.

*County of Sacramento vs. Northern Electric Railway Company and Sacramento and Woodland Railroad Company.*

(Decided April 10, 1914.)

Complainant alleged that a certain agreement entered into between Northern Electric Railway Company and Sacramento and Woodland Railroad Company was void, as its execution was not authorized by the Commission under section 51 of the Public Utilities Act. Defendant contended that the agreement was only an operating agreement, and, as such, it was not necessary to secure the Commission's consent to its execution.

*Held*, That the agreement was void, as this Commission's consent to the execution



thereof had not been secured. Defendants given thirty days in which to apply to the Commission for permission to enter into such arrangements as they might desire in connection with the operation of the line owned by the Sacramento and Woodland Railroad.

, Decision No. 1425.

Case No. 489.

*Gem City Packing Company vs. San Jose Water Company.*

(Decided April 11, 1914.)

Complainant alleged that it had been receiving water from defendant through a pipe owned by the county of Santa Clara, and that owing to an order from the board of supervisors of said county, they had been refused service through this pipe line.

*Held*, Parties to agree upon a plan for the construction of a new tap line from the nearest main of defendant to complainant's plant, and to submit same within twenty days, at which time the Commission would decide upon the division of the cost thereof.

Decision No. 1429.

Case No. 548.

*Mrs. Lillie Lay vs. Consolidated Securities Company.*

(Decided April 13, 1914.)

Complainant petitioned the Commission to compel defendant to construct, at its own expense, a connection from its nearest main to the property line of complainant, a distance of 275 feet.

*Held*, Defendant directed to make such installation at its own expense and deliver water to complainant at the regular rates for such service, and also to install a connection for two certain neighbors of complainant, if they so desired.

Decision No. 1437.

Case No. 511.

*Winifred F. Murr vs. Los Angeles and Arizona Land Company.*

(Decided April 15, 1914.)

Complainant alleged that defendant was operating a water distributing system in the city of Glendale without a franchise, that its supply of water was inadequate to satisfy its present and proposed new consumers, and that it had not established a clear title to its source of supply.

In view of the fact that the city of Glendale had instituted proceedings to acquire a municipal water system and defendant proposed to give its plant to the city, and it appearing that the present consumers of defendant were adequately supplied, complaint dismissed.

Decision No. 1458.

Cases Nos. 357 and 556.

*Kern County Merchants' Association vs. California Natural Gas Company.*

*In the matter of the Commission's investigation into the rates of the Bakersfield Gas and Electric Company.*

(Decided April 25, 1914.)

Complaint of Kern County Merchants' Association alleged that the present wholesale rates of the California Natural Gas Company for gas delivered at the city limits of Bakersfield were unjust and unreasonable and petitioned the Commission to establish reasonable rates for such service.

After thorough investigation into all the circumstances surrounding the delivery of natural gas at the city limits of Bakersfield,

*Held*, That the present rates were unreasonable, that a rate of 12.75 cents per 1,000 cubic feet, on a four ounce basis, was a just rate for natural gas for distribution in Bakersfield and vicinity; that a rate of 7 cents per 1,000 cubic feet, on a four ounce basis, was a just rate for excess gas over and above all demands for other purposes, for delivery to large consumers for fuel purposes, which rates were ordered into effect within twenty days.

In justification of the lower rate accorded for industrial purposes,

*Held*, If this rate was increased, thereby compelling the consumer to use other than gas for fuel purposes, and no other consumers could be found for such excess

supply, the deficiency caused by the elimination of this revenue must necessarily be made up by other consumers.

After complete investigation upon the Commission's own initiative into the rates and charges of the Bakersfield Gas and Electric Company,

*Held*, That the rates of defendant were unjust and unreasonable, just and reasonable rates to be charged by said company for service in Bakersfield and vicinity prescribed, which included a rate of 70 cents per 1,000 for the first 3,000 cubic feet, 50 cents per 1,000 for next 7,000, 35 cents per 1,000 for next 90,000, and 25 cents per 1,000 for next 100,000, with a minimum monthly bill of 85 cents per meter, together with a rate of 8.25 cents per 1,000 cubic feet for excess gas above the total demand, delivered to the steam plant of the San Joaquin Light and Power Company, which rates were ordered into effect within twenty days.

Decision No. 1460.

Case No. 462.

*In the matter of the investigation on the Commission's own motion of the rules, regulations and practices of the Pullman Company.*

(Decided April 25, 1914.)

The Commission, upon consideration of the numerous informal complaints received, instituted upon its own motion, an investigation into the rules, regulations and practices of respondent. Various different subjects of complaint reviewed, and though no order was rendered at the time, remedies suggested, which respondent was directed to comply with and put into effect within thirty days.

*Held*, That the methods of respondent as to the reservation of berths was unjust and discriminatory, form of receipt suggested, and respondent directed to eliminate from the form of receipt submitted by it, the wording that such receipt did not guarantee a reservation.

*Held*, That the salaries paid by respondent to its employees were so low as to be nothing more than an inducement to such employees to solicit gratuities from the traveling public. Respondent directed to take such steps as found necessary to place its scale of salaries upon a living basis, thereby enabling the public to give such gratuities as it might desire in a spirit of generosity and not with a feeling of necessity, as has been the case. That if this company can not be fair and just to the public and its employees, it will be hard to expect public sentiment as expressed by this Commission, to accord to this company and to like corporations in the future, the just treatment to which they are entitled.

Decision No. 1472.

Case No. 553.

*J. H. Brockman vs. Inglewood Water Company.*

In a former order of the Commission defendant company was directed to remove certain discrimination in its rates as then effective, whereby parties having lawns were given a preferential rate over other consumers. This order was effective outside the city limits of Inglewood only, and as such a rate is still effective within such limits, defendant permitted to reestablish the "lawn rate" placing consumers on the outside of city limits on the same basis as those within.

Decision No. 1488.

Case No. 214. (Application No. 1.)

*In the matter of the application of The Atchison, Topeka and Santa Fe Railway Company (coast lines) for relief from the provisions of section 21, article XII of the constitution relating to long and short hauls and through rates exceeding the aggregate of intermediate rates.*

(Decided May 6, 1914.)

Application of The Atchison, Topeka and Santa Fe Railway Company (coast lines) to increase its one-way fares 5 cents between Los Angeles and Santa Anita, Arcadia, Monrovia, Duarte, Azusa and Glendora, so that the aggregate of the intermediate fares to and from those points would not be less than the fares between Los Angeles and San Bernardino, granted, on the grounds that the traffic between said points moved via interurban electric line, and increase was therefore immaterial.

Decision No. 1486.

Case No. 214. (Application No. 2.)

*In the matter of the application of The Atchison, Topeka and Santa Fe Railway Company (coast lines) for relief from the provisions of section 21, article XII of the constitution of California, relating to long and short hauls and through rates exceeding the aggregate of intermediate rates.*

(Decided May 6, 1914.)

Application of The Atchison, Topeka and Santa Fe Railway Company (coast lines) for general authority to continue in effect any fares in violation of the long and short haul provisions of the constitution indefinitely, denied, sufficient time having elapsed in which to have checked tariffs and to have removed such violations.

Decision No. 1487.

Case No. 214. (Application No. 3.)

*In the matter of the application of The Atchison, Topeka and Santa Fe Railway Company (coast lines) for relief from the provisions of section 21, article XII of the constitution, relating to long and short hauls and through rates exceeding the aggregate of intermediate rates.*

(Decided May 6, 1914.)

Application of The Atchison, Topeka and Santa Fe Railway Company (coast lines) to continue in effect through fares greater than the aggregate of the intermediate fares or alternately to increase its one-way fares 5 cents between San Francisco and Merced, denied.

*Held.* The provisions of section 21 of article XII of the constitution of the State of California, relating to through rates in excess of the aggregate of intermediate rates is prohibitory and the Commission is not vested with any discretionary power of its application.

Decision No. 1488.

Case No. 214. (Application No. 4.)

*In the matter of the application of The Atchison, Topeka and Santa Fe Railway Company (coast lines) for relief from the provisions of section 21, article XII of the constitution of the State of California, relating to long and short hauls and through rates exceeding the aggregate of intermediate rates.*

(Decided May 6, 1914.)

Application of The Atchison, Topeka and Santa Fe Railway Company (coast lines) for authority to charge a greater compensation as a through rate between Los Angeles, Orange and Santa Ana and San Diego and intermediate points than the aggregate of the intermediate fares, denied.

Applicant given sixty days in which to present a tariff, completely eliminating the violations of the constitutional provisions, for approval and authorization of the Commission.

Decision No. 1489.

Case No. 214. (Application No. 5.)

*In the matter of the application of The Atchison, Topeka and Santa Fe Railway Company (coast lines) for relief from the provisions of section 21, of article XII of the constitution of California, relating to long and short hauls and through rates exceeding the aggregate of intermediate rates.*

(Decided May 6, 1914.)

Application of The Atchison, Topeka and Santa Fe Railway Company (coast lines) for general authority to continue in effect "the principles, bases and adjustments upon which were constructed passenger fares and excess baggage charges," denied. The reasons submitted in justification of such a general authority not sufficient to warrant the Commission granting same, if it had the power so to do.

Decision No. 1492.

Case No. 510.

*Charles Mitchell Whitaker vs. Snowball-Sullivan Company and Palmdale Water Company.*

(Decided May 7, 1914.)

Complainant, owning certain farming property near Palmdale, Los Angeles County, petitioned the Commission to compel defendant to serve him with water for irrigation purposes.



*Held*, That complainant's property was not within the territory which defendant held itself out as serving, that defendant's supply of water was not sufficient to serve additional acreage at the time. Complaint dismissed.

Decision No. 1511.

Case No. 536.

*John Wall et al. vs. Nevada-California-Oregon Railway.*

(Decided May 16, 1914.)

Complainants alleged that the depot site of defendant at Alturas, located approximately one mile from the center of town, was inconvenient and unsatisfactory, and petitioned the Commission to direct defendant to remove said depot to a more convenient location.

*Held*, Defendant directed to submit within thirty days for the approval of the Commission, plans for the construction of a frame passenger depot at the intersection of its tracks with Modoc street, and to construct a depot in accordance with such plans ninety days after their approval. Defendant also directed within ten days to stop all of its passenger trains at site selected.

Decision No. 1512.

Case No. 524.

*Klein-Simpson Fruit Company vs. The Atchison, Topeka and Santa Fe Railway Company, and Northwestern Pacific Railroad Company.*

(Decided May 16, 1914.)

Complainant alleged that the refrigeration charge of \$35.00 per car charged by defendants on shipments of eggs in carload lots between Petaluma and Los Angeles was excessive and unreasonable.

*Held*, That the refrigeration rate was a just and reasonable rate, but that discrimination existed as against Petaluma in favor of certain eastern points, in that defendants did not permit shippers to do their own pre-icing if they so desired. Defendants directed to file within twenty days a tariff providing that shippers could furnish their own initial icing on shipments of eggs between points named, carrier to do any re-icing necessary at cost, or, if the shipper desired, to ship through without re-icing, though any loss due solely thereto to be borne by shipper.

Decision No. 1526.

Case No. 527.

*Oakland, Antioch and Eastern Railway Company vs. Northern Electric Railway Company.*

(Decided May 18, 1914.)

Above entitled proceedings being the culmination of a dispute between parties in interest as to which should bear the expense of construction of a certain crossing near the city of Sacramento.

*Held*, Interested parties directed to construct within two months a standard three-rail crossing, expense of said crossing to be shared three fourths by the Oakland, Antioch and Eastern Railway Company and one fourth by the Northern Electric Railway Company.

Decision No. 1529.

Case No. 557.

*Modesto Chamber of Commerce vs. Southern Pacific Company.*

(Decided May 18, 1914.)

Complainant alleged that the depot of defendant in the city of Modesto was inadequate in size and inconveniently situated, and petitioned the Commission to compel defendant to construct an adequate depot conveniently located upon a site selected by the Commission.

*Held*, Defendant directed to submit within sixty days for the approval of the Commission, plans for the construction of a depot to cost approximately \$15,000.00, midway between I and J streets in the city of Modesto, and to construct said depot six months after the approval of such plans.



## Decision No. 1530.

Cases Nos. 508 and 538.

*Calistoga Electric Company vs. Napa Valley Electric Company, and in the matter of the investigation into the rates of Napa Valley Electric Company for electric energy.*

(Decided May 21, 1914.)

Complainant in Case No. 508 alleged that the rates for electrical energy purchased under contract from respondent were unjust and discriminatory, and petitioned the Commission to fix a just and reasonable rate for such service; in Case No. 538 the Commission instituted upon its own initiative an investigation into the general rates of respondent then in effect.

*Held.* As stated in prior decisions, this Commission has the power to adjust existing contract rates if the contract results in discrimination. After thorough investigation, just and reasonable rates were prescribed for all classes of service furnished by respondent including a rate of 3 cents per kilowatt hour to Calistoga Electric Company, said rates to become effective June 1, 1914.

## Decision No. 1531.

Case No. 545.

*Roy Pratt et al. vs. Spring Valley Water Company.*

(Decided May 21, 1914.)

Complainants alleged that the supply of water furnished by defendant company in the district west of Twenty-third avenue in the city and county of San Francisco was insufficient and inadequate, and asked the Commission to direct the defendant company to install larger mains in order to supply more water. The defendant company question the jurisdiction of the Commission to grant the relief prayed.

*Held.* By section 23, article XII of the state constitution, the city and county of San Francisco retains the "powers of control over any public utility vested" in the city on March 23, 1912.

*Held.* After a review of the constitutional provisions and authorities, that the delegation by the state to municipalities of general power to enact police regulations, or to enact ordinances for the general welfare, does not confer upon the municipality the power to regulate rates or service, or in any other way to regulate the relationship between a utility and its customers and patrons as distinguished from the city and its inhabitants in general.

*Held.* Subsection 14, section 1, chapter 2, article II of the charter of the city and county of San Francisco, giving to the municipality the power "to prescribe the quality of the service" of water supplied within the municipality vests in the municipality jurisdiction to grant the relief sought in this proceeding.

*Held.* The Commission has no jurisdiction to grant the relief prayed, and complaint was dismissed.

## Decision No. 1532.

Case No. 562.

*In the matter of the investigation on Commission's own motion into the charge for natural gas by California Natural Gas Company to West Side Gas Company.*

(Decided May 21, 1914.)

Investigation upon the Commission's own initiative to determine a fair and reasonable rate for natural gas to be paid by the West Side Gas Company to respondent.

*Held.* That the rate of 25 cents per one thousand cubic feet for natural gas delivered by California Natural Gas Company to West Side Gas Company for distribution in the towns of Taft and Maricopa was unjust and unreasonable, and a rate of 7 cents per thousand cubic feet was determined upon as a fair and just rate for this particular service, which rate was ordered into effect within thirty days.

## Decision No. 1533.

Case No. 516.

*City of Taft vs. West Side Gas Company.*

(Decided May 21, 1914.)

Complainant alleged that the rates for natural gas as charged by defendant in the city of Taft were unreasonable, and petitioned the Commission to fix a reasonable rate for such service.

*Held.* After thorough investigation just and reasonable rates prescribed, which

included a rate of 7 cents per one thousand feet for the first five thousand cubic feet per month with a minimum monthly bill of \$1.00, which rates were ordered into effect within thirty days. Defendant also directed to file for the approval of the Commission, a plan embodying uniform deposit requirements in accordance with suggestions outlined therein.

Decision No. 1534.

Case No. 476.

*Thomas Monahan, as mayor of the city of San Jose, vs. San Jose Water Company.*  
(Decided May 22, 1914.)

Complainant alleged that rates for all classes of service as furnished by defendant in the city of San Jose were unjust and unreasonable and petitioned the Commission to fix just and reasonable rates for such service.

*Held*, That the rates of defendant in so far as they differ from the rates herein prescribed are unjust and unreasonable, which prescribed rates include an increase in the commercial rates paid by the city and a decrease in the minimum monthly rates as paid by the small consumers. Defendant directed to make all service connections and meter installations at its own expense, with certain specified exceptions, subject to the consent of the Commission.

*Held*, That though it is the desire of the Commission to encourage utilities to safeguard the purity of water used for domestic purposes, if more than one method may be pursued with equal effectiveness, it is only reasonable to require that the more economical one be followed.

*Held*, That the right to pump water, when such right does not interfere with equal rights of other property owners, can not be capitalized to a greater extent than the actual cost of such service, which amount will be fully allowed. That where land included in a watershed is essential to a water supply such land is included in the value of the water, and when the two are valued separately duplication results.

*Held*, That necessary development cost, being interest upon investment in a plant, which during its infancy can not be reasonably expected to earn a return upon such invested capital, should be allowed by a rate-fixing body, provided that such cost has not been offset by subsequent excessive earnings.

Decision No. 1548.

Case No. 514.

*Oakland, Antioch and Eastern Railway vs. Northern Electric Railway Company.*  
(Decided May 28, 1914.)

Complainant, claiming title to certain right of way and trackage thereon, petitioned the Commission for an order directing defendant to discontinue the joint use thereof.

*Held*, That the object of the complaint was merely to secure the Commission's interpretation of a certain agreement between the parties in interest, and that the Commission has no jurisdiction to interpret such contracts, except when incidental to or in connection with its established powers, and the present contract not coming within this class, the complaint was dismissed.

Decision No. 1550.

Case No. 575.

*City of Napa et al. vs. Theodore A. Bell and Napa City Water Company.*  
(Decided May 28, 1914.)

Complainants alleged that the water service as furnished by Theodore A. Bell in the Alta Heights district of Napa was inadequate and uncertain, and petitioned the Commission to compel the Napa City Water Company, serving the city of Napa, to extend its mains so as to serve this territory.

*Held*, Parties in interest reaching an agreement satisfactory to the Commission subsequent to the hearing, Napa City Water Company directed to construct an eight-inch main to connect with the system now owned by Bell, which system is to be sold to the Napa company for the sum of \$500.00, the latter company hereafter to serve this district at a minimum rate of \$1.50 per month.

Decision No. 1553.

Case No. 561.

*In the matter of the service of Tujunga Water and Power Company, investigation upon the Commission's own initiative.*

(Decided June 2, 1914.)

In view of prior formal and informal complaints against the facilities and service of respondent, the Commission instituted an investigation upon its own initiative, and respondent having fully complied with all of its promises made at a prior hearing to eliminate the deficiencies complained of, with the exception of the installation of a larger main, and it agreeing to make such installation within a reasonable time, the complaint was dismissed, with the provision that the Commission may make further changes in the rules and regulations ordered adopted by respondent, if, after a thorough trial, they prove in any way inadequate.

Decision No. 1583.

Case No. 571.

*J. J. Gill vs. San Francisco-Oakland Terminal Railways.*

(Decided June 11, 1914.)

Complainant contended that the 5-cent fare limit of defendant at Davis street in the city of San Leandro was discriminatory and should be extended to the easterly boundary of said city.

*Held.* That if the present limit was discriminatory as against such residents as live directly east, to extend the limit as proposed would likewise discriminate against the residents immediately adjoining the proposed extension. Complaint dismissed.

Decision No. 1587.

Case No. 579.

*J. D. Warren et al. vs. Murphy Water, Ice and Light Company.*

(Decided June 17, 1914.)

Complainant alleged that the service of respondent was inadequate, that its charge for tapping mains was unjust and unreasonable, and that respondent refused to extend its main to serve a number of prospective consumers.

*Held.* Respondent directed to lay mains of adequate size along certain streets and to install service connections at its own expense for residents along such mains requesting such service. Respondent also directed to extend its mains so as to serve any additional consumers not adjoining its system, who may desire service, and are willing to deposit a sum sufficient to cover cost of extension, such deposit to be returned periodically when consumption of water shall guarantee a reasonable return upon the cost of such extension.

Decision No. 1590.

Case No. 535.

*The Saratoga Improvement Association vs. The San Jose Water Company.*

(Decided June 17, 1914.)

Complainant alleged that the water service of respondent at the head of Oak street, in the city of Saratoga, was entirely inadequate and insufficient, and that the water company did not take proper steps to prevent its water from pollution.

*Held.* That the Commission has no jurisdiction over the purity of water, such jurisdiction resting with the health authorities, who have already taken steps to eliminate this portion of the complaint.

*Held.* That to compel respondent to improve its facilities at its own expense so as properly to serve the few consumers now inadequately supplied would be unjust. Parties interested directed to confer with a view to agreeing upon the division of expenses covering the cost of a tank and pumping facilities adequately to supply these consumers, and if, after thirty days, such an agreement could not be reached, the Commission would make a further order directing such adjustments as might appear justified.



## Decision No. 1600.

Case No. 378.

*Quincy Chamber of Commerce vs. Western Union Telegraph Company.*

(Decided June 22, 1914.)

Complainants, alleging that the service of defendant in the town of Quincy was inadequate, petitioned the Commission to compel defendant to establish an agent at that point, which, owing to the limited amount of business, the Commission did not deem advisable.

*Held*, That defendant has improved its facilities so as adequately to serve this town. Complaint dismissed.

## Decision No. 1601.

Case No. 489.

*Gem City Packing Company vs. San Jose Water Company.*

(Decided June 22, 1914.)

Complainants petitioned the Commission to compel defendant to build an extension from its present system in the town of Los Gatos to the packing plant of complainant. Owing to distance of proposed extension, the Commission directed the parties interested to agree upon a division of cost, which they were unable to do.

*Held*, Defendant directed to construct an extension to a point 2,000 feet beyond the corporate limits of Los Gatos and install a meter and service connection for complainant, such installation to be ready for service on or before July 15, 1914.

## Decision No. 1603.

Case No. 194.

*In the matter of ascertaining the value of the property of the South San Francisco Belt Railway.*

(Decided June 22, 1914.)

Proceeding on motion of Commission to ascertain various elements entering into the value of respondent's property.

**FINDINGS OF FACT:** (1) That the reproduction value of the operative physical property of respondent as of June 30, 1913, is the sum of \$69,064.42. (2) That the present value of the operative physical property of respondent as of June 30, 1913, is the sum of \$56,208.08. (See engineer's valuation tables.)

## Decision No. 1610.

Case No. 616.

*Fourth Street District Improvement Club vs. Southern Pacific Company.*

(Decided June 24, 1914.)

Complainant alleged that the proposed new depot to be constructed by defendant at its present terminal at Third and Townsend streets will be inadequate properly to serve the needs of its patrons, is not properly situated, and, if constructed, trains will block Fourth street.

*Held*, That the plans submitted by defendant and as approved by the board of supervisors of San Francisco are far more suitable properly and adequately to serve the needs of its patrons than the plans submitted by complainant. Complaint dismissed.

## Decision No. 1612.

Case No. 603.

*Reedley Telephone Company vs. L. O. Clough et al.*

(Decided June 26, 1914.)

Complainant telephone company alleged that the telephone connection of defendant Clough is situated within the city limits of Reedley, within the exchange radius, and should be required to pay the regular rates for such service though connected with a farmer line.

*Held*, That the connection of L. O. Clough is situated within the regular exchange radius and receiving such service, and should be required to pay the regular monthly rate of \$1.50.



Decision No. 1614.

Case No. 601.

*W. S. Van Sciever vs. The Ocean Park Heights Land and Water Company et al.*  
(Decided June 27, 1914.)

Complainants alleged that the water system of defendant serving the residents of Ocean Park Heights was inadequate and insufficient properly to serve this territory.

*Held*, Defendant and parties interested showing a mutual desire to cooperate in improving and bettering this system so as to enable it to give proper and adequate service. Order suspended.

Decision No. 1618.

Case No. 524.

*Klein-Simpson Fruit Company vs. The Atchison, Topeka and Santa Fe Railway Company, Santa Fe Refrigerator Dispatch Company, and Northwestern Pacific Railroad Company.*

(Decided June 29, 1914.)

Supplemental order amending the original order in above entitled case so as to provide a re-icing charge on egg shipments from Petaluma to Los Angeles of not to exceed \$3.50 at Stockton, \$3.50 at Bakersfield, and \$6.00 per ton at Barstow. When initial icing is done by shipper, cars must be iced to capacity, if carriers are directed to re-ice in transit.

Decision No. 1619.

Case No. 327.

*In the matter of ascertaining the value of the property of Santa Maria Valley Railroad Company.*

(Decided June 29, 1914.)

Proceeding on Commission's own motion to determine the various elements entering into the value of respondent's property.

**FINDINGS OF FACT:** (1) The original cost of the operative physical property of respondent as of June 30, 1912, is the sum of \$234,956.11. (2) The reproduction value of the operative physical property of respondent as of June 30, 1912, is the sum of \$232,150.98. (3) The present value of the operative physical property of respondent as of June 30, 1912, is the sum of \$216,509.07. (See engineer's valuation tables.)

Decision No. 1620.

Case No. 180.

*In the matter of ascertaining the value of the property of the Ocean Shore Railroad Company.*

(Decided June 29, 1914.)

Proceeding on Commission's own motion to determine the various elements entering into the value of respondent's property. General history of respondent reviewed, revealing an enormous waste in connection with the construction of this property.

**FINDINGS OF FACT:** (1) That the original cost of the operative physical property of respondent as of June 30, 1912, is the sum of \$5,373,667.84. (2) That the reproduction value of the operative physical property of respondent as of June 30, 1912, is the sum of \$4,812,083.79. (3) That the present value of the operative physical property of respondent as of June 30, 1912, is the sum of \$4,627,319.40. (4) That the total cost of the non-productive property of respondent is the sum of \$507,889.97. (See engineer's valuation tables.)

Decision No. 1628.

Case No. 586.

*F. E. Seaman et al. vs. Mount Whitney Power and Electric Company.*

(Decided June 29, 1914.)

Complainants, upon the expiration of their five-year contract with defendant company, declined to enter into another five-year contract and protested the payment of a \$90.00 per horsepower per year non-contract rate.

Defendant agreeing to the insertion of a clause permitting a yearly extension of its five-year contracts at the regular contract rate—which agreement was satisfactory to complainants—the complaint was dismissed.

## Decision No. 1630.

Case No. 499.

*City of Monterey vs. Coast Valleys Gas and Electric Company.*

(Decided June 30, 1914.)

Complainant alleged that the rates for gas service in the city of Monterey were unjust and unreasonable and petitioned the Commission to establish reasonable rates for such service.

*Held.* After thorough investigation, defendant was directed to publish and place in effect, within twenty days, a rate of \$1.30 per thousand cubic feet for first 5,000 cubic feet and \$1.00 per thousand cubic feet for all amounts in excess of 5,000 cubic feet per month through a single meter, with a minimum charge of 60 cents per month. Gas to have an average heating value of not less than 600 British thermal units per cubic foot.

*Held.* That the occasion of early losses in the operation of a utility can not tend to make such property more valuable, although it does make it more costly; that such losses might be considered, on grounds of equity, in reaching a value for rate fixing purposes, though the practice of utilities in submitting grossly exaggerated values in the hope that the Commission will "split the difference" does not tend to secure to the utility such just consideration.

*Held.* That the element of hazard, when taken in connection with the establishment of a basis covering "cost of money" invested in a public utility of this character, should be considered in connection with the protection from competition given such utility by the state, through this Commission.

## Decision No. 1635.

Case No. 558.

*L. E. Cole et al. vs. South Feather Land and Water Company.*

(Decided June 30, 1914.)

Complainants alleged that defendant's rates for water for irrigation purposes were unjust and unreasonable, that proposed consumers were obliged to pay for water right, that the supply was inadequate and that certain consumers previously served had been cut off and refused service by defendant.

*Held.* Defendant directed to publish and place in effect July 1, 1914, a rate of \$15.00 per miner's inch per annum for all water contracted for or reserved, whether actually used or not, with an additional charge of 10 cents per miner's inch per twenty-four hours for water actually delivered to consumers for use. Defendant also directed to file for the approval of the Commission rules and regulations prescribing the time of payment, as directed herein, and to make same effective for the irrigating season of 1914.

*Held.* That the purchaser of a utility can not acquire same and discontinue service to all unprofitable consumers who have previously enjoyed service. Defendant directed to deliver water, at its own expense, to former consumers of its system who had been denied service, if such consumers should demand water and agree to pay the regular rates herein established. Complaint in all other respects dismissed.

## Decision No. 1637.

Case No. 600.

*Garnett A. Joslin vs. Southern Pacific Company.*

(Decided June 30, 1914.)

Complainant alleged that defendant, owning a spur track leading off its main line between tunnels Nos. 7 and 8, on the coast division, refused to operate said spur so as to serve complainant's quarry situated thereon.

*Held.* That to serve the spur in question, freight engines, while they picked up and set out cars, would be required to leave their trains unprotected upon the main line of a heavy grade, and at times, partly within one of the tunnels, which would make the operation of this particular piece of road extremely dangerous. Complaint dismissed.

During the fiscal year covered by this report a considerable number of formal complaints filed, having been satisfied or adjusted in a manner agreeable to all interested parties without the necessity of a formal order and in most cases without the necessity of a hearing, were there-

upon dismissed. The following is a list of formal matters handled in this manner, effecting a considerable saving in time and money to interested parties and the Commission alike, also several complaints over the subject of which this Commission's jurisdiction did not extend:

Case No. 367.

*California Pine Box and Lumber Company vs. Southern Pacific Company.*  
(Dismissed July 19, 1913.)

Case No. 395.

*Palo Alto Gas Company vs. Pacific Gas and Electric Company.*  
(Dismissed July 19, 1913.)

Case No. 403.

*Teralta Heights Improvement Association vs. The Pacific Building Company.*  
(Dismissed July 23, 1913.)

Case No. 420.

*Associated Chambers of Commerce of Orange County vs. Pacific Electric Railway.*  
(Dismissed July 29, 1913.)

Case No. 343.

*Fellows Chamber of Commerce vs. Atchison, Topeka and Santa Fe Railway.*  
(Dismissed July 29, 1913.)

Case No. 391.

*Frazier M. Sallee vs. Southwestern Home Telephone and Telegraph Company and The Pacific Telephone and Telegraph Company.*  
(Dismissed September 11, 1913.)

Case No. 443.

*John W. Reese vs. The Southwestern Home Telephone and Telegraph Company, The Pacific Telephone and Telegraph Company and United States Long Distance Telephone and Telegraph Company.*  
(Dismissed September 11, 1913.)

Case No. 428.

*J. A. Hoag vs. Southwestern Home Telephone and Telegraph Company, The Pacific Telephone and Telegraph Company and The United States Long Distance Telephone and Telegraph Company.*  
(Dismissed September 11, 1913.)

Case No. 421.

*City of Tulare vs. Southern Pacific Company and The Atchison, Topeka and Santa Fe Railway Company.*  
(Dismissed September 15, 1913.)

Case No. 448.

*Chamber of Commerce of Redlands vs. The Pacific Telephone and Telegraph Company.*  
(Dismissed October 25, 1913.)

Case No. 368.

*City of Petaluma vs. The Petaluma Power and Water Company.*  
(Dismissed November 5, 1913.)

Case No. 474.

*Pacific Telephone Herald Company vs. The Pacific Telephone and Telegraph Company.*  
(Dismissed November 18, 1913.)

Case No. 443.

*Tideewater Southern Railway Company vs. Transcontinental Scrip Bureau.*

(Dismissed November 21, 1913.)

Case No. 449.

*Klein-Simpson Fruit Company vs. The Atchison, Topeka and Santa Fe Railway Company.*

(Dismissed December 18, 1913.)

Case No. 415.

*W. F. Crocker and Warren Crocker vs. Southern Pacific Company.*

(Dismissed January 3, 1914.)

Case No. 459.

*Los Angeles Rate Association vs. Pacific Electric Railway Company et al.*

(Dismissed January 14, 1914.)

Case No. 506.

*H. F. Seiler et al. vs. San Francisco-Oakland Terminal Railways.*

(Dismissed January 17, 1914.)

Case No. 355.

*F. K. Weeks et al. vs. California Development Company and W. H. Holubird, Receiver.*

(Dismissed January 22, 1914.)

Case No. 296.

*Charles F. Fleming vs. Peninsular Railway Company.*

(Dismissed January 28, 1914.)

Case No. 525.

*Ed. P. Reed vs. Pacific Electric Railway Company.*

(Dismissed February 6, 1914.)

Case No. 518.

*Mark W. Baker et al. vs. Southern Pacific Company.*

(Dismissed March 13, 1914.)

Case No. 438.

*Southwestern Home Telephone Company vs. The Southern Sierras Power Company.*

(Dismissed March 19, 1914.)

Case No. 529.

*State Commission in Lunacy vs. The Atchison, Topeka and Santa Fe Railway.*

(Dismissed April 9, 1914.)

Case No. 585.

*Charles W. Paine et al. vs. Southern California Gas Company.*

(Dismissed April 25, 1914.)

Case No. 532.

*Benjamin W. Fenton vs. Wells Fargo & Company Express.*

(Dismissed May 1, 1914.)

Case No. 491.

*Florence Locke vs. Bolinas Water and Power Company.*

(Dismissed May 7, 1914.)

Case No. 520.

*City of Crescent City vs. The Crescent City Light, Water and Power Company et al.*

(Dismissed May 12, 1914.)



Case No. 572.

*Inghram Hughes vs. The Union Water Company of California.*

(Dismissed May 18, 1914.)

Case No. 577.

*Reclamation District No. 551 vs. Great Western Power Company.*

(Dismissed June 2, 1914.)

Case No. 542.

*City of Piedmont vs. San Francisco-Oakland Terminal Railways.*

(Dismissed June 29, 1914.)

## MISCELLANEOUS APPLICATIONS.

The following miscellaneous applications, not covered by any particular department, were filed and decided during the fiscal year covered by this report:

Application No. 682.

*(Decided August 30, 1913.)*

In the matter of the application of Atchison, Topeka and Santa Fe Railway Company to discontinue service between Barnwell and Ivanpah, California.

In view of the fact that the Salt Lake Railroad amply serves the territory covered by the line proposed to be abandoned, and applicant receives practically no revenue whatever therefrom, application granted.

Application No. 758.

*(Decided October 16, 1913.)*

In the matter of the application of Pacific Electric Railway Company for permission to operate and maintain two certain wharves in the waters of the Pacific Ocean, at Redondo Beach, California.

Application granted.

Application No. 759.

In the matter of the application of Southern Pacific Company to abandon its agency station at Brookdale during winter months.

Application granted informally.

Application No. 782.

*(Decided December 18, 1913.)*

In the matter of the application of the Southern Pacific Company to make certain temporary changes in its station facilities at Dutch Flat, California.

*Held.* That the temporary abandonment of this station was not warranted and the application was denied.

Application No. 784.

*(Decided October 17, 1913.)*

In the matter of the application of Frank Jackson and Ida H. Jackson for regulation of the use of water.

Applicant permitted to collect in advance the minimum monthly rate for water service from each of two consumers upon a single service connection.

Application No. 793.

*(Decided November 25, 1913.)*

In the matter of the application of Southern Pacific Company for approval of plans and specifications covering the construction of a new passenger station at Los Angeles.

Applicant authorized to tear down and abandon its present passenger depot in the city of Los Angeles and to erect a new depot in lieu thereof and to take up and relocate such trackage as is necessary in connection therewith.

Application No. 805.

*(Decided October 29, 1913.)*

In the matter of the application of Ventura County Railway Company for permission to lease to the Southern Pacific Company the right to operate engines and trains over its "Y" tracks at Oxnard, California.

Application granted.

Application No. 822.

*(Decided March 11, 1914.)*

In the matter of the application of Klamath Lake Railroad Company for an order determining its income insufficient to operate its road and for leave to abandon operations.

The several industrial concerns supporting applicant's line having discontinued business, application granted.

## Application No. 841.

*(Decided December 13, 1913.)*

In the matter of the application of the Boea and Loyalton Railway Company for an order exempting it from complying with the provisions of the headlight law.

*Held.* That as all of applicant's trains, with the exception of one during the winter months, operate wholly during the hours of daylight, application granted.

## Application No. 842.

*(Decided December 13, 1913.)*

In the matter of the application of the Western Pacific Railway Company for an order extending time in which to comply with the provisions of the headlight law.

Applicant granted an extension of thirty days.

## Application No. 843.

*(Decided March 23, 1914.)*

In the matter of the application of the city of Eureka to fix compensation to be paid for the water system owned by Eureka Water Company.

This was the first application made under the amended section of the Public Utilities Act empowering the Commission to fix valuations of utilities desired to be purchased by a municipality, and in which proceeding the Commission gave thorough consideration to the various elements entering into the valuations of utilities in condemnation proceedings, including a review of the various theories as regards the proper amounts to be apportioned under water rights in proceedings of this nature. The Commission, with reference to this matter, said, in part, relative to the market value theory in condemnation proceedings:

"That this theory may properly be followed in cases of this nature if the utility property is regarded as an entity and not divided into all its separate elements."

And as regards the value of water rights, the Commission said:

"That though the question of placing a value upon water rights is not a question in the present case, owing to previous agreement, in the final determination of this question, the Commission will not consider 'the additional cost of the next available source of supply theory.'"

In conclusion, the sum of \$270,000 was fixed as the proper amount to be paid by the city of Eureka for this utility.

## Application No. 880.

*(Decided January 30, 1914.)*

In the matter of the application of Southern Pacific Company for additional time in which to comply with the provisions of the headlight law.

Applicant granted an extension until May 1, 1914, at which time if sufficient showing should be made, an additional extension would be granted.

## Application No. 936.

*(Decided May 18, 1914.)*

In the matter of the application of the city of Glendale to fix the valuations on certain water systems in said city.

After investigation, the Commission determined upon the following findings of fact:

(1) That the fair compensation to be paid by the city of Glendale for the Glendale Consolidated Water Company, including certain water stock owned by said company, is the sum of \$69,782.66;

(2) For the system and water stock owned by the Verdugo Springs Water Company, the sum of \$50,292.00;

(3) For the system and water stock owned by the Miradero Water Company, the sum of \$24,919.00;

(4) For the system of the Verdugo Pipe and Reservoir Company, the sum of \$14,241.00.

## Application No. 898.

*(Decided January 20, 1914.)*

In the matter of the application of the Catalina Island Company for permission to discontinue service of electricity in the city of Avalon during certain hours.

Application dismissed at request of applicant.

## Application No. 910.

*(Decided February 17, 1914.)*

In the matter of the application of the Point Loma Railway Company for permission to reduce service.

Application for a vacation of the Commission's order in Case No. 402, requiring the maintenance of a twenty-minute schedule between San Diego and Point Loma and Ocean Park.

Application denied.

## Application No. 915.

*(Decided January 15, 1914.)*

In the matter of the application of Northwestern Pacific Railroad Company for an extension of time in which to comply with the provisions of the headlight law.

Applicant granted an extension of time to and including April 4, 1914.

## Application No. 957.

*(Decided February 9, 1914.)*

In the matter of the application of Los Angeles and San Diego Beach Railway Company for permission to move agency and freight and passenger station from present terminal grounds.

Applicant permitted to move its depot to a site approximately three blocks north of its present location.

## Application No. 961.

In the matter of the application of the Northern Electric Railway Company for permission temporarily to discontinue the operation of its Hamilton Branch, being a part of its railroad between Chico and Hamilton, California.

Decision pending.

## Application No. 975.

*(Decided February 27, 1914.)*

In the matter of the application of the Quincy Western Railroad Company for an order exempting it from complying with the provisions of the headlight law.

In consideration of the fact that applicant operates only two trains daily, neither of which is operated after sundown, application granted.

## Application No. 988.

In the matter of the application of the Klamath Telephone and Telegraph Company for a dissolution of such corporation.

In suspense.

## Application No. 993.

*(Decided March 23, 1914.)*

In the matter of the application of Hermosa Beach Water Company to withdraw from the territory embraced within the limits of the city of Manhattan Beach.

Application to withdraw held in abeyance until April 15, 1914, during which time the Commission suggested that applicant and protestant, city of Manhattan Beach, attempt to reach an amicable adjustment of their difficulties, and if such impossible, an order will be made directing such adjustment as seems proper to the Commission.

Stipulations filed and decision suspended.

## Application No. 1027.

*(Decided April 17, 1914.)*

In the matter of the application of Southern Pacific Company to move its station at New England Mills and to abandon the agency at that point.

Applicant granted permission to remove its station to a point approximately 2,000 feet east and to abandon its agency, provided that it make provisions to establish a temporary agency during the months of August, September and October of each year adequately to handle fruit shipments made during this period.

## Application No. 1066.

*(Decided June 24, 1914.)*

In the matter of the application of the Nevada-California-Oregon Railway for an order exempting it from compliance with the provisions of the headlight law.

Application for exemption from the provisions of the headlight law denied. Appli-



cant granted an extension of sixty days within which to comply with the provisions thereof.

Application No. 1086.

*(Decided June 17, 1914.)*

In the matter of the application of the Board of Trade of Turlock for a new depot at Turlock, to compel the stopping of train No. 50 and for the installation of gates at certain street crossings.

Southern Pacific Company directed to file, within sixty days, for the approval of the Commission, plans for a passenger depot to be constructed at Turlock to cost not less than \$10,000, and to construct said depot six months after the approval of said plans, provided the city of Turlock shall acquire a certain strip of property adjoining the proposed new depot, remove the present structures thereon and park same. Respondent also directed to remove a certain siding, crossing Main street, and to separate its passenger from its freight depot. Petition to compel the stopping of train No. 50 dismissed.

Application No. 1111.

In the matter of the application of Southern Pacific Company to discontinue agency station at Mt. Hebron, California.

Decision pending.

Application No. 1115.

*(Decided June 5, 1914.)*

In the matter of the application of the Sacramento and Woodland Railway Company and the Northern Electric Railway Company for the approval of an agreement whereby the latter road will operate its trains over the tracks of the Sacramento and Woodland Railway Company.

Application granted provided that the Commission reserves the right to alter or amend such agreement at any time it may deem such action necessary.

Application No. 1141.

In the matter of the application of the Marin Municipal Water District for an ascertainment of the value of the property of the Marin Water and Power Company.

Matter pending.

Application No. 1148.

In the matter of the application of the Board of Trustees of the city of Fort Bragg for an ascertainment of the value of the water system owned by H. F. Miliken and the Fort Bragg Water Company.

Matter pending.

Application No. 1154.

In the matter of the application of the Marin Municipal Water District for an ascertainment of the value of the property of the North Coast Water Company.

Matter pending.

## INFORMAL PASSENGER COMPLAINTS.

### ASTRAY BAGGAGE.

I. C. 1644.

July 4, 1913.

J. J. Bodinson of Montesano wrote the Commission with reference to some baggage checked from Alameda to Montesano, which had gone astray.

The Commission took the matter up by telephone, located the baggage, and had it forwarded to its destination.

### CHECKING OF BAGGAGE.

I. C. 1650.

July 3, 1913.

Hans Wietrich, Berkeley, wrote the Commission with reference to checking of baggage by the San Francisco and Portland Steamship Company from San Francisco to Portland, Oregon.

The matter was one over which the Commission had no jurisdiction and complainant was advised to communicate with the Interstate Commerce Commission, Washington, D. C.

### STAGE TICKET.

I. C. 1651.

June 29, 1913.

The National Retail System, San Francisco, wrote the Commission making a complaint against the stage line operating between Oroville and Woodleaf, on the grounds that they sold him a round-trip ticket, which ticket was only used in one direction, and declined to make any adjustment of the unused portion of the ticket.

The Commission took the matter up informally, but was unable to secure any satisfaction and as stage lines are not under the jurisdiction of this Commission, complainant was notified that it would be necessary to secure redress in the courts.

### LOST COMMUTATION TICKET.

I. C. 1657.

July 15, 1913.

Charles R. Boatright of San Francisco wrote the Commission advising that he had purchased a commutation ticket for use between San Francisco and East Oakland and had lost the same after only a few rides had been used from the book. He endeavored to secure a refund from the Southern Pacific Company, but was unable to do so.

The ticket was of such form that it could be used by any one who presented it, and as the rules provided refund only upon surrender of ticket, complainant was notified that no refund could be secured unless the ticket was found.

### COMMUTATION FARES.

I. C. 1669.

July 7, 1913.

Mrs. M. A. Ripley, Richmond, entered a complaint alleging that the commutation fares between Richmond, Crockett, and Martinez were excessive.

The complaint was taken up with the passenger traffic manager of the Southern Pacific Company, who maintained that the charges as assessed were reasonable and refused to make any informal adjustment. Complainant was advised that it would be necessary to file formal proceedings if she desired to carry the matter further. This, however, was not done.

### PASSENGER FARES.

I. C. 1733.

July 19, 1913.

Robert W. Lambley of Benicia complained because the Southern Pacific Company refused to accept a continuous-trip ticket for passage from Martinez to Benicia.

It was found that the ticket was limited to one day after date of sale and had not been presented in accordance with the conditions printed on the ticket.

The complainant was advised that he was entitled to a refund for the unused ticket, but the transportation company could not accept same for the trip for which it was originally purchased.

### PASSENGER FARES—ROUND TRIP.

I. C. 1790.

August 1, 1913.

Philip Becher, Taft, entered a complaint with the Commission alleging that stations on the Sunset Railway were discriminated against as no round-trip tickets were on sale to certain points on the Santa Fe line.

The railway company stated that the Sunset Railway were granted the same round-trip rates as authorized to similar points on the Santa Fe, and declined to

make any informal adjustment. Complainant was notified that it would be necessary to file a formal complaint should he desire to continue the matter further. This was not done.

## CHARGE FOR LOST BAGGAGE CHECK.

I. C. 1791.

August 1, 1913.

J. F. Galvin of Richmond entered a complaint against the payment of 50 cents for the loss of a paper baggage check. The charge was in conformity with the tariffs on file with the Commission, and the Southern Pacific Company maintained the practice was reasonable and declined to make any informal adjustment. Complainant was therefore notified that if he desired to follow the matter to a conclusion it would be necessary to file formal complaint.

## PASSENGER COMMUTATION TICKET.

I. C. 1800.

July 24, 1913.

J. M. Gilman, San Francisco, entered protest with the Commission alleging that commutation fares between San Francisco and Concord were excessive when compared with the rates between San Francisco and Burton, both points located on the Oakland, Antioch and Eastern Railway.

The railway company declined to reduce the rates to Concord, but did reduce the commutation rate between San Francisco and Burton from \$8.60 to \$8.15.

## COMMUTATION TICKETS.

I. C. 1800.

August 2, 1913.

J. M. Gilman of San Francisco wrote to this office asking information with reference to the unused portion of a commutation ticket reading between San Francisco and Concord.

Complainant was advised that no refund was due on the ticket for the reason that transportation actually used was of a greater value than would have been paid had same been purchased at regular rates.

## STOCKDROVER RETURNING.

I. C. 1803.

April 4, 1913.

The Sisquoc Investment Company, Santa Barbara, wrote the Commission with reference to the refusal of an agent of the Southern Pacific Company to furnish free return transportation for a stockdrover who accompanied a trainload of cattle from Santa Barbara to Gilroy.

The rules of the transportation company provide that a stock drover must secure return transportation within seven days after the cattle reach their destination, and as this was not done, the agent at Gilroy was acting in conformity with published tariffs when he refused to issue free return transportation.

## ROUND-TRIP PASSENGER FARE.

I. C. 1808.

August 2, 1913.

C. F. Gilmore, Escondido, entered a complaint against the Atchison, Topeka and Santa Fe Railway, alleging that round-trip fares from Escondido to Los Angeles, and return, being higher than those from Los Angeles to Escondido and return, were excessive.

The matter was taken up with the Santa Fe whose passenger department explained that the volume of traffic was from Los Angeles to Escondido, and declined to make any informal adjustment.

Mr. Gilmore was advised that if he desired to carry the matter to a conclusion, it would be necessary to file formal proceedings. This has not been done.

## PILFERAGE OF SUIT CASE.

I. C. 1815.

August 6, 1913.

C. S. G. Nagel, San Francisco, called at this office and entered a complaint against the Northwestern Pacific with reference to the pilferage of a suit case. It was found upon investigation that the suit case was turned over to a transfer company, and through some misunderstanding was placed in a baggage car of the Atchison, Topeka and Santa Fe, went to Chicago and returned from that point. During the time it was astray it was pilfered and goods to the value of \$67.50 stolen.

The Commission endeavored to secure a settlement but without success, and as it has no jurisdiction over loss and damage claims, complainant was notified that it would be necessary to take the matter into the proper civil courts for adjustment.



## PASSENGER FARES.

I. C. 1816.

January 11, 1913.

H. F. W. Helms, secretary of a Citizens' Committee representing the city of San Leandro, presented a petition to the Commission asking that the 5 cent fare of the San Francisco-Oakland Terminal Railways be extended from its present terminus at Davis street, in the center of San Leandro, to the eastern limits of San Leandro, a distance of some six or eight blocks.

The Commission was unable to secure any informal adjustment and the controversy came to an issue in Case 571. The Commission, in this decision, No. 1583, failed to find any justification for extending the fare limits, and denied the application.

## REFUND COMMUTATION TICKETS.

I. C. 1818.

August 6, 1913.

Chas. S. Fee, passenger traffic manager of the Southern Pacific Company, forwarded to this office some papers in a claim for refunds on commutation tickets purchased during the month of July for use between San Francisco and San Mateo.

This office made a check of the situation, and found that under the tariffs in effect no refunds could be granted for the unused portions of the books.

## PASSENGER FARES.

I. C. 1822.

August 4, 1914.

W. G. Martin, acting as secretary for the Jefferson Improvement Association, filed a complaint with the Commission against the Los Angeles Railway, alleging that the single fare of 15 cents, the 30-ride family ticket of \$3.30 and 52-ride commutation ticket of \$4.60, between Los Angeles and Lennox, were unreasonable and excessive.

The complaint was taken up informally with the traffic department of the railway company who declined to make any adjustment. Complainant was notified that it would be necessary to file formal proceedings. This was done, and an order issued in decision No. 1399 reducing the 30-ride family ticket to \$2.25; other rates not changed.

## COMMUTATION TICKETS.

I. C. 1831.

August 12, 1913.

David T. Babcock of San Francisco wrote the Commission and complained of the action of the Southern Pacific Company in restricting the use of 20-ride tickets within the city of Berkeley. The passenger traffic manager of the Southern Pacific Company advised that tickets were of special form limited only to points between Alcatraz and Vine streets, to comply with franchise provision and were never intended to cover the entire city of Berkeley. No informal adjustment was offered, and complainant was accordingly notified that it would be necessary to file formal proceedings should he care to bring the matter to a definite conclusion. This, however, was not done.

## CHILDREN'S COMMUTATION TICKETS.

I. C. 1835.

August 5, 1913.

E. R. Samuels, Novato, wrote the Commission complaining that the children's commutation fare of \$5.00 between San Rafael and Novato was excessive and unreasonable.

Complainant was advised that the Northwestern Pacific Railroad Company had, in Case No. 333, been ordered by this Commission to readjust its passenger fares, and that they would make a reduction in fare complained of when new tariff was published.

## USE OF SCRIP BOOK ON ELECTRIC LINES.

I. C. 1848.

August 8, 1913.

Byron A. Bearce, president of the Tidewater Southern Railway Company, Stockton, wrote this office with reference to the practice of the Transcontinental Scrip Bureau in refusing to permit electric lines to become members of that association, which prevented the electric lines from securing business from people who travel on scrip transportation.

Complainant was advised that the matter had never been brought before the Commission on formal proceedings, and therefore no action had been taken. It was suggested that a formal complaint be filed in order to bring the matter to a definite conclusion.



## PASSENGER FARES.

I. C. 1854.

August 13, 1913.

A. W. Smith, Oakland, entered a complaint against the Southern Pacific Company alleging that the single fare and commutation rate between San Francisco and Seminary Avenue were excessive and unreasonable.

The Commission adjusted the rates complained of in decision rendered October 28th, Case No. 396, wherein it ordered the single fare reduced from 15 cents to 10 cents and the commutation fare from \$4.50 to \$3.00.

## PASSENGER TRAIN SERVICE.

I. C. 1862.

August 1, 1913.

R. H. McKaig, San Francisco, filed a complaint against the Boca and Loyalton Railway because that company failed to operate its passenger train on schedule time, thus making it necessary to go to the expense of hiring an automobile to take him to a connecting point on the Western Pacific Railway.

The matter was taken up informally and satisfactory settlement was arranged.

## PASSENGER FARES.

I. C. 1863.

August 10, 1913.

E. E. Preston, Pasadena, wrote this office alleging that certain passenger fares between local points on the Pacific Electric Railway in combination made lower rates than the published through rates, and were therefore in violation of the Public Utilities Act.

A check of the tariffs disclosed the fact that Mr. Preston's rates were in error, and that there are no violations between points referred to.

## REFUND FOR UNUSED TICKET.

I. C. 1874.

August 15, 1913.

The Arizona Corporation Commission of Arizona submitted to the Commission the unused portion of a round-trip ticket sold at Los Angeles to Reno and return, and requested that proper refund be secured. Voucher was secured from the Southern Pacific Company in the sum of \$5.20 being the difference between the amount paid for the round-trip ticket and what the passenger would have paid for transportation actually used.

## PASSENGER FARES.

I. C. 1878.

September 12, 1913.

The Southern Pacific Company requested permission to refund \$3.20 against four tickets sold from Haywards to Diamond Springs via Niles.

It was found, upon checking the tariffs, that the through rates were in excess of the combination of local rates and were therefore in violation of the constitution and of the Public Utilities Act.

The Southern Pacific Company refunded the overcharges and at once made arrangements to republish its tariffs in order to correct rates which were in violation of the law.

## REFUND—PASSENGER FARES.

I. C. 1890.

August 18, 1913.

The passenger traffic manager of the Southern Pacific Company requested authority to refund overcharges paid by Mr. Barclay, in connection with round-trip from Los Angeles to Imperial Valley, account Chamber of Commerce excursion.

After investigation the Commission authorized the Southern Pacific Company to refund the excess fare collected, amounting to \$4.85.

## PASSENGER FARES.

I. C. 1896.

August 19, 1913.

Arthur R. Whitney, Pasadena, complained against the passenger fares, single and round-trip, between Altadena and Rubio Canyon, as being excessive.

The Pacific Electric Railway Company in its explanation alleged that the 1½ miles of track from Altadena to Rubio Canyon was constructed at a great expense to enable people to visit Mt. Lowe, and that the line was used for sight-seeing and pleasure only. No informal adjustment of the rate was offered, and complainant was advised that formal proceedings would be necessary if he desired to carry the matter to a conclusion.

## COMMUTATION TICKETS.

I. C. 1927.

August 25, 1913.

*Chas. R. Woodward vs. Los Angeles and San Diego Beach Railway Company.*  
Chas. R. Woodward of Pacific Beach entered complaint against the Los Angeles and San Diego Beach Railway Company, alleging that certain privileges, in con-

nection with 30-ride family commutation tickets and 60-ride children's tickets, were being denied to purchasers of the same.

Investigation developed the fact that, while formerly conductors extended certain privileges not authorized in the tariffs, this practice had been discontinued and the published tariffs of the railway company were being strictly adhered to.

#### COMMUTATION TICKET PUNCHED IN ERROR.

I. C. 1936.

August 28, 1913.

T. C. Peck, general passenger agent of the San Pedro, Los Angeles and Salt Lake Railroad Company, wrote the Commission requesting permission to make a satisfactory adjustment in connection with a 25-ride family commutation ticket applying between Riverside and Los Angeles, not used within the regular time limit, for the reason that the selling agent neglected to punch the date of expiration in the margin of the ticket.

Authority to make refund was granted.

#### PULLMAN FARES.

I. C. 1937.

August 29, 1913.

C. F. Wieland, San Francisco, made a complaint against the Pullman fares between Los Angeles and San Diego. After some correspondence with the Pullman Palace Car Company they agreed to informally reduce the fare from \$2.00 to \$1.50.

#### TRAIN FARES.

I. C. 1945.

September 1, 1913.

A. F. Moradyan of Sanger wrote this office asking for information with reference to the authority of conductors to collect train fares in excess of the ticket rate shown in tariffs from agency stations.

Complainant was advised that it was lawful for the conductor to collect train fares in excess of the ticket rates when passengers boarded trains at stations where tickets could have been procured.

#### PASSENGER FARES.

I. C. 1954.

August 29, 1913.

Frank W. Warren, San Francisco, wrote the Commission stating that he had purchased a limited ticket from Redwood City to San Mateo, June 30th and that same was refused by conductor when presented for transportation on August 13th.

Complainant was advised that the ticket in question was limited to one day after date of sale, and that the refusal of conductor to accept same after it had expired was in conformity with rules and regulations contained in passenger tariff.

#### REPARATION—PASSENGER FARE.

I. C. 1966.

September 4, 1913.

Chas. S. Fee, passenger traffic manager, Southern Pacific Company, San Francisco, asked authority of the Commission to adjust a claim filed by F. R. Dutton, who purchased a ticket from San Francisco to Riverside and return but was unable to take the trip to the Riverside office for validation.

Authority was issued for the proper adjustment of the claim.

#### BAGGAGE—INTERSTATE.

I. C. 1970.

September 4, 1913.

Miss Sue Rowden, Porterville, made a complaint alleging that the charges assessed for the transportation of some excess baggage from Chattanooga, Tenn., to Porterville, were excessive.

Complainant was referred to the Interstate Commerce Commission, Washington, D. C., as the matter complained of was not under the jurisdiction of this Commission.

#### ROUND-TRIP TICKETS—INTERURBAN CARS.

I. C. 1971.

September 5, 1913.

R. T. Baxter, Los Angeles, called the Commission's attention to the fact that conductors on Pacific Electric Railway cars refused to sell special excursion tickets to the Beach resorts. The matter was taken up informally with the traffic department of the railway company, who advised that tickets were only sold at regular ticket offices for the reason that conductors would find it impossible to sell tickets on cars and properly handle the crowds.

Complainant was notified that since the transportation company refused to make any informal adjustment, it would be necessary to bring formal proceedings should he desire to continue the matter further.

## SERIP BOOKS.

I. C. 2003.

September 7, 1913.

H. J. Messenger complained to the Commission that he was unable to purchase a serip book at Santa Margarita station.

An investigation developed that serip transportation is only sold at the important offices; also that agents at smaller stations always secure serip books upon request. Complainant was notified accordingly.

## OVERCHARGES—TICKETS TO LOS ANGELES.

I. C. 2017.

September 13, 1913.

The Southern Pacific Company requested permission to adjust a claim covering two six months' tickets purchased by S. Salz from Irvington to Los Angeles.

The Commission permitted refunding of \$5.50 because of a misunderstanding on the part of purchaser and the failure of agent to correct the error.

## REFUND—PASSENGER FARE.

I. C. 2024.

September 13, 1913.

Gordon L. Von Planck called the Commission's attention to the fact that a passenger, Mrs. Nellie Ridge of San Francisco, had been carried past a junction point on the Oakland, Antioch and Eastern Railway, and was required to pay 90 cents for the return transportation, alleging negligence on the part of the conductor in not calling out the transfer point.

Amount collected for the return trip was refunded by the railroad company.

## LOSS AND DAMAGE CLAIM.

I. C. 2028.

September 4, 1913.

H. S. Bengston, Los Angeles, referred to the Commission some papers in their claim against the Southern Pacific Company for the value of a hand-bag checked at Los Angeles and lost in the parcel room at that point.

The Commission endeavored to secure a satisfactory settlement but without result, and having no jurisdiction notified complainant that a final adjustment must be had through the civil courts.

## PASSENGER FARES.

I. C. 2041.

September 17, 1913.

J. D. Davis, San Anselmo, wrote the Commission alleging that charges as collected by train conductors between certain points on the Northwestern Pacific Railway are excessive.

Sufficient facts were not furnished in the communication to permit an investigation, and, as complainant failed to reply to letters from this office, no action was taken.

## PASSENGER FARES.

I. C. 2047.

September 19, 1913.

Lee Marvin of Los Angeles entered a complaint against the single and round-trip passenger fares between Los Angeles and Slawson Junction and Santa Ana.

Complainant was notified that the rates assessed were lawful and in conformity with tariffs on file but rates referred to, however, would be investigated in the very near future.

## STOCKDROVER'S FARE.

I. C. 2053.

September 19, 1913.

Butte County Railroad Company applied to the Commission for authority to adjust a claim for stockdrover's fares involving a movement which took place just before tariff promised to shippers became effective.

Authority was granted to make proper reparation refund.

## LOSS OF COMMUTATION TICKET.

I. C. 2067.

September 20, 1913.

The Southern Pacific Company asked for authority to adjust a matter with reference to a commutation ticket which had been lost and afterwards turned in for redemption.

Authority to make proper adjustment to the owner of the book was granted.

## SUBURBAN FARES.

I. C. 2080.

September 2, 1913.

*V. S. McClatchy vs. Southern Pacific Company.* V. S. McClatchy of Sacramento called attention to the fact that conductors on Southern Pacific Interurban trains between Berkeley and Oakland Pier did not define limit of 5 cent fare, and, therefore, if trins were continued to Oakland Pier, an additional 10 cents was collected.



The company advised that all conductors would be notified to clearly explain to passengers limit of 5 cent fare, in order that future trouble and overcharge may be avoided.

## SERIP TRANSPORTATION.

I. C. 2089.

September 22, 1913.

Fred Wilcox, Los Angeles, referred to the Commission for adjustment a claim against the Transcontinental Serip Bureau involving refunds on five serip books not presented for refund within eighteen months, as prescribed by the rules and regulations of the Serip Bureau.

The refusal of the Serip Bureau to make refund after eighteen months is in strict conformity with the contract terms of the serip book, and this rule having been approved by the Commission, Mr. Wilcox was notified that refunds could not be made.

## TRANSFER AND CHECKING OF BAGGAGE.

I. C. 2107.

September 13, 1913.

The Federal Transfer and Draying Company, San Francisco, made a complaint alleging that baggage solicited on trains and at residences was not delivered or forwarded promptly; also that when the representatives of the transfer company collected baggage checks on trains and the company was unable to provide prompt service they insisted on the payment of their transfer charges before surrendering check to the owner thereof.

The Commission made an investigation with the result that the transfer company promised to give better service; also that if the owner of baggage checks desired return of same, there would be no objection and checks would be returned upon application.

## REFUND FOR UNUSED TICKET.

I. C. 2108.

September 23, 1913.

Hugo Cahn, San Francisco, made a verbal complaint against the Pacific Navigation Company, alleging that he was unable to secure refund of amount paid for transportation from San Francisco to Los Angeles, notwithstanding the fact that he notified the agent of the Navigation Company to cancel the steamer reservation before the boat left San Francisco.

The Commission took the matter up and secured refund of \$9.85, the amount paid for the ticket.

## DAMAGE TO BAGGAGE.

I. C. 2118.

September 28, 1913.

A. Chinnock, Chico, referred to the Commission papers in a damage claim against the Northern Electric Railway Company involving loss sustained because of rough handling of a trunk while moving as baggage from Marysville to Chico.

The Commission used its efforts to secure an adjustment of the claim but without results, and as the Public Utilities Act does not delegate authority over loss and damage claims, claimant was notified that it would be necessary to proceed in the civil courts.

## PASSENGER FARES.

I. C. 2121.

September 15, 1913.

S. Dusenberry, San Mateo, entered a complaint against the Southern Pacific Company alleging that there was no Sunday rate in effect between San Mateo and San Jose. The complaint was taken up informally and the railway company arranged to publish round-trip excursion fare of \$1.00 from San Mateo and \$1.10 from Burlingame to San Jose and return, good Sundays only.

## PASSENGER FARES.

I. C. 2123.

September 25, 1913.

W. F. Hyde, Stanford University, entered a complaint against the Peninsula Railway Company, alleging that the practice of selling round-trip tickets only at offices worked a hardship upon persons boarding trains at intermediate points who were required to pay single fares to conductors, as conductors were not permitted to handle round-trip tickets.

The railway company maintained that conductors on their cars could not properly attend to the collecting of fares and the running of the car if they were required to carry a ticket stock and sell round-trip tickets, and declined to offer any informal adjustment.

Complainant was advised of the situation and notified that if he desired to carry the matter further it would be necessary to file formal proceedings.



MUSICAL INSTRUMENTS IN PASSENGER CARS.

I. C. 2124.

September 28, 1913.

P. J. Gowzer, San Francisco, called the Commission's attention to the fact that he had been charged a regular one-way fare for carrying a bass drum between points on the San Francisco-Oakland Terminal Railways.

The rate as charged was proper and in conformity with the tariff filed with this Commission.

REFUND PASSENGER FARE.

I. C. 2128.

September 30, 1913.

The Commission authorized the Southern Pacific Company to refund \$7.30 to a passenger who was traveling on a special train from Los Angeles to Colfax, and who inadvertently missed the train at San Luis Obispo, and was required to purchase a ticket to San Francisco where he caught the special train and continued his journey to Colfax.

REFUND PASSENGER FARE.

I. C. 2135.

October 1, 1913.

Rufus H. Kimball, San Francisco, presented to this office the unused return portion of a round-trip ticket reading from San Francisco to Santa Barbara.

The only refund lawful in connection with the unused return ticket was the difference between the fare paid for the round-trip and the one-way fare, which the transportation company refunded.

REFUND PASSENGER FARE.

I. C. 2139.

October 2, 1913.

Northwestern Pacific Railroad Company, San Francisco, was granted authority to refund \$2.90 for the unused portion of two round-trip tickets purchased from San Francisco to Monte Rio. The refund was authorized for the reason that purchaser exchanged 30-day tickets to Guerneville for the tickets to Monte Rio and through a misunderstanding was given five-day tickets instead of thirty-day tickets as had been originally purchased.

BAGGAGE CHARGES.

I. C. 2146.

October 7, 1913.

L. W. Rankin, Maricopa, entered a complaint against the Santa Fe Railway alleging that a telegram was not delivered promptly and as a result two pieces of baggage were permitted to be carried from Bakersfield to Cushing, Okla., and return, upon which the excess baggage charges amounted to \$49.30.

The complaint was taken up informally but no adjustment was possible; and as the Commission is without authority, the movement being interstate, complainant was advised to communicate with the Interstate Commerce Commission, Washington, D. C.

BAGGAGE CHECKED ON SCRIP.

I. C. 2147.

October 4, 1913.

R. Niedt, San Francisco, made a complaint alleging that baggage could not be checked from points on the Sierra Railway in connection with transcontinental scrip. The complaint was taken up with the railway company, who advised that they were making arrangements to become members of the Scrip Bureau, and baggage would in the very near future be checked from all stations on their line.

PASSENGER—ROUND-TRIP FARES.

I. C. 2148.

August 1, 1914.

G. Toyne, Toyneville, addressed a communication to the Commission with reference to certain round-trip tickets being sold from interior points on the Northwestern Pacific to San Francisco, as compared with lower priced tickets sold from San Francisco to the same points.

The low rates in effect from San Francisco are published for a certain period each year to accommodate vacation travel, and are not made effective in the opposite direction. This information was given complainant.

STREET CAR SERVICE.

I. C. 2155.

October 6, 1913.

Ernest H. Card, Berkeley, called at the office of the Commission and entered a complaint against the street car service of the San Francisco-Oakland Terminal Railways serving Euclid avenue, Berkeley.

The situation was called to the attention of the general manager of the road, who took steps at once to adjust the matter and prevent further complaint.

## REDEMPTION OF UNUSED TICKETS.

I. C. 2180.

October 9, 1913.

Capt. F. M. Bennett, Mare Island, referred to the Commission correspondence with the Vallejo, Benicia and Napa Valley Railroad, in the matter of unused single and round-trip tickets purchased by the United States Government in 1906 and 1907.

The Commission advised that, while it has no authority over refunds for tickets sold in 1906 and 1907, it had no objection to any adjustment the railroad company was willing to make.

## PASSENGER TRANSPORTATION.

I. C. 2189.

October 11, 1913.

The Southern Pacific Company was granted permission to extend the time limit of an excursion ticket sold on Washington's Birthday from Bakersfield to Los Angeles and return. A violent rainstorm prevented the movement of trains and passenger was unable to reach depot at Los Angeles in time for train. Permission to extend limit of ticket was authorized.

## TRANSFERRING OF BAGGAGE.

I. C. 2194.

October 9, 1913.

Karl Riedelsberger, Los Angeles, addressed the Commission with reference to transferring of baggage by the Pacific Navigation Company at San Francisco.

An investigation was made and misunderstanding explained to complainant.

## PASSENGER FARES.

I. C. 2208.

October 15, 1913.

Beckett & Crothers, San Jose, entered a complaint with the Commission alleging that the three-party home seekers' tickets sold from San Francisco and Oakland to points in the San Joaquin Valley operated as a discrimination against San Jose.

The Southern Pacific Company maintained that different conditions existed at points where these tickets were sold than existed at San Jose, and that they would rather withdraw the San Francisco-Oakland tickets than establish similar rates from San Jose and other points. Complainants were notified that it would be necessary to file formal action if they desired to carry the matter further.

## UNUSED TICKETS.

I. C. 2211.

October 15, 1913.

Southern Pacific Company requested permission to make reparation in connection with two tickets purchased from San Jose to Los Angeles by persons who held round-trip tickets from Los Angeles to Del Monte, and were unable to use same because of destruction of a tunnel by fire on the Coast Division. Authority was given to make the desired reparation adjustment.

## PASSENGER FARES.

I. C. 2242.

October 23, 1913.

Shirley Moore, San Francisco, entered a complaint against the Oakland, Antioch and Eastern Railway, alleging that tickets had been sold him to Walford Station after the last train which made a connection for that point had departed, thus making it necessary for him to walk  $2\frac{1}{2}$  miles from Meinert Junction.

The matter was taken up with the transportation company who notified its agents to decline to sell tickets in future when trains do not stop at destination of passenger, or when destination is on branch line and there is no connecting train.

## ROUND-TRIP FARES.

I. C. 2249.

October 20, 1913.

David Van Gelder, San Francisco, called attention to the fact that there was a round-trip fare of \$2.70, good Sunday to Monday, sold from Tracy to San Francisco, but that the fare from San Francisco to Tracy, and return, was \$3.70.

After considerable correspondence the Southern Pacific arranged to publish the same fare from San Francisco, namely \$2.70, as was in effect from Tracy. This adjusted the matter satisfactorily to complainant.

## ROUND-TRIP FARES.

I. C. 2255.

October 18, 1913.

Allan H. Warner, Knights Landing, entered a complaint against the Southern Pacific Company because no round-trip week-end tickets were sold from Knights Landing. The complaint was taken up informally but without results, and Mr. Warner was notified that if he desired to bring the matter to a conclusion it would be necessary to begin formal proceedings.

## REFUND—STOCKDROVER'S FARE.

I. C. 2256.

October 20, 1913.

Butte County Railroad Company of Chico requested permission to refund going fare collected from a stockdrover who made a trip and returned with one double-deck carload of sheep. Refund was authorized on the basis that a double-deck car was equivalent to two single-deck cars.

## ROUND-TRIP FARES.

I. C. 2257.

October 20, 1913.

E. D. Flint, Los Gatos, complained to the Commission of the round-trip rates in effect between Los Gatos and San Francisco.

The matter was taken up informally with the Southern Pacific, but they declined to make any adjustment, and complainant was advised that it would be necessary to file formal proceedings should he desire to continue the matter. This, however, was not done.

## REFUND—STOCKDROVER'S FARE.

I. C. 2284.

October 23, 1913.

The Butte County Railroad Company was authorized to refund \$1.90 to Western Meat Company account of fare paid by one stockdrover who purchased ticket from Chico to Stirling City in order to return as an attendant with a shipment of sheep. The tariff authorizing the refund of fares was made effective a few days after the shipment moved.

## UNUSED RETURN PART ROUND-TRIP TICKET.

I. C. 2326.

October 29, 1913.

L. A. Crossman, Los Angeles, wrote the Commission with reference to the unused portion of a round-trip ticket reading from Los Angeles to San Francisco. The ticket was sold at a rate less than the one-way fare conditioned upon the same being used within a specified limit. Transportation was not used in accordance with the contract, and as the round-trip fare was less than the one-way single fare no refund was due.

## REFUND—STOCKDROVER'S FARE.

I. C. 2332.

November 4, 1913.

The Butte County Railroad Company was authorized to refund \$1.90 to Miller & Lux account of fare paid by one stockdrover who purchased ticket from Chico to Stirling City in order to return as an attendant with a shipment of sheep. The tariff authorizing refund of fares was made effective a few days after the shipment moved.

## REPARATION SPECIAL ROUND-TRIP FARES.

I. C. 2335.

November 4, 1913.

The Southern Pacific Company requested permission to adjust a claim presented by the Native Sons of the Golden West, who chartered a train from Centerville to Oakland and in addition purchased 100 round-trip tickets from Niles to Oakland. The transportation was not used in its entirety, and the Commission authorized adjustment based on the charge which would have applied had the special train been secured from Centerville without giving any consideration to the passengers picked up at Niles.

## COMMUTATION FARES.

I. C. 2342.

November 6, 1913.

Chas. McArthur, Oakland, addressed a communication to the Commission with reference to commutation fares between San Francisco and Oakland in connection with the trains of the Oakland, Antioch and Eastern Railway.

Complainant was advised that the fares referred to had been the subject of correspondence with other persons, and an informal adjustment was not possible; therefore it would be necessary to file formal complaint. This, however, was not done.

## UNUSED TICKETS.

I. C. 2345.

November 5, 1913.

H. E. Eckstein, New York, referred to the Commission a claim against the Atchison, Topeka and Santa Fe Railway, involving refund due for unused portions of two tickets purchased from Pasadena to Yosemite Valley and return.

Investigation developed the fact that complainant was entitled to refund of \$5.90, which amount the transportation company paid.



## PASSENGER EXCURSION FARE.

I. C. 2377.

November 12, 1913.

Chino Chamber of Commerce, Chino, entered a complaint against the Southern Pacific Company alleging that they were discriminated against because the round-trip fares were lower from Los Angeles to Chino than in the opposite direction.

After some correspondence it was arranged to have the round-trip rate from Chino to Los Angeles reduced from \$2.15 to \$1.75.

## COMMUTATION FARES.

I. C. 2378.

November 15, 1913.

Leslie Salt Refining Company, San Francisco, entered a complaint with the Commission alleging that the commutation rates charged by the Southern Pacific Company to Leslie Station were excessive and discriminatory.

The complaint was taken up with the Southern Pacific Company but without result, the company maintaining that the rates were fair and as low as possible.

Complainant was therefore notified that it would be necessary to institute formal proceedings if it was desired to continue the matter further.

## PASSENGER FARES.

I. C. 2383.

November 10, 1913.

A. E. Magoffin, Yountville, filed a complaint with the Commission against the Southern Pacific Company alleging that he had been overcharged in connection with two tickets purchased from Los Angeles to Pomona in June, 1909.

Every effort was made to secure refund, but agent of the Southern Pacific Company maintained that passenger paid only the lawful rate.

## PASSENGER FARES.

I. C. 2397.

November 19, 1913.

J. H. Grande, Santa Barbara, entered a complaint with reference to the practice of the Southern Pacific Company refusing to allow passengers to board the Lark at Santa Barbara without first paying the fare in effect from San Luis Obispo to Los Angeles.

The complaint was taken up with the Southern Pacific Company, and after investigation it was informally arranged to permit passengers to board the Lark at Santa Barbara, when space was available in Pullman cars, at the regular fare in effect between Santa Barbara and Los Angeles. It was also arranged to refund to Mr. Grande the amount paid in excess of regular rate on the particular trip in question.

## TICKETS—INTERSTATE.

I. C. 2418.

November 23, 1913.

E. L. Harriman, Browns Valley, wrote the Commission stating that he had purchased two full-fare and two half tickets from Marysville to Bangor, Maine, for the use of himself and family. The tickets were lost somewhere between Marysville and Sacramento, and complainant asked the Commission to intercede and have the tickets duplicated.

The matter was taken up with the Southern Pacific Company, and, after some correspondence, new tickets were furnished in lieu of originals which were lost.

## PULLMAN RATES.

I. C. 2422.

November 20, 1913.

Philip Wiseman, Los Angeles, made a complaint with reference to rate charged by the Pullman Company for sleeping car accommodations between San Francisco and Chicago, alleging that the rate on fast trains should be lower than on trains moving on slower schedules, and often taking an additional day to make the trip.

The Commission has no jurisdiction over the transportation in question, but the matter was taken up informally with the Pullman Company, which company, however, declined to make any changes in the rates. Complainant was advised accordingly, and referred to the Interstate Commerce Commission for further action.

## TICKETS HONORED IN ERROR.

I. C. 2430.

November 27, 1913.

Edw. Grenfell, Coulterville, called the Commission's attention to the fact that the Southern Pacific Company had asked him to pay \$3.90 in connection with two tickets, reading from Merced to Stockton via the Santa Fe, which by mistake had been honored from Merced to Stockton by a conductor of the Southern Pacific Company.

The matter was taken up with the company, who arranged to collect the value of



the tickets from the Santa Fe, thereby relieving complainant of the necessity of paying the fares to the Southern Pacific Company and receiving a refund of the same from the Santa Fe.

## CHECKING OF BAGGAGE.

I. C. 2441.

November 26, 1913.

F. R. Levee, Cleveland, Ohio, entered a complaint with this Commission alleging that the exclusive right held by a transfer company to check baggage at private residences was discriminatory and detrimental to other transfer companies.

Complainant was advised that the courts had, a number of times, ruled to the effect that a transportation company had a legal right to sell the exclusive privilege of checking baggage to one transfer company.

## BAGGAGE STORAGE CHARGES.

I. C. 2449.

December 2, 1913.

John A. Gager, Oakland, called on the Commission with reference to a baggage charge of 70 cents which accrued because of delay in the sailing of a steamer of the West Coast Steamship Company's line from San Pedro.

Complaint was taken up with the steamship company, who admitted that they were responsible for the charges having accrued, and refunded the same.

## SUBURBAN FARES.

I. C. 2450.

December 3, 1913.

Geo. J. Campbell entered a complaint with the Commission with reference to the fares assessed on the suburban lines of the Southern Pacific Company between 103d avenue, Oakland, and San Francisco.

Complainant was advised that the Commission would conduct a formal hearing in Cases 517 and 519 involving the charges in question, at which time matters complained of would be given full consideration.

## PARTY TICKET.

I. C. 2459.

December 3, 1913.

Southern Pacific Company requested permission to make a reparation refund in connection with the transportation of members of an athletic team who traveled from Dinuba to Lindsay, and return, and purchased single trip tickets instead of regular round-trip party ticket authorized in the tariff.

The Commission granted authority to refund the difference between the amounts paid for the single-trip tickets and the amount which would have been paid had the manager of the team purchased a party ticket for the entire class of students.

## SCRIP TRANSPORTATION.

I. C. 2470.

December 13, 1913.

R. R. Pew, Woodland, entered a complaint against the San Francisco-Oakland Terminal Railways, alleging that a ticket agent of that company in San Francisco declined to issue a ticket from San Francisco to Sacramento in connection with a joint scrip book sold by the Northern Electric Railway.

Investigation was made and it was ascertained that the agent in San Francisco misunderstood the instructions with reference to the scrip transportation. The railway companies arranged to refund the overcharges caused by their agent's error.

## EXCURSION FARES.

I. C. 2483.

December 10, 1913.

Mrs. Clara Newbold Williams, Yreka, called attention to the fact that no excursion tickets were sold from points in the Siskiyou Mountains to San Francisco, and return, and requested that such rates be established.

The Southern Pacific Company explained that it was not customary, and they did not desire to publish regular excursion rates from interior points to San Francisco. The Commission therefore found it impossible to make any informal adjustment. Complainant advised that a formal complaint would be filed by citizens of Yreka.

## PASSENGER FARE—INTERSTATE.

I. C. 2488.

December 10, 1913.

Paul Lavergne, Oakland, addressed a communication to the Commission, alleging that proper refund had not been made by the Western Pacific Railway for unused portion of a round-trip ticket reading from Oakland to New York.

The transportation company advises the Commission that they have made a satisfactory adjustment with complainant, and the matter has been closed.

## LOST BAGGAGE CHECK.

I. C. 2495.

December 8, 1913.

John H. Eisenhart, San Francisco, protested to the Commission against a charge of 50 cents assessed by the Southern Pacific Company for a lost baggage check.

As charge complained of was in conformity with tariffs, and is the usual amount collected by all of the lines within the United States when baggage check is lost, complainant was so informed.

## PASSENGER FARES.

I. C. 2523.

December 13, 1913.

J. H. Wentz, Folsom, wrote the Commission stating that because of change in the operation of motor cars between Sacramento and Fair Oaks, passengers were required to pay an additional 10 cents for the reason that the conductors do not run through to Fair Oaks Station.

The complaint was taken up by telephone with the Southern Pacific Company who arranged to have conductors in the future supply passengers traveling through to Fair Oaks with proper transfers.

## BAGGAGE CHARGES VIA STEAMSHIP LINE.

I. C. 2539.

December 16, 1913.

A. C. Fouche, San Francisco, entered a complaint with the Commission with reference to rate on excess baggage via the North Pacific Steamship Company between San Diego and San Francisco.

The Commission, not exercising jurisdiction over steamship lines at the present time, was compelled to advise complainant that no relief could be offered until such time as the case now pending in the United States Supreme Court had been decided.

## COMMUTATION TICKET.

I. C. 2547.

December 18, 1913.

The Southern Pacific Company was granted authority to make a pro-rate refund for the unused portion of a commutation ticket purchased between San Francisco and Los Gatos and not used by purchaser because of change of passenger train schedule.

## PASSENGER FARES.

I. C. 2563.

December 19, 1913.

R. H. Gand, Santa Barbara, protested to the Commission against the rule of the Southern Pacific Company which prohibits local passengers traveling on the Lark between Santa Barbara and Los Angeles.

The complaint was adjusted informally, and arrangements made with the railroad company for the transportation of local passengers on the Lark between Santa Barbara and Los Angeles when Pullman accommodations were available.

## COMMUTATION FARES.

I. C. 2591.

December 27, 1913.

Richard Keatings, Palo Alto, referred to the Commission commutation tickets for October, and November, which had only been partly used, and alleged that a refund was due on November ticket.

Under the rules governing the sale of these tickets refunds are not permissible, and complainant was advised accordingly.

## PASSENGER SERVICE—INTERSTATE.

I. C. 2605.

December 26, 1913.

E. F. Allen, Bakersfield, called the Commission's attention to the fact that the Southern Pacific Company and Pullman Car Company had not furnished transportation from Port Arthur, Texas, to Taft, Cal., in accordance with arrangements made at the time prepaid tickets were purchased.

Complainant was advised that the movement being interstate, an adjustment would have to be secured through the Commission at Washington, D. C.

## BAGGAGE TRANSFER CHARGES.

I. C. 2621.

December 22, 1913.

H. D. Stoley, Los Angeles, entered a complaint with the Commission, alleging that solicitors on passenger trains who collected baggage checks misrepresented the charges of both storage and delivery.

After an extensive correspondence with the different railroads entering Los Angeles, it was arranged to have solicitors furnished with printed slips showing the amount of charges, which slips were to be delivered to owners of baggage at the time checks were collected.

## REFUND—PASSENGER FARE.

I. C. 2629.

December 30, 1913.

Mrs. Mary R. Schuyler, Oakland, referred to the Commission papers in a complaint against the Western Pacific Railway, alleging that time limit on two round-trip tickets issued at Oakland to Berry Creek should have been extended as per application made to the railway company.

An investigation developed that tariffs do not provide for the extension of time as requested, and, therefore, the only refund due on the tickets was the difference between the round-trip fare paid and the single fare had no round-trip tickets been purchased.

## COMMUTATION TICKET.

I. C. 2638.

December 27, 1913.

A. A. Hintz, Encanto, entered a complaint with the Commission alleging that proper refund had not been granted in connection with a 60-ride commutation ticket between San Diego and Encanto, sold by the San Diego and Southeastern Railway and used in part.

The matter was taken up with the traffic department of the railway company, and satisfactory adjustment arranged.

## SCRIP TRANSPORTATION.

I. C. 2658.

December 30, 1913.

Pacific Mill and Mine Supply Company, San Francisco, wrote the Commission alleging that they were entitled to a refund for unused portion of a California scrip book, issued by the Western Pacific Railway.

It was found on checking over the situation that the book had not been used in conformity with its contract, and complainants were, therefore, not entitled to refund.

## LOST TRANSPORTATION—INTERSTATE.

I. C. 2671.

December 23, 1913.

E. Caroll Taber, Keokuk, Iowa, referred to the Commission papers in a claim against the Southern Pacific Company for a ticket reading from Williams to Grand Canyon and return, which it is alleged was lost by passenger conductor of the Southern Pacific Company.

The railroad company advised that they had made a careful investigation and disclaimed any responsibility for the lost ticket. The transaction involving interstate transportation complainant was advised to take the matter up with the Interstate Commerce Commission.

## BAGGAGE BY STEAMER.

I. C. 2687.

January 2, 1914.

H. N. Blair, Portland, Oregon, protested to the Commission against a charge of 50 cents per trunk assessed by the Pacific Navigation Company on baggage checked from San Diego to San Francisco.

The steamship company explained that it had no baggage room on the dock at San Francisco, and therefore if baggage was not called for by 4:30 p. m. on date of arrival, it was placed in charge of the Union Transfer Company for storage. The jurisdiction of Commission over water carriers now being subject to review by United States Supreme Court, complainant was notified the matter would be held in suspense for future consideration.

## COMMUTATION TICKETS.

I. C. 2700.

January 5, 1914.

Lewis S. Warford, Alameda, wrote the Commission advising that monthly commutation tickets reading between Alameda and Vallejo were not acceptable on the cross-town street car line operated by the Southern Pacific Company between Sixteenth Street Depot, Oakland, and Alameda.

Complainant was advised that the cross-town line was held by the Southern Pacific to be a street car service and operated independent of the main line; that its tariffs only provided for a cash fare of 5 cents; and that the company furnished other facilities for the handling of its main line business. As a result of the complaint the Southern Pacific Company increased its train service between Oakland Pier and Alameda operating through Fruitvale, and main line tickets were accepted on these trains.

## PASSENGER EQUIPMENT.

I. C. 2701.

January 7, 1914.

State Board of Health called attention to the fact that transportation companies frequently used wooden passenger coaches in trains with steel equipment, and that such practice was dangerous.



The matter was taken up with the principal railroads in the State who advised that they were gradually retiring from service wooden coaches but as long as such coaches remained in service special efforts would be used to carry same on the rear end of passenger trains.

## UNUSED TICKET.

I. C. 2703.

June 5, 1914.

Miss Velma Kniskern, Los Angeles, forwarded to the Commission unused ticket purchased from the Santa Fe reading Fresno to Hanford.

It was arranged to have the purchase price of the ticket refunded to complainant.

## PASSENGER FARES.

I. C. 2736.

January 12, 1914.

F. J. Martinetti, Modesto, wrote the Commission alleging that he was unable to purchase a ticket from Los Banos to Modesto, allowing stopover at Newman.

Complaint was investigated and the agent at Modesto advised the Commission that a stop-over ticket would have been sold if called for.

## CHECKING OF BAGGAGE.

I. C. 2752.

January 10, 1914.

Alfred Kohlberg, San Francisco, made complaint against the Pacific Navigation Company, alleging that he was unable to check his baggage upon presentation of transportation.

The Commission being unable to exercise jurisdiction over steamer lines at the present time was compelled to so advise complainant.

## PASSENGER FARES.

I. C. 2756.

January 12, 1914.

H. O. H. Shelley, Cupertino, filed a complaint against the Peninsula Railway alleging that the single trip fare of 15 cents between Prospect Avenue and Saratoga was excessive.

The railway company in defense of the rate stated that the line was divided into five zones and to make any change between the points in question would disarrange the fares of the entire line, and declined to make any adjustment.

Complainant was advised that it would be necessary to file a formal complaint should he desire to bring the matter to a conclusion.

Formal complaint attacking all passenger rates of the Peninsular Railway is now before the Commission.

## PASSENGER FARES.

I. C. 2769.

January 13, 1914.

G. W. Jones, Los Angeles, entered a complaint against the single and round-trip fares charged by the Pacific Electric between Hollywood and Van Nuys.

The Railroad Company declined to informally change the rates and complainant was notified that it would be necessary to begin formal proceedings should he desire to carry the matter to a conclusion.

## UNUSED TICKETS.

I. C. 2772.

January 10, 1914.

The traffic department of the Oakland, Antioch and Eastern Railway requested permission to refund fares paid by a number of passengers holding round-trip tickets over their line who were compelled to purchase tickets and make the return journey via the Southern Pacific or Santa Fe because of high water and washouts.

Authority was granted to refund to ticket holders extra fares paid.

## EXCESS BAGGAGE.

I. C. 2776.

January 13, 1914.

Chas. Wake, Los Angeles, requested information with reference to rate per hundred pounds on excess baggage to Corsicana, Texas.

Desired information was furnished.

## PASSENGER TRAIN STOPS.

I. C. 2832.

January 23, 1914.

R. J. Montgomery, Oakland, entered a complaint against the Oakland, Antioch and Eastern Railroad alleging that through trains of that company did not make convenient and proper stops in the city of Oakland. The railroad company maintained that they stopped at their regular depots and could not in conformity with their trackage arrangements with the Key Route make any additional stops. The Commission was unable to arrange any adjustment informally and so notified complainant.



REFUND—PASSENGER FARES.

I. C. 2838.

January 24, 1914.

The Southern Pacific Company requested permission to make a refund in connection with 100-party tickets purchased from Los Angeles to Chatsworth, and return, which had only been used in part. The permission was granted to make adjustment.

PULLMAN ACCOMMODATIONS—INTERSTATE.

I. C. 2840.

January 23, 1914.

Pacific Tool and Supply Company filed a complaint with the Commission alleging that the rule requiring a ticket and a half, when one person occupied a compartment, was unjust and unreasonable. The transportation referred to involved a trip from San Francisco to Chicago, and complainant was notified that it would be necessary to take the complaint up with the Interstate Commerce Commission at Washington, D. C.

Collection of ticket and a half for passenger occupying compartment is not permitted in California.

UNUSED TICKET.

I. C. 2846.

January 23, 1914.

L. Lehmann, Walnut Creek, referred to the Commission papers in a claim against the Oakland, Antioch and Eastern Railway involving a commutation ticket which was only used in part owing to washouts on the company's line during the month of January necessitating suspension of service.

The railway company was authorized to make proper refund for the unused transportation.

EXTRA FARE TRAINS.

I. C. 2849.

January 26, 1914.

L. J. Clayburgh, San Francisco, entered a complaint against the Southern Pacific Company alleging that extra charge of \$1.50 assessed on Overland Limited Train No. 1, from Benicia to San Francisco was excessive and unreasonable.

Complainant was notified that the train referred to was a limited train and that the charge was in conformity with tariffs. The train is intended for through traffic and extra fares are assessed all local passengers who board the trains.

REFUND PASSENGER FARES.

I. C. 2850.

January 8, 1914.

Southern Pacific Company requested permission to refund \$180.00 to the Committee in charge of Mystic Shrine, hands around the State tour, involving 200 fares purchased for use between Fresno and Hanford.

The itinerary of the trip being changed, the transportation from Fresno to Hanford was not used, and the Commission, therefore, authorized the refunding of the amount collected for the unused tickets.

REFUND—PASSENGER FARE.

I. C. 2863.

January 27, 1914.

P. J. Muttersbach, Colusa, entered a complaint against the Northern Electric Railway, based on the grounds that a round-trip ticket had been purchased from Colusa to San Francisco and return and complainant was compelled to pay local fare from Sacramento to Colusa for the reason that the Northern Electric had suspended operations account washouts.

The Commission took the matter up with the company, who arranged for proper adjustment of the claim.

REFUND—PASSENGER FARES.

I. C. 2866.

January 28, 1914.

Southern Pacific Company requested permission to refund \$2.20 in connection with a family commutation ticket between San Bernardino and Riverside.

The ticket was only used in part for the reason that passenger service between the points in question was discontinued.

Authority to make refund was granted.

PASSENGER FARES.

I. C. 2886.

January 27, 1914.

W. M. Brown, Los Angeles, made a complaint with reference to a fare of 30 cents assessed for single trip from Ottenheim to Hudson, alleging that same was excessive.

It was found upon investigation that conductor's collection was in error and amount should have been 20 cents. The 10 cents overcharge was refunded.

## UNUSED COMMUTATION TICKET.

I. C. 2887.

January 30, 1914.

The Southern Pacific Company requested permission to refund \$1.50 to H. D. Curtis, Los Gatos, account unused coupons in a six months' 30-ride family commutation book, sold for use between Los Gatos and San Francisco. The ticket was lost and not located again until after its date of expiration.

The Commission authorized the refund.

## PASSENGER FARE.

I. C. 2898.

January 30, 1914.

Wm. B. Stewart, Los Angeles, wrote the Commission alleging that he had been overcharged in connection with two tickets purchased from Los Angeles to Huntington Park for which he was assessed 20 cents each when the correct fare is but 10 cents.

Clerk selling the tickets claimed he collected only the proper rate and complainant was mistaken about paying too much.

## PASSENGER FARES.

I. C. 2904.

January 19, 1914.

L. D. Temple, Upland, entered a complaint with the Commission alleging that the passenger fares of the Southern Pacific Company from Ontario to Thermal were excessive.

An adjustment of these rates would bring into question all rates in Southern California and complainant was advised that the matter could not be adjusted informally and would have to be handled by formal proceeding.

## ROUND-TRIP TICKETS—INTERSTATE.

I. C. 2908.

February 2, 1914.

American Photo Player Sales Company, San Francisco, referred to the Commission papers involving refund claimed for unused part of a round-trip ticket reading Los Angeles to Chicago. Complainant was advised to take the matter up with the Interstate Commerce Commission which had jurisdiction over the transaction.

## REFUNDS—COMMUTATION TICKETS.

I. C. 2924.

February 6, 1914.

Ocean Shore Railroad Company, San Francisco, requested permission to refund for unused portion of January commutation tickets sold by that line and not used because of land slides when railroad was not in operation.

Permission to make proper refund was granted.

## PASSENGER TRANSPORTATION—INTERSTATE.

I. C. 2942.

February 9, 1914.

W. J. Reed, Westgate, wrote the Commission with reference to alleged overcharge in connection with tickets purchased via the Pacific Coast Steamship Company from Los Angeles to Bellingham, Washington.

After investigation matter was referred to Interstate Commerce Commission for adjustment.

## INTERURBAN PASSENGER FARES.

I. C. 2944.

February 10, 1914.

A. S. Maloney, San Bernardino, made a complaint against the Pacific Electric Railway alleging that proper transfers were not issued in connection with tickets purchased from Colton to San Bernardino. The Pacific Electric maintained that their interurban rates did not include transfer privilege to the street cars operating in the city of San Bernardino, and declined to make any change in their rates, rules or regulations.

Complainant advised the Commission that he was not satisfied with the explanation offered and would in the near future file a formal complaint in order that an investigation might be made of the situation.

## TRAIN FARES.

I. C. 2958.

February 10, 1914.

G. H. Briggs, East Highlands, entered a complaint with reference to fare collected by conductor of a Santa Fe passenger train for transportation from East Highlands to Redlands.

Investigation developed that passenger had failed to purchase a ticket at station, and train fare as collected was lawful and in conformity with tariffs.

PASSENGER STATION.

I. C. 2963.

February 12, 1914.

A petition was received by the Commission from people residing on line of the Pacific Electric Railway, between Urbita and Bethone, who alleged that they were put to a great deal of inconvenience because the stations were 3,500 feet apart.

The complaint was taken up with the president of the Pacific Electric Railway, who arranged for an additional station midway between the two points mentioned above. This adjusted the situation to the satisfaction of complainants.

REFUND—PASSENGER FARES.

I. C. 2969.

February 12, 1914.

Oakland, Antioch and Eastern Railway requested permission to make reparation refunds to certain parties who had purchased transportation via their line, but were unable to use the same on account of washouts and slides, which prevented the moving of passenger trains.

Authority to make satisfactory refunds was granted.

REFUND—PASSENGER FARES.

I. C. 3000.

February 18, 1914.

Southern Pacific Company requested permission to refund \$4.00 to P. A. Ellis, in connection with a 30-ride family commutation ticket, purchased for use between Niles and San Francisco. The ticket was lost before used in its entirety, and the Commission therefore authorized proper adjustment for the unused portion.

PULLMAN SEAT FARES.

I. C. 3003.

February 17, 1914.

Wm. Kerans, Los Angeles, entered a complaint with reference to the Pullman seat charge assessed by the Santa Fe between Fresno and Los Angeles. The charges collected by conductor on train were found to be in accordance with tariff, and complainant was advised that when the Commission made a general investigation of the Pullman charges the rates complained of would be considered.

REFUND—PASSENGER FARE.

I. C. 3043.

February 24, 1914.

Southern Pacific Company requested permission to refund \$2.80 to C. F. Benninghoff, who had purchased a Sunday round-trip ticket, Fruitvale to Salinas, which was not used within the life of the ticket on account of annulment of passenger train service because of washouts on the line.

Authority to make proper refund was granted.

TICKET REFUND.

I. C. 3072.

March 3, 1914.

The Southern Pacific Company requested permission to refund \$6.00 to Miss Marjorie Wentworth, account scholar's commutation ticket purchased for use between Redwood City and San Jose and mislaid, thereby requiring the purchase of a second ticket. Upon recovery of lost ticket and its return to the company, traveler asked for cancellation.

Permission to refund in line with facts submitted was granted.

PASSENGER FARES.

I. C. 3086.

March 9, 1914.

Mrs. Lillian S. Baldwin, Stockton, entered a complaint against the Central California Traction Company, alleging that the company had discontinued issuing transfers from certain points on its interurban line to street cars operating within the city of Stockton.

Upon taking the matter up with the management of the traction company, it was arranged to provide transfers to the points in question, which adjusted the matter to the satisfaction of complainant.

REFUND—UNUSED TICKET.

I. C. 3088.

March 6, 1914.

A. A. Hanks, San Francisco, entered a complaint with the Commission stating that he had purchased a commutation ticket from the Oakland, Antioch and Eastern Railway for use between San Francisco and Nichols, but was unable to use same owing to washouts and high water which prevented the operation of the line during part of the month of January.

Upon investigation the Commission authorized the refund of \$7.74, being the value of the unused portion of the ticket.



## PASSENGER TRANSPORTATION.

I. C. 3115.

January 19, 1914.

C. R. Chapman, San Francisco, made a complaint against the Pacific Navigation Company because that company declined to redeem a ticket purchased for use, San Francisco to San Pedro, and not used for the reason that party for whom the ticket was purchased became ill and was unable to travel.

Complaint was taken up with the steamship company who arranged to refund purchase price.

## STORAGE CHARGES—BAGGAGE.

I. C. 3124.

March 13, 1914.

A. H. Ford, Oakdale, wrote the Commission alleging that charges had been erroneously assessed against a piece of baggage held in the baggage room at Oakdale. Charge as made was found to be correct, and complainant so notified.

## REFUND—PASSENGER FARE.

I. C. 3131.

March 11, 1914.

J. D. Nelson, Oakland, referred to the Commission papers in a claim against the Oakland, Antioch and Eastern Railway and Northern Electric, involving extra fares paid in connection with round-trip transportation from Berkeley to Marysville.

As the Northern Electric was not in operation between Marysville and Sacramento on account of high water, which made it necessary for passengers to return to Sacramento via the Southern Pacific, the Commission authorized reparation refund of the additional fares paid by the purchasers.

## REFUND—PASSENGER FARE.

I. C. 3132.

March 10, 1914.

San Pedro, Los Angeles and Salt Lake Railroad Company applied for permission to make a refund in connection with three children's commutation tickets, purchased for use between Los Angeles and San Bernardino during the month of February, 1914, and not used in their entirety because the railroad was not in operation during part of the month on account of floods.

Authority to make reparation refund was granted.

## REFUND—PASSENGER FARE.

I. C. 3144.

March 14, 1914.

Oakland, Antioch and Eastern Railway was granted permission to refund the amount collected for a ticket reading Berkeley to Sacramento and only used to Bay Point on account of washouts on the Oakland-Antioch line. Passenger was compelled to travel to destination via the Southern Pacific, and \$2.40 paid for extra transportation was refunded.

## PASSENGER TRAIN SERVICE.

I. C. 3150.

March 16, 1914.

W. W. Perkins, Santa Ana, entered a complaint alleging that proper Pullman accommodations were not furnished in cars between Los Angeles and McFarland.

Investigation developed the fact that certain cars moving on train No. 7 were cut out of the train at Bakersfield, and ticket sellers at Los Angeles failed to take notice of the fact when arranging for berth accommodations. Instructions were issued to agents, which adjusted the situation.

## PASSENGER TRANSPORTATION—INTERSTATE.

I. C. 3170.

March 16, 1914.

Albert Lucas, Sacramento, wrote the Commission with reference to a round-trip ticket purchased, Sacramento to Washington, D. C.; return portion of ticket was lost, and Mr. Lucas was required to purchase a single trip ticket from Washington to Sacramento; the lost ticket was afterward recovered, but the company declined to refund amount paid for the second ticket.

The transaction, being interstate, it was necessary to advise complainant to take the matter up with the Commission at Washington, D. C.

## TRANSFER OF BAGGAGE.

I. C. 3171.

May 15, 1914.

E. C. Packard, Los Angeles, entered a complaint with the Commission alleging that the Los Angeles Transfer Company which secured his baggage check on a passenger train of the San Pedro line did not carry out its agreement and overcharged him in connection with the storage and delivery.



After considerable correspondence the Commission arranged with the railroad companies to have a printed notice given by the solicitors of baggage to every person from whom checks were collected on passenger trains, setting forth the charges to be assessed for the storage of the baggage and its delivery.

## REFUND—PASSENGER FARE.

I. C. 3178.

March 18, 1914.

Southern Pacific Company requested authority to make a refund in connection with a ticket purchased from Fresno to Santa Barbara by H. W. Swift, a delegate to the Republican State Central Committee's convention held at the latter point.

Because of blockade on the line passenger was unable to reach Santa Barbara and was carried to Los Angeles, returning home without having attended the convention.

After investigation the Commission authorized the refunding of \$5.10, being the difference between the amount paid and what would have been paid had the obstruction on the line not prevented Mr. Swift from attending the convention.

## REFUND—PASSENGER FARE.

I. C. 3181.

March 16, 1914.

C. B. Crawford, Buttonwillow, wrote the Commission stating that he had been overcharged in connection with a round-trip ticket reading from Buttonwillow to Los Angeles.

Investigation developed the fact that because of washouts train service was suspended and passenger was unable to reach his home destination before ticket had expired.

Excess fare amounting to \$2.70 was refunded by the Southern Pacific.

## PASSENGER TRAIN STOP.

I. C. 3187.

December 23, 1913.

W. C. Clark, Oakland, referred to the Commission correspondence with the Oakland, Antioch and Eastern Railway with reference to the failure of that company to stop its passenger trains on Mr. Clark's property as per an agreement entered into at the time right of way was deeded to the railway company.

The matter was taken up with the Oakland-Antioch, and a satisfactory arrangement finally agreed upon.

## PASSENGER CARS.

I. C. 3196.

March 19, 1914.

J. C. Metzgar, secretary Chamber of Commerce, Santa Ana, entered a complaint against the Pacific Electric Railway, alleging that the passenger cars operating between Los Angeles and Santa Ana were not properly equipped in order to take care of the comfort of its passengers.

After correspondence with the manager of the railway it was arranged to have new cars which were in course of construction provide the improvements desired.

## DRINKING CUPS ON TRAINS.

I. C. 3200.

March 20, 1914.

J. S. Stevenson, Placentia, entered a protest against the practice of railroads removing drinking cups from its passenger coaches. Complainant was notified that the regulation was in conformity with an order issued by the Interstate Commerce Commission and health authorities, but that the Commission required sanitary drinking cups to be sold at one cent each.

## PASSENGER STOP—INTERURBAN TRAIN.

I. C. 3203.

March 21, 1914.

H. H. Dingley, Saratoga, entered a complaint against the Peninsular Railway alleging that satisfactory station stop was not made in the territory between Saratoga and Congress Junction.

After some correspondence with the traffic manager of the interested railway it was arranged to have a new train stop made between the points in question, which adjusted the matter to complainant's satisfaction.

## REFUND OF FARE.

I. C. 3210.

March 23, 1914.

Southern Pacific Company was authorized to refund excess amount collected in connection with a ticket purchased from Chico to San Jose and return by a party who attended the California Retail Harness Dealers' Association's convention.

Traveler neglected to secure a regular receipt certificate at Chico when purchasing ticket for the going trip but obtained a memorandum from conductor. It is, there-

fore, apparent that the reduced fare should be granted delegate from San Jose to Chico, and the Commission authorized adjustment accordingly.

#### PULLMAN—REFUND OF FARE.

I. C. 3226.

March 25, 1914.

R. W. Rogers, Oakland, entered a complaint against the Pullman Company, alleging that he had purchased a ticket from Los Angeles to Phoenix which he was unable to use, and that the refunding of the amount paid had not been made by the car company.

The matter was taken up by mail and a check secured for \$2.60, the amount originally paid for the ticket.

#### COMMUTATION FARES.

I. C. 3228.

March 23, 1914.

H. S. Fairchild, San Francisco, wrote for information with reference to the commutation fares in effect between San Francisco and points on the Peninsular Railway.

The desired information was given.

#### ROUND-TRIP REFUND.

I. C. 3243.

March 28, 1914.

Northwestern Pacific Railroad Company was granted authority to make a refund to Frank Lowe in the sum of \$2.10 in connection with three round-trip tickets purchased from San Francisco to San Antonio, good Sunday only.

Refund was authorized on the basis of the difference between the amount paid and what would have been paid had party purchased Saturday to Monday excursion tickets.

#### TICKETS—COMMUTATION FARE.

I. C. 3264.

April 2, 1914.

R. N. Burgess, San Francisco, entered a complaint against the San Francisco-Oakland Terminal Railways, alleging that that company refused to accept at Berkeley commutation tickets reading between points on the Oakland, Antioch and Eastern Railway and San Francisco.

Commutation tickets in question were limited to certain stations on the Oakland, Antioch and Eastern Railway, and were not good between local points on the Terminal Railway. Complainant was notified accordingly.

#### STORAGE CHARGE ON BAGGAGE.

I. C. 3276.

April 1, 1914.

C. J. Dusenberry, San Francisco, entered a complaint against the Atchison, Topeka and Santa Fe Railway, alleging that storage charges had been wrongfully assessed against a trunk forwarded as baggage from Portland, Maine, to San Francisco.

The Commission having no jurisdiction, after failing to adjust matter informally, advised the complainant to take the matter up direct with the Interstate Commerce Commission at Washington, D. C.

#### PASSENGER FARES.

I. C. 3282.

March 28, 1914.

Frank Mallard, Sonora, wrote the Commission alleging that certain passenger fares on the Sierra Railway were excessive. Further information was requested, but as the same was not forthcoming the file was closed.

#### PASSENGER FARES.

I. C. 3293.

April 7, 1914.

Oakland Chamber of Commerce, entered a complaint with reference to passenger fares between Oakland and points east of Sacramento on the Ogden route. The complaint was taken up with the passenger traffic department of the Southern Pacific Company which maintained that fares were on the basis of 3 cents per mile east of Sacramento, but, because of water competition, were slightly less than 3 cents per mile between Sacramento and San Francisco; Oakland being intermediate to San Francisco was given the benefit of the lower rates to San Francisco. They, therefore, declined to make any change, and complainant was advised that, if the present schedule of rates was considered unreasonable, it would be necessary to file a formal complaint.

## REFUND—COMMUTATION TICKET.

I. C. 3314.

April 11, 1914.

San Pedro, Los Angeles and Salt Lake Railroad Company, Los Angeles, requested authority to make a refund in connection with a commutation ticket which was not used in its entirety during the month of February for the reason that trains were not running account of washouts and high water.

Authority was given to make proper refund.

## REFUND—COMMUTATION FARES.

I. C. 3331.

April 14, 1914.

Ocean Shore Railroad Company requested permission to make an adjustment in connection with commutation ticket reading between San Francisco and Mussel Rock. Ticket was only used in part for the reason that passenger service was discontinued on account of washouts and slides.

Authority to make proper refund was granted.

## COMMUTATION TICKET.

I. C. 3338.

April 12, 1914.

O. H. Mattley, West Berkeley, entered a complaint with the Commission against the Southern Pacific Company stating that he was required to pay fare from San Francisco to Berkeley because he was not in possession of his commutation book.

Since the rules of the tariff provide that commutation books must be presented, complainant was notified that the company was within its rights in refusing to accept the detached coupon.

## CHILDREN'S COMMUTATION FARES.

I. C. 3344.

April 17, 1914.

Mrs. Frances Lawrence, Oroville, wrote the Commission alleging that the charges assessed by the Northern Electric Railway for children's 46-ride commutation tickets between Chico and Oroville were excessive. No adjustment could be arranged informally, and complainant was therefore notified that the matter would have to be heard at a formal proceeding in order to secure testimony and make a final adjustment.

## PASSENGER—ALLEGED EXCESSIVE RATES.

I. C. 3370.

April 20, 1914.

L. F. Binz, Imperial Beach, forwarded to the Commission a petition signed by citizens of Imperial Beach, alleging that passenger train fares between San Diego and that city were very unsatisfactory.

The Commission endeavored to make some adjustment informally, but was unsuccessful as the principal transportation company took the position that there was no volume of business between the points in question, and since its line was operating at a deficit refused to make any change in the present service or rates being charged.

Complainant was notified that it would be necessary to institute formal proceedings, should they desire to carry the matter further; this was not done.

## PASSENGER FARES.

I. C. 3372.

April 21, 1914.

T. M. Edwards, San Rafael, entered a complaint alleging that the fare of 10 cents from Union Depot in San Rafael to San Anselmo was excessive.

In Commission's decision in Case No. 333 the rate was reduced to 5 cents, which adjusted the matter to the satisfaction of complainant.

## PASSENGER—ROUND TRIP FARES.

I. C. 3382.

April 20, 1914.

Placer Optical Company, East Auburn, entered a complaint alleging that the round-trip excursion tickets on sale from Auburn to Sacramento were discriminatory, for the reason that same could not be purchased in the opposite direction.

The subject was called to the attention of the Southern Pacific Company, which advised that on May 1st tickets would be sold from Sacramento to Auburn and remain on sale until October 24th.

Adjustment arranged was satisfactory to complainant.

## REFUND OF FARES.

I. C. 3383.

April 23, 1914.

S. Judson Hankins, San Francisco, referred to the Commission papers in a claim against the San Francisco-Oakland Terminal Railways in the matter of refund for unused portions of 2½ round-trip tickets purchased from San Francisco to Colusa. At the time the return journey was made the Northern Electric and



the Oakland, Antioch and Eastern, two of the participating carriers, were not operating trains because of high water, and purchasers of tickets were therefore required to secure other transportation via the Southern Pacific from Colusa to San Francisco.

The Commission took the position that claimant was entitled to a return of the money paid for the extra transportation from Colusa to San Francisco, and the transportation companies adjusted the claim accordingly.

#### PASSENGER FARE REFUND.

I. C. 3391.

April 22, 1914.

Southern Pacific Company requested authority to make a reparation refund in favor of E. J. Segerstrom in connection with ticket purchased from Sonoma to San Francisco and return. Mr. Segerstrom was a delegate to a convention being held in San Francisco but neglected to take the usual receipt at the time of purchasing ticket for the going trip, and therefore was unable to secure a reduced rate for the return trip. The Commission authorized refund of the excess amount collected.

#### PASSENGER TRAIN SERVICE.

I. C. 3393.

April 20, 1914.

F. M. Bailey, San Francisco, entered a complaint against the Southern Pacific Company alleging that the passenger train service was inadequate between San Francisco and Stanford University on April 18th.

Superintendent of the railroad company advised that because of a football game at the university travel was unusually heavy, but that every effort was made to provide sufficient number of coaches and seats for the traveling public.

#### OVERCROWDING OF CARS.

I. C. 3395.

April 25, 1914.

Hugh M. Burke, San Francisco, filed a complaint with the Commission stating that passenger cars on the San Francisco, Napa and Calistoga Railway were frequently overcrowded. The matter was taken up with the traffic department of the transportation company, which advised that it would check the cars up very carefully in future and endeavor to prevent overcrowding.

#### ROUND-TRIP FARES.

I. C. 3397.

April 26, 1914.

Waldo R. Norris, Tracy, made a complaint with reference to the round-trip passenger fare in effect between Tracy and San Francisco. Complainant was notified that effective June 1st a round-trip ticket would be placed on sale for \$2.70, good for going trip Saturday or Sunday, returning Monday. This was a satisfactory adjustment of the trouble.

#### ROUND-TRIP PASSENGER FARE.

I. C. 3399.

April 27, 1914.

F. Farquhar, Long Beach, entered a complaint against the Pacific Electric Railway, based on the fact that conductors on interurban cars did not sell special round-trip tickets which were sold at the company's office at reduced rates on Sundays and holidays.

The railway company in defense of the practice maintained that conductors could not sell tickets on rush occasions and at the same time attend to their regular duties, and further advised that, if the sale of these tickets could not be restricted to ticket offices, they would prefer to discontinue their issuance. Complainant was advised accordingly, and notified that it would be necessary to file formal proceedings should he desire to carry the matter to a conclusion.

#### LOSS AND DAMAGE CLAIM.

I. C. 3404.

February 27, 1914.

P. Flatow & Son, Alameda, referred to the Commission papers in a claim amounting to \$66.25 against the Lake County Automobile Transportation Company. The claim represented the value of a suit case and contents which were lost by the automobile company.

While the Commission has no jurisdiction over loss and damage claims, it nevertheless took the matter up with the automobile company and arranged for settlement of claim.

#### STREET CAR FARES.

I. C. 3406.

April 27, 1914.

Edgar Richardson, Alameda, entered a complaint against the Southern Pacific Company alleging that the passenger rates between points in Alameda were not



properly adjusted. The rates complained of were on street cars and therefore under the control of the Alameda city council.

#### PACKAGES IN BAGGAGE CARS.

I. C. 3418.

April 28, 1914.

Marin County Grocers' Association, San Rafael, wrote the Commission stating that conductors of passenger trains on the Northwestern Pacific Railroad refused to allow passengers to carry into coaches boxes of fruit and berries.

Complainant was advised that a passenger ticket did not include the carrying of merchandise, and that packages should be placed in the express car and charges paid for the same.

#### SCRIP TRANSPORTATION.

I. C. 3451.

May 2, 1914.

H. H. Plummer, Berkeley, entered a complaint against the Transcontinental Scrip Bureau, alleging that refund checks were not promptly forwarded and reports issued by the Bureau were frequently incorrect.

The manager of the Scrip Bureau advised the Commission that he was making arrangements to have checks sent out more promptly in future, and would also correct the trouble complained of in connection with the reports.

#### ROUND-TRIP PASSENGER FARE.

I. C. 3453.

May 14, 1914.

H. A. George, Petaluma, called on the Commission and stated that round-trip fares offered by the Northwestern Pacific Railway for the use of children attending the district Sunday-school picnic at Mirabel Park were unsatisfactory.

The matter was taken up with the railway company which arranged to sell round-trip tickets for one-way single fare, which is the same rate offered all picnic parties.

#### ROUND-TRIP TICKETS.

I. C. 3471.

May 6, 1914.

Miss Helen Shamp of San Francisco, wrote the Commission complaining because conductors on the Peninsular Railway did not sell round-trip tickets, and that same could only be secured at depots where agents were on duty. The railway company declined to change its operating rules, maintaining that conductors could not sell round-trip tickets on special occasions and attend to their other duties in connection with the operation of their trains. Complainant was therefore notified that the matter would have to be taken care of after a formal investigation.

#### PULLMAN ACCOMMODATIONS.

I. C. 3515.

May 11, 1914.

M. L. Daggy, San Francisco, wrote the Commission calling attention to the fact that travelers occupying Pullman sleepers were not receiving proper treatment from car employees.

Complainant was advised that Commission would give careful consideration to the facts presented when making its investigation in connection with Pullman service.

#### COMMUTATION TICKETS.

I. C. 3531.

May 15, 1914.

T. C. Eager, San Leandro, complained to the Commission because the San Francisco-Oakland Terminal Railways did not sell commutation tickets at its office in San Leandro.

Arrangements were made to have the tickets placed on sale.

#### ROUND-TRIP PASSENGER FARE.

I. C. 3545.

May 15, 1914.

W. C. Duffield, Escondido, made a complaint with reference to the round-trip rate applying from Escondido to Los Angeles, which is higher than the round-trip rate in the opposite direction.

The railroad company took the position that lower rates from Los Angeles are justified for the reason that the traffic is heavier and could not be on the same basis as applied from the interior point to Los Angeles. Since no adjustment could be secured informally, complainant was advised that it would be necessary to begin formal proceedings.

#### PASSENGER—STATE FAIR TICKET.

I. C. 3546.

May 16, 1914.

J. F. Day, Riverbank, called the attention of the Commission to the fact that while the agent of the Santa Fe notified travelers that a fare and a third would be

in effect during the State Fair at Sacramento, proper tariffs to cover were not published, and therefore he was required to pay local fare in both directions.

The Commission authorized the Santa Fe to refund to Mr. Day the sum of \$1.45, being the excess amount paid because proper tariffs were not published.

#### LOST BAGGAGE CHECKS.

I. C. 3549.

May 18, 1914.

C. S. Fee, passenger traffic manager of the Southern Pacific Company, requested authority to waive storage charges in the sum of \$2.10 assessed against baggage belonging to a person who had lost his checks, and because of meeting with an accident was unable to call at the baggage room and identify the baggage. Authority to cancel the storage charges was granted.

#### COMMUTATION FARES.

I. C. 3552.

May 18, 1914.

Mrs. Alice G. Whitbeck, Martinez, entered a complaint against the commutation fares of the Southern Pacific Company between Richmond and Martinez.

The matter was taken up with the transportation company which claimed that rates were reasonable and declined to make any changes therein. Complainant was notified that if it was desired to carry the matter further, it would be necessary to bring formal action. This, however, was not done.

#### STREET CAR TRANSFERS.

I. C. 3568.

May 20, 1914.

M. C. Devaney, Alameda, wrote the Commission complaining of the manner in which street car transfers were issued by the United Railroads in San Francisco.

The Commission, having no jurisdiction, advised the complainant to take the matter up with the San Francisco board of supervisors.

#### PASSENGER—SALE OF THROUGH TICKETS.

I. C. 3602.

May 23, 1914.

Complaint was entered to the effect that tickets could not be purchased at the agency of the Oakland, Antioch and Eastern Railway at Fortieth and Shafter streets, Oakland, through to Woodland located on the Sacramento and Woodland.

Investigation developed the fact that through tickets were on sale at the Oakland office, and there was apparently some misunderstanding on the part of the agent declining to sell same to party who entered the complaint.

#### PASSENGER—BAGGAGE.

I. C. 3613.

May 13, 1914.

E. E. Gardner, Lodi, referred to the Commission claim against the Southern Pacific Company involving storage charge on baggage checked at Ceres and left at that point, because baggage room was closed at departure of traveler's train on the Sunday in question.

After some correspondence, the Commission arranged to have the baggage returned to its proper destination without additional charges.

#### REFUND—PASSENGER FARES.

I. C. 3615.

May 25, 1914.

The Southern Pacific Company requested permission to make a reparation refund in favor of E. B. Partridge in connection with a journey made from Livermore to Fresno and return as a delegate to the California Building and Loan League. Mr. Partridge was unable to secure reduced fare for the round-trip for the reason that the secretary had not signed the receipt certificate.

The Commission authorized a satisfactory adjustment of the claim.

#### STORAGE CHARGES—BAGGAGE.

I. C. 3616.

May 25, 1914.

Chas. Fehely, Oakland, wrote the Commission stating that storage charges had been wrongfully assessed on a piece of baggage remaining in the custody of the agent at Fruitvale Station.

The charges as assessed were investigated and found to be correct and in conformity with tariffs, and complainant was therefore notified that no overcharges existed.

## REFUND—PASSENGER FARES.

I. C. 3618.

May 25, 1914.

Southern Pacific Company requested permission to refund fares to parties who attended a convention of the Seventh-Day Adventists at Fresno.

Tariffs as published, through a mistake, did not cover all of the territory from which the delegates traveled. Authority to make proper adjustment was given.

## TRANSFERRING OF BAGGAGE.

I. C. 3635.

May 25, 1914.

Elmer E. Smith, San Francisco, filed a complaint with the Commission alleging that he was being overcharged and did not receive proper service from the Los Angeles Transfer Company in the city of Los Angeles.

The Commission, having no jurisdiction over transfer companies, advised complainant to take the matter up with the city authorities at Los Angeles.

## PASSENGER FARE REFUND.

I. C. 3650.

June 1, 1914.

W. R. Christie, San Francisco, wrote the Commission complaining of the fare assessed for passenger transportation between Mt. Hermon and Olympia.

Investigation developed the fact that conductor who made the collection read the tariff wrong, and the amount of overcharge was refunded by the Southern Pacific Company.

## PASSENGER—ROUND-TRIP AND COMMUTATION FARES.

I. C. 3658.

May 26, 1914.

Niles Chamber of Commerce entered a complaint with the Commission, alleging that passenger fares in effect between Niles and Oakland via the Southern Pacific were excessive and discriminatory as compared with rates between Niles and San Francisco.

The Commission had a lengthy correspondence with the Southern Pacific Company, but was unable to secure any informal adjustment, and was therefore compelled to notify complainants that formal proceedings would be necessary should they desire to carry the controversy to a conclusion.

## PASSENGER—TRAIN FARE.

I. C. 3661.

May 30, 1914.

P. J. McHugh, Los Angeles, complained that he was assessed train fare by the Santa Fe Railway for a trip from Corona to Los Angeles, it being alleged that there was no ticket seller on duty at Corona and therefore regular ticket rate should have been charged.

After some correspondence with the passenger traffic department of the Santa Fe, the Commission secured a refund of the additional 15 cents paid to conductor.

## PASSENGER FARE.

I. C. 3665.

June 1, 1914.

Oakland Chamber of Commerce entered a complaint against the Southern Pacific Company alleging that there was no satisfactory 10-ride ticket in effect between Oakland and Los Gatos.

After considerable correspondence the railroad company agreed to publish the same rate from Oakland as was in effect from San Francisco, which adjusted the matter to the satisfaction of complainants.

## PASSENGER—LOSS AND DAMAGE TO BAGGAGE.

I. C. 3671.

June 2, 1914.

Miss Virginia Riley, Bakersfield, referred to the Commission papers in a claim involving loss and damage to a suit case and contents.

After some correspondence the transportation company agreed to make a partial settlement of the claim, which, however, was not satisfactory to complainant, who was advised that any adjustment other than informal would have to be secured by action in the civil courts.

## PASSENGER FARES.

I. C. 3713.

June 8, 1914.

L. W. Ball, Mojave, called attention to the fact that passenger fares on the branch line, known as the Nevada and California Railway, operating out of Mojave, were considered excessive.

Complainant was notified that the Commission would in the near future make an investigation of all passenger fares in the State of California, and would at that time give due consideration to the fares complained of.



## PASSENGER FARE.

I. C. 3725.

June 10, 1914.

Robt. E. Swain, Stanford University, submitted to the Commission papers in a claim entered against the Southern Pacific Company involving alleged balance due on a round-trip ticket sold from Palo Alto to Riverside.

After investigation the Commission reached the conclusion that while the tariff had not been strictly adhered to, passenger had acted under instructions of the agent of the Southern Pacific Company and the undercharge bill should be cancelled. Authority so to do was therefore issued.

## PASSENGER—INDIRECT SERVICE, ACCOUNT WASHOUTS.

I. C. 3759.

March 2, 1914.

J. B. S. Coates, Los Angeles, called the Commission's attention to the fact that on account of washouts the Pacific Electric Railway was unable to operate its regular service, and was assessing additional charges to holders of commutation tickets who were required to reach their destination by roundabout routes.

The complaint was taken up direct with President Shoup of the railway company who issued instructions for the honoring of tickets via the long mileage until such time as the tracks via the short line had been repaired.

## ROUND-TRIP PASSENGER FARES.

I. C. 3791.

June 16, 1914.

Southern Pacific Company requested permission to waive undercharge bill in the sum of \$5.00 issued by the auditing department against a round-trip ticket to Los Angeles, which by mistake of agent had been sold one day before the effective date of the tariff covering the rate.

Authority was issued to cancel the undercharge bill.

## SOLICITOR ON PASSENGER TRAINS.

I. C. 3801.

June 16, 1914.

J. A. Ryan, Sulphur Creek, proprietor of the Jones Hot Sulphur Springs, protested against the practice of the Southern Pacific Company in allowing a solicitor employed by the Gibson Wilbur Springs Stage Company to travel on its trains between Arbuckle and Williams and attempt to divert business to the Wilbur Springs resort.

The matter was taken up with the transportation company, and, pending the formal hearing of a case involving like conditions, it was suggested that the solicitor be removed.

## PULLMAN ACCOMMODATIONS.

I. C. 3812.

May 29, 1914.

P. S. Moody, Webber Lake, entered a complaint with the Commission alleging that Pullman accommodations could not be secured at Truckee in the local car operating between that point and San Francisco.

It developed that the practice had been to assign most of the space in this car to the Tahoe City agency, located in a hotel, the result being that the agent of the Southern Pacific Company at Truckee was seldom able to secure accommodations when called for.

After considerable correspondence the Commission arranged to have the space in this car equally divided between the stations Truckee and Tahoe, the offices to communicate with each other and when space is sold out at one station that station may sell the unsold accommodations reserved at the other point.

## PASSENGER—ROUND-TRIP TICKETS.

I. C. 3850.

June 22, 1914.

Prof. A. B. Purfurst, San Diego, wrote the Commission alleging that the schedule of round-trip fares between points on the San Diego and Southeastern Railway were discriminatory.

The basis upon which excursion fares are constructed was explained to complainant, and the file closed without action as the railway company declined to make any readjustment of its fares by informal proceedings.

## TICKET REFUND AND RELEASE OF BAGGAGE.

I. C. 3876.

May 19, 1914.

Geo. Williams, Coreoran, complained to the Commission that he was unable to secure release of baggage and refund on unused portions of one half fare and six full fare tickets purchased for himself and family at Santa Ana for transportation to Paris, Ills., via the Santa Fe Railway, and only used as far as Coreoran, where



he had been compelled to discontinue his journey account of illness. Complainant's baggage had been checked through to final destination and returned to Corcoran with accumulated charges.

The Commission took the matter up with the railroad company and effected a prompt release of the baggage, together with refund due on tickets in question.

PASSENGER—CONVENTION RATES.

I. C. 3904.

June 30, 1914.

Western Pacific Railway, San Francisco, requested authority to make refunds to delegates attending convention of the Seventh-Day Adventists held in Oakland.

It appeared that through some misunderstanding proper passenger tariff was not issued in time to be used by delegates, and authority was granted to refund amounts of overcharges.

PASSENGER—REFUND FOR UNUSED TICKETS.

I. C. 3908.

July 1, 1914.

L. W. Leighton, Palo Alto, wrote the Commission complaining that refund secured for unused ticket purchased from the Southern Pacific was not satisfactory.

Investigation was made and it was found that refund was in strict conformity with tariff regulations; after the situation had been explained, complaint was withdrawn.

## INFORMAL FREIGHT COMPLAINTS.

### SWITCHING CARS.

I. C. 1637.

July 2, 1913.

The Richmond Chemical Company asked for information with reference to charges assessed for the switching of cars by the Atchison, Topeka and Santa Fe at Richmond.

The matters complained of were investigated and the Chemical Company advised of the facts in the case and informed that the charges they had paid were lawful and in conformity with the tariffs on file in this office.

### CEMENT SHIPMENTS.

I. C. 1643.

July 3, 1913.

The Ross Construction Company of Sacramento referred to this office their file with reference to the purchase of some 8,000 barrels of cement to be used at Wyo.

The complaint involved the cost price of the cement, over which this Commission had no jurisdiction, and complainant was notified accordingly.

### FREIGHT RATE—CEMENT.

I. C. 1643½.

July 10, 1913.

Ross Construction Company, Sacramento, wrote the Commission for information with reference to the rate on cement, in carloads, from Bay Point to Wyo. The desired information was given.

### BOAT CHARGES FOR TRANSFERRING AUTOMOBILES.

I. C. 1647.

July 5, 1913.

Geo. G. Clarksen of Oakland, wrote the Commission complaining of the charges assessed by the Monticello Steamship Company for carrying automobiles between San Francisco and Vallejo; also against the charge made by the Southern Pacific Company between Benicia and Port Costa.

The complaint was taken up with the traffic managers of the two transportation companies, who maintained that the charges shown in their tariffs were just and reasonable, and declined to make any informal adjustments.

Complainant advised it would be necessary to file formal proceedings if he wished to carry the matter further.

### DEMURRAGE CHARGES.

I. C. 1648.

July 18, 1913.

The Mission Brewing Company of San Diego submitted to the Commission papers in connection with demurrage charges collected against a carload of oil at San Diego.

Complainants were under the impression that because the oil car was the property of a private firm and was held while under load on private track of the Mission Brewing Company, that no charges should be assessed for demurrage.

General Order No. 2 of this Commission makes no distinction between privately owned cars and railroad company cars. Therefore the demurrage charges as assessed were lawful and no overcharge existed.

### REFUND OF CHARGES FOR FEEDING LIVE STOCK.

I. C. 1652.

July 7, 1913.

F. A. Fickert, Tehachapi, forwarded to the Commission papers in a claim amounting to \$8.50 against the Southern Pacific Company, representing the charges assessed for feeding a carload of live stock at Fresno, which was in transit from Gilroy to Tehachapi.

Investigation developed the fact that if this shipment had been properly handled it need not have been stopped at Fresno for feeding. The transportation company accordingly refunded the charges collected.

### OVERCHARGES ON CEMENT.

I. C. 1653.

July 7, 1913.

Riverside Portland Cement Company of Los Angeles submitted papers to this Commission with reference to charges assessed against three carload shipments of cement forwarded from Riverside Junction to Santa Barbara, Riverside, and San Pedro.

The bills were checked, and it was found that a slight overcharge existed, which overcharge the Commission authorized the transportation company to refund.

## FREIGHT RATES—CATTLE AND HORSES.

I. C. 1658.

July 16, 1913.

Thos. Brinan, San Ardo, called at this office and entered a complaint against the rate of \$67.00 per car for cattle and \$78.00 per car for horses transported from San Ardo to Marysville.

The matter was taken up with the traffic manager of the Southern Pacific Company, who informally reduced the rates to \$60.00 per car for both horses and cattle; also refunded to the complainant \$92.75, being the difference between the amounts charged and the amounts which would have been assessed at the rates subsequently established.

## REPARATION REFUND.

I. C. 1658½.

February 6, 1914.

Thos. Brinan vs. *Southern Pacific Company*. Permission granted February 11, 1914, to make a reparation refund of \$16.35, account unreasonable rate applied on one carload of barley, forwarded from Graves to San Ardo on September 24, 1913.

## MILK VIA PASSENGER TRAINS.

I. C. 1661.

July 7, 1913.

The California Central Creameries entered a protest against the change made in the Pacific Freight Tariff Bureau, Exception Sheet 1-C, which eliminated the Atchison, Topeka and Santa Fe from item S5-A, providing for a charge of 150 per cent of the freight rates where milk and cream is transported by passenger trains.

Complainant was advised that the Atchison, Topeka and Santa Fe Railway published a special tariff for the transportation of milk and cream by their passenger trains, and would arrange a specific rate for all movements of that commodity over their line; and therefore the change in the exception sheet brought about no increases to the shipping public.

## FREIGHT—WOOD.

I. C. 1667.

July 9, 1913.

W. G. Stafford & Co., San Francisco, entered a complaint against the Northwestern Pacific Railway, alleging that the rates assessed for the transportation of cord wood in carloads from Willits to San Francisco were excessive and unreasonable.

The railway company in its defense took the position that the rates for the service performed were not excessive, and declined to make any informal adjustment.

Complainant was notified that it would be necessary to bring a formal complaint in order to secure a decision from the Commission adjusting the situation on its merits.

## DELAY OF FREIGHT.

I. C. 1671.

July 11, 1913.

David M. Kennedy of Weimar wrote the Commission complaining of the poor freight service rendered by the Southern Pacific Company in the transportation of less than carload shipments of general merchandise forwarded from Sacramento to New England Mills.

The complaint was taken up with the freight traffic manager of the Southern Pacific Company, who made an investigation and advised that better service would be rendered in the future.

## OVERCHARGE—FREIGHT.

I. C. 1672.

July 23, 1913.

Smith's Cash Store of San Francisco forwarded to this office papers in an overcharge claim which they were unable to adjust direct with the Monticello Steamship Company.

This office made a check of the charges as assessed by the steamship company and found that there was an overcharge of 43 cents, which amount was refunded to complainant.

## FREIGHT—COTTON SEED MEAL.

I. C. 1683.

July 8, 1913.

Imperial Valley Oil and Cotton Company, El Centro, entered a complaint alleging that the rates on cotton-seed meal from El Centro to points located on the line of the Southern Pacific were excessive and unreasonable.

After an extensive correspondence it was arranged informally to have the rates reduced to all points to which the meal was shipped. The principal reductions are as follows:

*Cotton-seed Meal—Cotton-seed Cake.*

From El Centro to—	Old rates	New rates effective May 28, 1914
Bakersfield .....	\$6 50	\$5 10
Fresno .....	6 60	6 15
Marysville .....	8 40	7 10
Sacramento .....	7 00	6 80
San Francisco .....	7 25	6 80
San Jose .....	7 90	6 80
Santa Barbara .....	5 25	4 40

## SWITCHING CARS.

I. C. 1685.

June 10, 1913.

The Great Western Smelting and Refining Company wrote the Commission for information with reference to the absorption of switching charges when cars were handled by the State Belt Railway from the transfer tracks of the Southern Pacific Company.

Complainant was notified that the tariffs provided for the absorption of the switching charges only when the cars were delivered on the belt line team tracks, and that no absorption was made when delivery was taken on private industry tracks.

## REPARATION REFUND.

I. C. 1688.

July 12, 1913.

*Barber Asphalt Paving Company vs. Atchison, Topeka and Santa Fe.* Permission granted July 16, 1913, to make a reparation refund of \$7.91, account unreasonable rate applied on two carloads of sand forwarded from Vidrio to Pasadena on November 15, 1911.

## REPARATION REFUND.

I. C. 1689.

July 12, 1913.

*American Steel Pipe and Tank Company vs. Atchison, Topeka and Santa Fe.* Permission granted July 16, 1913, to make a reparation refund of \$5.72, account unreasonable rate applied on one carload of galvanized pipe lock seamed and riveted forwarded from South Pasadena to Paige on August 16, 1912.

## INTERSTATE FREIGHT RATE.

I. C. 1691.

July 12, 1913.

Thos. Smith of Vallejo wrote the Commission alleging that he had been overcharged in connection with a shipment of drums forwarded from New York City to South Vallejo. Tariff provisions were explained, but as this Commission had no jurisdiction over the shipment in question, complainant was advised to take the matter up with the Interstate Commerce Commission at Washington, D. C.

## REPARATION REFUND.

I. C. 1708.

July 15, 1913.

*Santa Clara County Board of Supervisors vs. Southern Pacific Company.* Permission granted July 26, 1913, to make a reparation refund of \$1,746.10, account unreasonable rate applied on fifty-eight carloads of bituminous rock, forwarded from Carpenteria to Hope Ranch on June 8 to September 6, 1912.

## REPARATION REFUND.

I. C. 1717.

December 24, 1913.

*United Material Company vs. Southern Pacific Company.* Permission granted January 19, 1914, to make a reparation refund of \$44.00, account unreasonable rate applied on one carload of enameled brick, forwarded from Los Angeles to San Francisco on June 18, 1912.

## GRAIN RATE.

I. C. 1718.

July 17, 1913.

The firm of E. Ignace & Company, Walnut Creek, wrote the Commission alleging that the carload rate for the transportation of grain from Concord to Walnut Creek of 80 cents per ton was unreasonable for the reason that the rate by the electric line was 50 cents per ton, and also that the rate in the opposite direction by the Southern Pacific was 50 cents per ton.

The complaint was investigated, and as a result a rate of 50 cents per ton was established and a reparation refund of \$16.93 secured.



## RENTAL OF CAR.

I. C. 1723.

July 18, 1913.

J. A. Johnston, warden, State Prison at Folsom, wrote the Commission with reference to the rental of a car belonging to the Southern Pacific Company which was being used by the State Railroad at Folsom.

Mr. Johnston was advised the Commission had no jurisdiction, and that it would be necessary to adjust the matter direct with the officials of the Southern Pacific Company.

## FREIGHT RATES—CEMENT.

I. C. 1726.

October 23, 1913.

Henry Cowell Lime and Cement Company requested the Commission to take up with interested transportation companies the question of reducing the rate on cement in carloads from \$4.00 to \$3.60 per ton moved from Cowell to Inglewood.

The railroad companies declined to informally reduce the rate, and complainant was notified that it would be necessary to file formal proceedings should they desire to continue the matter further.

## FREIGHT RATE—GRAIN.

I. C. 1739.

July 23, 1913.

The Grange Company, Modesto, wrote the Commission asking for information with reference to the freight rates on grain between Turlock and San Francisco. The desired information was furnished.

## OVERCHARGES.

I. C. 1740.

July 23, 1913.

The Linder Hardware Company referred to the Commission papers in a claim against the Southern Pacific Company for alleged overcharges against shipment of irrigating pipe forwarded from Shorb to Visalia.

A check was made of the charges as assessed and they were found to be correct, as per rates in effect at the time the shipment moved. The rate, however, since the movement of this particular shipment, was reduced from \$1.55½ per 100 pounds to 55¼ cents per 100 pounds, thus providing a satisfactory rate for future business.

## REPARATION REFUND.

I. C. 1741.

July 23, 1913.

*Lachman & Jacobi vs. Southern Pacific Company.* Permission granted July 29, 1913, to make a reparation refund of \$285.19, account unreasonable rate applied on forty-two carloads of wine, forwarded from Hanford and Fresno to Petaluma on March, April, May, August, November, and December, 1912.

## LOSS AND DAMAGE CLAIM.

I. C. 1745.

July 24, 1913.

H. E. Bruckman, San Francisco, wrote the Commission and entered a complaint against the San Francisco, Napa and Calistoga Railway because that line neglected to pay a loss and damage claim for goods which had gone astray.

The Commission endeavored to informally arrange for a settlement of the claim, but without success, and was therefore compelled to notify complainant that the matter would have to be taken into the civil courts for definite adjustment.

## REPARATION REFUND.

I. C. 1748.

July 23, 1913.

*Canadian North Pacific Fisheries, Ltd. vs. San Pedro, Los Angeles and Salt Lake Railroad Company.* Permission granted August 9, 1913, to make a reparation refund of \$7.63, account unreasonable rate applied on two carloads of fertilizer, forwarded from East San Pedro to Redlands on December 18, 1912.

## FREIGHT—MILLING IN TRANSIT.

I. C. 1749.

July 24, 1913.

E. K. Wood Lumber Company, Los Angeles, wrote the Commission alleging that the refund of local charges on lumber, stopped at Los Angeles for milling in transit purposes, worked a hardship and a loss when charges were adjusted on the basis of the actual weight instead of the minimum carload weight.

Complainants were notified that the tariffs provided for adjustment on the basis of the actual weight of the consignment and therefore no overcharges or discrimination existed against the shipments referred to.

## FREIGHT RATES.

I. C. 1750.

July 23, 1913.

The Orange County Highway Commission requested that special rates be authorized for the transportation of cement to be used in the construction of public highways in Orange County.

The Commission took the matter up with the traffic manager of the Southern Pacific Company and arranged rates to the satisfaction of the Highway Commission.

## INTERSTATE FREIGHT.

I. C. 1759.

July 26, 1913.

The Livermore Valley Chamber of Commerce, Livermore, wrote the Commission complaining of the freight rates in transcontinental tariffs. Since the rates complained of are under the jurisdiction of the Interstate Commerce Commission, complainant was advised that it would be necessary to refer the matter to that Commission at Washington, D. C.

## FREIGHT CHARGES—CLAY.

I. C. 1768.

July 28, 1913.

Los Angeles Pressed Brick Company, Los Angeles, referred to the Commission papers in a claim against the Santa Fe Railway involving freight charges assessed against a carload of clay which, by mistake, was forwarded to wrong destination.

The matter was taken up with transportation company who arranged to refund charges assessed on account of error on the part of their own agent.

## FREIGHT—INTERSTATE.

I. C. 1772.

July 21, 1913.

James Johnston, Los Angeles, wrote the Commission alleging that the charges assessed for the transportation of a shipment of household goods from Alma, Michigan, to Los Angeles were not in conformity with published tariffs. The tariff provisions were explained and complainant advised to correspond with the Interstate Commerce Commission at Washington, D. C., under whose jurisdiction the shipment moved.

## PACKAGES DEPOSITED AT NEWS STANDS.

I. C. 1774.

July 28, 1913.

G. H. Elliot, Redwood City, wrote the Commission and complained against the charges assessed by news stands located in depots, for packages deposited for safe-keeping.

Complainant was advised that this Commission had no jurisdiction over the charges and could offer no assistance.

## REPARATION REFUND.

I. C. 1777.

July 29, 1913.

*Federal Construction Company vs. Peninsular Railway Company.* Permission granted August 9, 1913, to make a reparation refund of \$29.20, account unreasonable rate applied on thirty-two carloads of gravel, forwarded from Bell's Spur to Redwood City during May and June, 1913.

## REPARATION REFUND.

I. C. 1778.

July 29, 1913.

*Mountain Copper Company, Ltd. vs. Southern Pacific Company.* Permission granted August 7, 1913, to make a reparation refund of \$87.43, account unreasonable rate applied on one carload of calcium carbonate, forwarded from Mococo to Fair Oaks on January 10, 1913.

## REPARATION REFUND.

I. C. 1779.

July 29, 1913.

*Union Oil Company vs. Southern Pacific Company.* Permission granted August 7, 1913, to make a reparation refund of \$48.72, account unreasonable rate applied on seven carloads of engine distillate, forwarded from Oleum to Lodi during February, March, and April, 1913.

## REPARATION REFUND.

I. C. 1780.

July 29, 1913.

*Los Angeles Mill and Lumber Company vs. Southern Pacific Company.* Permission granted August 13, 1913 to make a reparation refund of \$5.00, account unreasonable rate applied on one carload of lumber, forwarded from Blinnville to Saugus on September 16, 1912.

## REPARATION REFUND.

I. C. 1781.

July 29, 1913.

*Riverside Portland Cement Company vs. Southern Pacific Company.* Permission granted July 29, 1913, to make a reparation refund of \$7.83, account unreasonable rate applied on one carload of cement, forwarded from Riverside Junction to Fresno on May 10, 1913.

## FREIGHT RATES.

I. C. 1783.

July 29, 1913.

The Ukiah Farmers' Club, Ukiah, alleged that charges had been wrongfully assessed against a shipment of hop cloth forwarded from San Francisco to Ukiah.

A check of the freight bill revealed an overcharge of \$20.60, which the transportation companies refunded.

## AUTOMOBILE VIA FERRY.

I. C. 1792.

August 1, 1913.

*N. Gray & Company, San Francisco,* made a complaint against the Northwestern Pacific Railroad because automobiles containing funeral parties were not given preference on ferryboats operating between San Francisco and Sausalito.

The complaint was taken up with the general passenger agent of the railroad company, who promised to establish rules which would take care of funeral parties without unnecessary delay.

## RATE ON HAY.

I. C. 1796.

August 1, 1913.

*Hilborn Bros., Suisun,* complained to this Commission alleging that the rate on hay from Tolenas to Suisun of 80 cents per ton was excessive as compared with rate of 25 cents per ton on cement between the same points.

The traffic department of the Southern Pacific Company in response to a communication from this office declined to make any informal adjustment claiming that the rates were reasonable and that the per car earnings on cement at 25 cents per ton averaged from \$7.50 to \$12.50 per car because of heavy tonnage loaded in each car, while the earnings on carloads of hay at 80 cents per ton, between the same points, only produces from \$6.80 to \$9.60 per car; this because of the very light loading tonnage of hay.

Claimants were notified that the matter would have to be taken up by formal proceedings should they desire to carry the matter further.

## REPARATION REFUND.

I. C. 1797.

November 13, 1913.

*Somers & Company vs. Western Pacific Railway, Northern Electric Railway.* Permission granted November 21, 1913, to make a reparation refund of \$27.82, account unreasonable rate applied on nine carloads of hay, forwarded from Tres Vias to San Francisco on June 2, 3, May 27, 28 and 31, 1913.

## FREIGHT CHARGES.

I. C. 1799.

August 2, 1913.

*A. S. Halsted,* general counsel of the San Pedro, Los Angeles and Salt Lake Railroad Company, Los Angeles, wrote the Commission and requested permission to adjust a loss sustained by a shipper because local agent of the railroad company, through a misunderstanding, ordered certain carload shipments of manure unloaded on a spur track other than that to which the shipment was consigned. After making an investigation, the Commission authorized a satisfactory settlement.

## FREIGHT RATE—SAND.

I. C. 1804.

August 4, 1914.

The Dow Pump and Diesel Engine Company of Alameda wrote the Commission alleging that the rate on moulding sand of 50 cents per ton from San Francisco to Alameda was excessive.

The Southern Pacific Company defended the rate maintaining that same was as low as could be established and declined to make any change. Complainant was advised that the Commission could do nothing further in the matter unless formal proceedings were filed.

## REPARATION REFUND.

I. C. 1809.

August 5, 1913.

*Standard Oil Company vs. Southern Pacific Company.* Permission granted August 9, 1913, to make a reparation refund of 96 cents, account unreasonable rate applied on one carload of oil, forwarded from Seguro to Sonora on June 9, 1911.



## FORMAL COMPLAINT.

I. C. 1811.

August 4, 1913.

R. R. Veale, Martinez, wrote the Commission for information with reference to the filing of a formal complaint against certain rates being charged between points in the Livermore Valley.

The desired information was furnished.

## REPARATION REFUND.

I. C. 1812.

July 21, 1913.

*Henry Cowell Lime and Cement Company vs. Atchison, Topeka and Santa Fe Railway.* Permission granted August 15, 1913, to make a reparation refund of \$80.94, account unreasonable rate applied on eight carloads of cement, forwarded from Cowell to Modesto from January 10, 1913, to May 17, 1913.

## REPARATION REFUND.

I. C. 1819.

August 6, 1913.

*Southern Pacific Milling Company vs. Southern Pacific Company.* Permission granted August 15, 1913, to make a reparation refund of \$12.75, account unreasonable rate applied on one carload of alfalfa forwarded from Soledad to San Miguel on January 2, 1913.

## INTERCHANGE TRACKS.

I. C. 1839.

August 9, 1913.

Riverside Chamber of Commerce, Riverside, requested the Commission to arrange for interchange tracks at Riverside between the four railroads at that point.

The matter was taken up informally with interested transportation companies, but, with one exception, the lines declined to build the tracks, alleging that the expense would be very great, while the volume of business did not justify the facilities asked for.

No formal complaint was entered, and the file has been closed.

## OVERCHARGES—FREIGHT.

I. C. 1840.

July 28, 1913.

Soper Bros., Chino, submitted to the Commission freight bills covering a carload of wagons forwarded from Los Angeles to Chino.

The bills were checked, and an overcharge of \$2.75 was found, which amount was refunded by the transportation company.

## FREIGHT RATES—CLAY.

I. C. 1843.

August 5, 1913.

The Chamber of Commerce, Corona, forwarded to this Commission a set of resolutions alleging that the freight charges for the transportation of clay forwarded from Corona were excessive and unreasonable.

No destinations or particular rates were mentioned, and as complainant failed to furnish additional information at the request of Commission, no action was taken.

## REPARATION REFUND.

I. C. 1846.

August 8, 1913.

*Western States Gas and Electric Company vs. Northwestern Pacific Railroad Company.* Permission granted August 18, 1913, to make a reparation refund of \$56.40, account unreasonable rate applied on two carloads of electric light poles, forwarded from South Fork to Lolo and Eureka on June 14, 1913.

## DEMURRAGE CHARGES.

I. C. 1849.

August 7, 1913.

The Atlas Tank Manufacturing Company of Fort Bragg, wrote the Commission complaining of demurrage charges assessed against certain carloads received from Middle Western States. The matter was one over which this Commission had no jurisdiction, and complainant was advised to take the matter up with the Interstate Commerce Commission at Washington, D. C.

## TEAM TRACKS.

I. C. 1850.

August 25, 1913.

Newmark Grain Company called attention to the fact that the Southern Pacific Company did not permit the use of their team tracks to cars reaching Los Angeles via the Pacific Electric Railway. Complainant was advised that it was not customary, and that the terminal facilities of a railroad were only used for the handling of shipments upon which they receive a main line haul.



## SELLING PRICE OF CEMENT.

I. C. 1855.

August 13, 1913.

The Arden Dairy, Certified, Los Angeles, wrote this office stating that they were being charged a higher price per barrel for cement at El Monte Station than they could purchase the same cement for in the city of Los Angeles, although the shipment passed through El Monte in reaching the Los Angeles market.

Claimant was notified that the Public Utilities Act did not give this Commission jurisdiction over the selling price of an article, and therefore we were unable to render them any assistance.

## REPARATION REFUND.

I. C. 1859.

August 13, 1913.

*Dieckman Hardwood Company vs. Northwestern Pacific Railroad Company.* Permission granted August 18, 1913, to make a reparation refund of \$88.11, account unreasonable rate applied on one carload of rough oak logs, forwarded from Hopland to San Francisco on August 2, 1913.

## REPARATION REFUND.

I. C. 1860.

August 14, 1913.

*The Diamond Match Company vs. Northern Electric Railway Company.* Permission granted August 19, 1913, to make a reparation refund of \$8.15, account unreasonable rate applied on one carload of lumber, forwarded from Chico to Sutter on May 23, 1913.

## FREIGHT—COCOANUT OIL.

I. C. 1870.

August 15, 1913.

Pacific Oil and Lead Works et al., located in San Francisco, entered a complaint alleging that rate of \$7.50 per ton on cocoanut oil from San Francisco to Los Angeles was excessive and unreasonable.

The matter was taken up informally and it was arranged to have the rate reduced to \$4.50 per ton. This adjustment was satisfactory to complainant.

## FREIGHT—GRAIN.

I. C. 1872.

August 15, 1913.

Rosenthal-Kutner Company, Madera, referred to the Commission some papers involving charges assessed by the Atchison, Topeka and Santa Fe, for shipment of grain moved from Trigo to Tulare.

It was found upon investigation that the charges as assessed were in conformity with lawful tariff, and that no overcharges existed.

## REPARATION REFUND.

I. C. 1879.

August 16, 1913.

*Turner & Watson vs. Southern Pacific Company.* Permission granted August 20, 1913, to make a reparation refund of waive of \$6.69, account unreasonable rate applied on one carload of animal manure, forwarded from Fresno to Lindsay on February 15, 1913.

## SWITCHING LESS CARLOAD FREIGHT.

I. C. 1883.

August 18, 1913.

T. L. Orr, Occidental, reported to the Commission that a bill for \$2.50 had been presented by the Northwestern Pacific Railway for the switching of a less than carload shipment of freight at Occidental. An investigation was made and it was ascertained that the local agent had presented the bill in error and same was cancelled. The complainant, however, was notified that there was no authority for moving less than carload freight within the yard limits and all such shipments must, under the tariffs, be handled over the depot platform.

## DAMAGE CHARGES.

I. C. 1884.

August 18, 1913.

E. E. Mote, manager Pacific Car Demurrage Bureau, San Francisco, made application to the Commission to refund \$36.00 to the Pacific Bone, Coal and Fertilizer Company. The permission to grant this refund was authorized under section B of rule 3 of this Commission's General Order No. 2, for the reason that the cars could not be unloaded within the free time limit as the manufacturing plant of consignees had been destroyed by fire, and insurance adjusters would not permit the ruins to be disturbed.

## INTERSTATE FREIGHT.

I. C. 1889.

August 18, 1913.

The Pioneer Paper Company of Los Angeles referred to the Commission papers in claim against the San Pedro, Los Angeles and Salt Lake Railroad Company, alleging overcharges against a shipment of emigrant movables forwarded from Los Angeles to Lund, Utah.

Rates in effect were explained, but since the shipment was interstate this Commission had no jurisdiction, and complainant was notified to take the matter up with the Interstate Commerce Commission at Washington, D. C.

## DEMURRAGE REFUND.

I. C. 1900.

August 20, 1913.

The Pacific Car Demurrage Bureau of San Francisco requested on behalf of the Southern Pacific Company, permission to refund to the Nevada County Narrow Gauge Railroad Company \$537.00 collected as demurrage against some sixty-one carloads of gravel delayed at Colfax. The locomotive of the narrow gauge railroad had been disabled, and it was therefore impossible to take care of the shipment.

The refund was permitted as per section B, rule 3 of General Order No. 2.

## FREIGHT RATE—CEMENT.

I. C. 1901.

August 19, 1913.

The Alpha Hardware Company made a complaint against the rate of \$3.00 per ton being charged by the Nevada County Narrow Gauge for the transportation of cement, in carloads, from Colfax to Nevada City.

The railroad company informally reduced this rate to \$2.25 per ton, which adjustment was satisfactory to complainant.

## REPARATION REFUND.

I. C. 1903.

August 13, 1913.

*Chas. Stern & Sons vs. Atchison, Topeka and Santa Fe.* Permission granted August 25, 1913, to make a reparation refund of \$84.00, account unreasonable rate applied on four carloads of wine, forwarded from Escondido to Los Angeles, on May 24, 1913.

## REPARATION REFUND.

I. C. 1904.

August 14, 1913.

*Tejunga Rock Company vs. Atchison, Topeka and Santa Fe.* Permission granted August 25, 1913, to make a reparation refund of \$54.95, account unreasonable rate applied on eight carloads of mixed c/1 sand and gravel forwarded from Los Angeles to Hyde Park March 6 to March 23, 1913.

## DAMAGE TO FREIGHT.

I. C. 1906.

August 21, 1913.

C. T. Henry and O. O. Harris of San Bernardino forwarded to the Commission papers in a loss and damage claim against the Atchison, Topeka and Santa Fe Railway for injury to a shipment of bees.

The matter was taken up with the railway company and a satisfactory adjustment secured.

## LOSS AND DAMAGE CLAIM.

I. C. 1907.

August 21, 1913.

G. W. Braden, Oroville, referred to the Commission papers in a claim against the Pacific Mail Steamship Company involving loss and damage to a shipment of linoleum.

Complainant was advised that the Commission had no jurisdiction over claims of this character, and could render no assistance.

## MINIMUM CARLOAD WEIGHT CANNED GOODS.

I. C. 1908.

January 21, 1913.

California Fruit Canners' Association entered a protest against the granting of the application of the Southern Pacific Company to increase the minimum carload weight from 30,000 to 40,000 pounds applying on canned goods moving from Bakersfield to San Francisco.

The application of the railroad company to make the change was denied.

## FREIGHT—IRON TANKS.

I. C. 1909.

August 22, 1913.

E. R. Deming & Co., San Francisco, wrote the Commission alleging that charges had been wrongly assessed against a shipment of gasoline tanks forwarded from Los Angeles to Alameda.

The Southern Pacific Company, after investigation, took the position that the charges as collected were in conformity with classification and the tariff and declined to make any reduction. Complainant was notified that the matter could only be brought to a final conclusion by filing formal proceedings; this, however, was not done.

## FREIGHT CHARGES—POWDER.

I. C. 1912.

August 22, 1913.

E. Lauer & Sons, Alturas, forwarded to the Commission freight bills covering shipments of powder moving from Vigorito to Alturas via Reno, Nevada.

The shipment was not under the jurisdiction of this Commission, and complainant was advised to that effect, together with the information that charges were assessed in conformity with local tariffs.

## REPARATION REFUND.

I. C. 1915.

September 2, 1913.

*Langton Produce Company vs. Southern Pacific Company.* Permission granted August 23, 1913, to make a reparation refund of \$19.84, account unreasonable rate applied on one carload of watermelons, forwarded from Coachella to Sacramento on June 25, 1913.

## FREIGHT—OIL.

I. C. 1917.

August 22, 1913.

Randolph Fruit Company, Los Angeles, submitted to the Commission papers in a claim against the Southern Pacific Company involving charges assessed against a carload of oil forwarded from Waits to Exeter.

Shipper ordered a small car, but when same was not furnished a large car was used, and consignees were required to pay charges on the basis of the carrying capacity of the large car. This charge was in conformity with tariff regulations, which provide that tank cars must be loaded to their carrying capacity and charges assessed accordingly.

## FREIGHT—GAS ENGINE.

I. C. 1918.

August 23, 1913.

The Benicia Water Company, Benicia, entered a complaint against the California Navigation and Improvement Company, with reference to the charges assessed against two shipments of gas engines.

It was found, upon investigation, that wrong rates had been applied and the navigation company arranged to refund the overcharges.

## FREIGHT—GRAIN.

I. C. 1919.

August 22, 1913.

J. D. Veach, King City, asked for information with reference to the rate on grain forwarded from Watsonville to King City. The charges as assessed against the particular shipment referred to were in conformity with local tariffs on file in this office.

## REPARATION REFUND.

I. C. 1920.

August 21, 1913.

*Diamond Match Company vs. Western Pacific Railway Company.* Permission granted August 30, 1913, to make a reparation refund of \$27.16, account unreasonable rate applied on five carloads of lumber, forwarded from Swayze to Barber on June 11, 12, 16, 20, and 21, 1913.

## INTERSTATE FREIGHT RATE.

I. C. 1922.

August 25, 1913.

The Pioneer Mercantile Company of Bakersfield referred to the Commission freight bills issued by the Atchison, Topeka and Santa Fe Railway covering miscellaneous shipments of hardware forwarded from St. Louis to Bakersfield. Explanation was made of the rates governing, but since the traffic was interstate complainant was notified to take the matter up direct with the Interstate Commerce Commission, Washington, D. C., for adjustment.

## DELAY TO FREIGHT.

I. C. 1924.

August 26, 1913.

B. Borach, Yolo, complained to the Commission that he was unable to collect a loss and damage claim against the Southern Pacific Company.

The Commission requested copy of documents covering the claim, with a view of investigating the same, but complainant failed to respond to letters, and the file was closed without action.



## REPARATION REFUND.

I. C. 1926.

August 21, 1913.

*Mai & Milan & Company vs. Atchison, Topeka and Santa Fe Railway.* Permission granted August 27, 1913, to make a reparation refund of \$4.00, account unreasonable rate applied on two carloads of wine in wood, forwarded from Vine Hill to San Francisco on June 11, 1913.

## FREIGHT RATE—HOUSEHOLD GOODS.

I. C. 1938.

August 28, 1913.

M. S. Morgan, Greenfield, wrote the Commission requesting information with reference to the freight rate on emigrant movables in carloads from Soledad to El Centro.

The desired information was furnished.

## FREIGHT—INTERSTATE.

I. C. 1939.

August 29, 1913.

Babson Bros., San Francisco, requested information with reference to certain freight rates between New York City and San Francisco. Desired information was secured, but since the traffic was not under the jurisdiction of this Commission complainant was advised to take the matter up direct with the Interstate Commerce Commission, Washington, D. C., for a final adjustment.

## DIVERSION OF CARS.

I. C. 1943.

August 29, 1913.

Newmark Grain Company, Los Angeles, complained to the Commission that the Pacific Electric Railway would not permit diversion of carload shipments when loaded in Pacific Electric cars originally consigned to a point located on the rails of the Pacific Electric Railway.

The matter was taken up by correspondence and it was developed that there was no objection to diverting Pacific Electric cars to foreign line points on special occasions and that the complaint was the result of a misunderstanding.

## FREIGHT—LOSS AND DAMAGE CLAIM.

I. C. 1944.

August 28, 1913.

J. M. Platts, Sonora, referred to the Commission papers in a claim against the Santa Fe for damages to a shipment of household goods forwarded from Chicago to San Diego in January, 1911.

While the Commission has no jurisdiction over loss and damage claims, the complaint was nevertheless taken up with company, informally. No adjustment, however, was secured and complainant was advised that it would be necessary to handle the matter through the proper courts.

## FREIGHT FORWARDED TO WRONG DESTINATION.

I. C. 1946.

August 30, 1913.

Pioneer Paper Company, Los Angeles, submitted to the Commission papers with reference to charges assessed against a shipment of paper which, because of wrong reading of a bill of lading, was forwarded to wrong destination.

The Southern Pacific Company admitted that its employees were in error, and arranged to adjust the claim to the satisfaction of complainant.

## FREIGHT RATE—HORSES.

I. C. 1948.

August 30, 1913.

J. L. Barker complained of the rate charged for the transportation of a carload of horses from Santa Barbara to Raymond. The shipment had been overcharged \$14.00 which amount was refunded by the Southern Pacific Company.

## MOVEMENT OF WOOD BY FLUME.

I. C. 1951.

August 17, 1913.

A. Meechi, Grub Gulch, wrote the Commission with reference to movement of wood through a flume owned by a lumber company. Every effort was made to induce the lumber company to transport the wood through the flume, but it was claimed that wood would interfere with the transportation of lumber.

The Commission had no jurisdiction over such flumes, not being common carriers, and so advised complainant.



## FREIGHT—BICYCLE RIMS.

I. C. 1952.

September 1, 1913.

F. M. Jones, Oakland, complained of the charges assessed for the transportation of a shipment of bicycle rims forwarded from Los Angeles to Oakland.

The charges were checked and found to be correct and complainant was notified that no overcharges existed.

## REPARATION REFUND.

I. C. 1956.

September 2, 1913.

*Matias Erro vs. Southern Pacific Company.* Permission granted September 17, 1913, to make a reparation refund of \$451.36, and waive collection of \$181.44, account unreasonable rate applied on twenty-eight carloads of sheep, forwarded from Daulton to Gazelle on May 21, 1913.

## REPARATION REFUND.

I. C. 1957.

September 2, 1913.

*H. Olcovich & Son vs. Southern Pacific Company.* Permission granted September 6, 1913, to make a reparation refund of \$98.34, account unreasonable rate applied on two carloads of sheathing or paper lining, forwarded from Capitola to Los Angeles on May 1 and 5, 1913.

## WEIGHING OF FREIGHT.

I. C. 1958.

September 3, 1913.

John M. Ratto & Bro., San Francisco, entered a complaint against the Ocean Shore Railroad because that line refused to accept public weighers' weights when assessing charges on carload shipments of grain.

Complainant was notified that transportation companies had the right to assess charges based on their track scale weights, but if such weights could be proven to be erroneous, the charges collected would have to be adjusted to the basis of the actual weight of shipments.

## FREIGHT VIA STEAMSHIP.

I. C. 1964.

September 1, 1913.

S. H. Moffoord, Eureka, wrote this office alleging that the charges assessed by a steamship company for the transportation of a shipment of household goods from Portland, Oregon, to Eureka, were excessive and unreasonable.

Since the Commission had no jurisdiction, complainant was advised that it would be necessary to take the matter up with the Interstate Commerce Commission at Washington, D. C.

## FREIGHT—FUEL OIL.

I. C. 1973.

October 30, 1913.

National Petroleum Company, Los Angeles, protested to the Commission against changing the classification of petroleum refinery tops, which brought about an increase in the freight charges. The matter complained of became part of Application 817 and was disposed of by the Commission's decision in that case.

## GRAIN—FREIGHT RATES.

I. C. 1977.

September 6, 1913.

Barnard & Bunker, San Francisco, made a complaint with reference to grain rates to points in the Salinas Valley. It developed that the rates complained of covered shipments from Utah territory which the Southern Pacific Company agreed to adjust by informal proceedings.

## FREIGHT—FERTILIZER.

I. C. 1978.

September 6, 1913.

The Pacific Guano and Fertilizer Company, San Francisco, entered a complaint alleging that the rates charged from West Berkeley to points on the Northwestern Pacific Railroad for fertilizer, in carloads, was excessive.

The Commission took the matter up informally and arranged to have the rates reduced, as shown below:

	Rate in cents, old rates.	Per ton, new rates.
Fulton .....	205	190
Markwest .....	205	190
Windsor .....	220	205
Grant .....	240	220
Healdsburg .....	255	235
Olivetto .....	255	235
Lytton .....	270	245
Geyserville .....	275	255
Cloverdale .....	275	260
Echo .....	350	270
Hopland .....	375	280
Largo .....	385	295
El Roble .....	385	305
Ukiah .....	385	310
Laughlin .....	495	350
Willits .....	740	405
Sherwood .....	740	465
Forestville .....	240	195
Green Valley .....	240	205
Korbel .....	255	235
Guerneville .....	255	245

## REPARATION REFUND.

I. C. 1980.

September 2, 1913.

*Schaw Batcher Company vs. Southern Pacific Company.* Permission granted September 17, 1913, to make a reparation refund of \$4.00, account unreasonable rate applied on one carload of coal, forwarded from Sacramento to Angels on February 14, 1913.

## FREIGHT TARIFFS.

I. C. 1989.

September 8, 1913.

Barnard & Bunker, San Francisco, made complaint with reference to certain grain tariffs which were issued a number of years ago and had been supplemented to such an extent that rates could not be easily located.

The interested transportation company advised that it would at once proceed to reissue the tariffs.

## FREIGHT—HAY.

I. C. 1991.

September 8, 1913.

T. K. Temple, Lancaster, complained with reference to rate of \$2.20 per ton for the transportation of hay, in carloads, from Lancaster to Mojave.

The matter was taken up with the Southern Pacific Company who published a commodity rate of \$1.25 per ton. This adjustment was satisfactory.

## REPARATION REFUND.

I. C. 1993.

September 10, 1913.

*Pacific Portland Cement Company vs. Southern Pacific Company.* Permission granted September 17, 1913, to make a reparation refund of \$19.88, account unreasonable rate applied on two carloads of black powder, forwarded from Giant to Tolenas on March 26, and June 4, 1913.

## REPARATION REFUND.

I. C. 1994.

January 17, 1914.

*Krieger Vinegar Company vs. Southern Pacific Company.* Permission granted January 29, 1914, to make a reparation refund of \$53.95, account unreasonable rate applied on one carload of vinegar, forwarded from Los Angeles to Watsonville on August 26, 1913.

## FREIGHT—CEMENT.

I. C. 1997.

September 8, 1913.

Pacific Portland Cement Company, San Francisco, made an informal complaint against the rate on cement in carloads from Cement Station to Edison, a point located in the San Joaquin Valley.

The matter was taken up informally with the Southern Pacific Company, who published rate of \$3.75 per ton on cement, carloads, from Cowell, Cement, and Napa Junction to Edison. This rate was satisfactory to complainant.

## FREIGHT—MINERALS.

I. C. 1998.

September 9, 1913.

R. S. Ammen, San Francisco, entered a complaint with reference to the charges on soapstone and other material forwarded from points in Modoc County.

No points of origin or destination were given, and as complainant failed to supply such information upon request, no action was taken.

## TRACK RENTAL.

I. C. 2006.

September 9, 1913.

S. L. G. Knox, San Francisco, called the Commission's attention to the fact that the State Belt Railroad assessed a track rental charge for cars held on their rails in addition to the regular demurrage charges assessed by the transportation company delivering the cars to the Belt Railroad.

Complainant was advised that the track rental charge assessed was in conformity with tariffs, and that said charge was necessary in order to prevent congestion of cars on wharf tracks to the detriment of other traffic.

## STATION FACILITIES.

I. C. 2012.

September 13, 1913.

L. F. Sayre, Felton, made a complaint against the Southern Pacific Company alleging that there were no facilities at Newel Creek Mill for the loading of carload freight. Investigation developed the fact that the yard facilities of the Southern Pacific at that point were satisfactory and the difficulty of complainant was with the owners of adjacent land who refused to permit lumber to be hauled over their property without being paid for the privilege. The Commission having no jurisdiction over the matter notified complainant accordingly.

## FREIGHT—INTERSTATE.

I. C. 2013.

September 10, 1913.

Geo. R. Young, Pepperwood, asked for information with reference to the rate charged on shipment of chairs from St. Louis to San Francisco.

The desired information was furnished, and the complainant advised to take the matter up direct with the Interstate Commerce Commission.

## REPARATION—FREIGHT.

I. C. 2016.

September 13, 1913.

The Union Oil Company of California asked for information with reference to reparation claims on shipments moved during the month of May, 1911.

Complainants were notified that in conformity with this Commission's decision in Case 283, no reparation refunds were authorized by the Commission against shipments moved prior to October 10, 1911.

## REPARATION REFUND.

I. C. 2020.

September 13, 1913.

*Pioneer Truck Company vs. Southern Pacific Company.* Permission granted October 8, 1913, to make a reparation refund of \$268.20, account unreasonable rate applied on fifteen carloads of range cattle, forwarded from Imperial to Drake on March 3, 1913.

## REPARATION REFUND.

I. C. 2021.

September 13, 1913.

*A. C. Knight vs. Southern Pacific Company.* Permission granted September 30, 1913, to make a reparation refund of \$30.63, account unreasonable rate applied on five carloads of hay, forwarded from Atascadero to Pasadena during March and April, 1913.

## REPARATION REFUND.

I. C. 2022.

September 13, 1913.

*Roma Wine Company vs. Southern Pacific Company.* Permission granted September 17, 1913, to make a reparation refund of \$83.58—legitimate overcharge \$3.82, account unreasonable rate applied on five carloads of wine grapes, forwarded from Lodi to Healdsburg on August 28 and October 4, 8, 10, 17, 1912.

## FREIGHT RATES.

I. C. 2025.

September 13, 1913.

A. Levy & J. Zentner Co., San Francisco, requested information with reference to the rate on potatoes and onions in carloads from Stockton to San Bernardino, Santa Ana, and Los Angeles as compared with rate on the same commodity to San Diego.

The situation was explained by calling complainant's attention to the fact that the rates to San Diego were compelled by water competition at that point, which did not exist at the other points mentioned.

## FREIGHT DISCRIMINATION.

I. C. 2029.

September 13, 1913.

Claypool & Co., Needles, wrote the Commission alleging that they were discriminated against with reference to freight rates.

Complainants were requested to furnish definite information, but as same was not forthcoming, no action was taken.

## FREIGHT—IRON DRUMS.

I. C. 2030.

October 28, 1913.

American Oriental Company filed a complaint with the Commission alleging that classification of iron oil drums had been changed from third to first class.

An investigation was made, and it was found that the change had been made without the consent of this Commission, and therefore third class rate was restored in the tariffs.

## FREIGHT—GRAIN RATES.

I. C. 2031.

September 15, 1913.

Long Beach Milling Company, Long Beach, entered a complaint against the rate on grain in carloads via the Southern Pacific from San Pedro to Long Beach.

The Commission took the matter up informally and secured a reduction of this rate from 75 cents to 60 cents a ton.

## FREIGHT—INTERSTATE.

I. C. 2035.

September 17, 1913.

Chas. F. May, Lakeport, submitted to the Commission papers in a claim involving loss and damage to a shipment of boat material forwarded from Bay City, Michigan, to Hopland.

An effort was made to adjust the claim but without results, and complainant was notified that for a final settlement the controversy would have to be taken into the civil courts.

## REPARATION REFUND.

I. C. 2037.

September 17, 1913.

*Pierre C. Morre vs. Southern Pacific Company.* Permission granted September 24, 1913, to make a reparation refund of \$35.91, account unreasonable rate applied on two carloads of scrap iron, forwarded from Flint to San Francisco on July 27 and 28, 1913.

## REPARATION REFUND.

I. C. 2038.

September 17, 1913.

*Geo. Watterson Hardware Company vs. Southern Pacific Company.* Permission granted September 25, 1913, to make a reparation refund of \$37.45, account unreasonable rate applied on three carloads of sewer pipe, forwarded from Lincoln to Laws on May 3, 5 and 8, 1913.

## LOSS AND DAMAGE CLAIM.

I. C. 2042.

September 5, 1913.

Mrs. A. L. Benton, Los Angeles, referred to the Commission papers in a loss and damage claim entered against the Santa Fe Railway for damages to a shipment of household goods forwarded from Hot Springs, Arkansas, to San Diego.

Complaint was taken up informally and the transportation company agreed to settle the claim on the basis of \$74.85, and complainant was notified accordingly.

## FREIGHT RATES.

I. C. 2051.

September 18, 1913.

Paso Robles Chamber of Commerce addressed a communication to the Commission alleging that class and commodity rates between San Francisco and Paso Robles were excessive as compared with other rates.

The Commission explained that the rates with which comparisons were made were water compelled, and therefore authorized temporarily, pending final decision in Long and Short Haul Case No. 214.



## REPARATION REFUND.

I. C. 2052.

September 19, 1913.

*Pacific Sanitary Manufacturing Company vs. Atchison, Topeka and Santa Fe Company.* Permission granted September 25, 1913, to make a reparation refund of \$199.35, account unreasonable rate applied on five carloads of sand, forwarded from San Diego to Richmond on April 12 and 13 and July 15, 1913.

## FREIGHT RATES.

I. C. 2054.

September 18, 1913.

Oliver Continuous Filter Company, San Francisco, referred to the Commission papers in a claim against the Southern Pacific Company involving charges assessed against a shipment of tank material forwarded from San Francisco to Oakland.

Freight bills were checked and it was ascertained that no overcharges existed.

## DIVERSION CHARGES.

I. C. 2056.

September 19, 1913.

Pacific Portland Cement Company wrote the Commission asking for information with reference to correct charges to assess against shipments diverted en route.

Desired information was given.

## DEMURRAGE CHARGES.

I. C. 2057.

September 19, 1913.

Essex Lumber Company, Decoto, requested information with reference to demurrage charges. Complainant was mailed a copy of this Commission's general order No. 2, effective May 1, 1911, which governed the charges.

## REPARATION REFUND.

I. C. 2058.

September 20, 1913.

*Spreckels Sugar Company vs. Southern Pacific Company.* Permission granted October 8, 1913, to make a reparation refund of \$32.55, account unreasonable rate applied on one carload of molasses returning, forwarded from Soledad to Spreckels on January 23, 1913.

## FREIGHT CHARGES.

I. C. 2068.

September 22, 1913.

Pacific Glass Company, San Francisco, referred to the Commission papers in a claim against the Southern Pacific Company for charges assessed on carloads of bottles forwarded from San Francisco to Sacramento.

Complainant was advised that shipments had been overcharged in that the combination of locals provided a lower charge than the through published rate, and application should be made for proper refund.

## DEMURRAGE.

I. C. 2073.

September 22, 1913.

Western Pipe and Steel Company, San Francisco, referred to this office some papers in a claim alleging overcharges against a car of steel not unloaded promptly, in the month of March, 1911.

At the time the demurrage accrued the lawful rate was \$6.00 per day and there were no overcharges against the shipment in question.

## FREIGHT—BOILERS.

I. C. 2074.

September 22, 1913.

Western Pipe and Steel Company of California, San Francisco, forwarded to the Commission freight bills against a shipment of boiler material moved from West Berkeley to Richmond, alleging that charges had been wrongly assessed.

The bills were checked and claimant informed that same were in conformity with tariffs.

## FREIGHT RATES—OIL.

I. C. 2077.

September 4, 1913.

American Oriental Company telephoned the Commission that certain rates from Mococo to points in the Sacramento Valley were in excess of the rates assessed from Port Costa.

The complaint was taken up with the Southern Pacific Company, who made a satisfactory adjustment by publishing from Mococo the same rates as were in effect from Port Costa.

## FREIGHT—GLASS BOTTLES.

I. C. 2083.

September 23, 1913.

Illinois-Pacific Glass Company, San Francisco, referred to the Commission papers in a claim against the Western Pacific Railway Company involving charges assessed

against a carload of bottles forwarded San Francisco to Oroville, via the Western Pacific to Marysville, thence to destination via the Southern Pacific. Claim was based on the application of the rate which would have applied had the consignment moved direct from San Francisco to Oroville via the Southern Pacific.

The consignment moved in conformity with the bill of lading, and therefore there were no grounds upon which the Commission could authorize the application of rate via the direct route of the Southern Pacific.

#### FREIGHT IN PASSENGER CAR.

I. C. 2085.

October 2, 1913.

Chas. Kricher, Pacific Beach, wrote the Commission stating that a charge had been assessed by the conductor of a passenger train for the transportation of some empty fruit boxes which he had with him in the passenger coach.

Complainant was advised that the charge was proper and lawful and that freight could not be carried by passengers in a coach even though they had no personal baggage to check on their tickets.

#### CARS FOR WOOD.

I. C. 2090.

September 24, 1913.

McCarley & Smith Mercantile Company, Cottonwood, wired the Commission stating that they were unable to secure cars for the loading of wood. The complaint was taken up with the general manager of the Southern Pacific Company who arranged to provide proper equipment.

#### DETENTION OF FREIGHT.

I. C. 2091.

September 25, 1913.

Gustav A. Behrnd, Midlake, wrote the Commission advising that he was unable to secure delivery of a shipment of household goods forwarded from San Jose to Ukiah. Investigation developed the fact that the consignment was forwarded shipper's order, and therefore could not be delivered by the transportation company without surrender of the original bill of lading; the bill of lading had been lost, and the Commission arranged to have the goods delivered upon filing of proper bond.

#### FREIGHT—WAGONS.

I. C. 2095.

September 24, 1913.

Harrison P. Smith, Inc., San Jose, requested information with reference to the correct rate to be assessed for the transportation of some wagons from San Jose to Point Reyes.

The desired information was given.

#### FREIGHT—RECIPROCAL DEMURRAGE.

I. C. 2098.

April 12, 1914.

Chas. F. Tozer, Cottonwood, referred to the Commission papers in a claim against the Southern Pacific Company involving reciprocal demurrage accruing on account of the failure of the railroad company to furnish proper cars for loading wood during the month of September, 1913, at Cottonwood.

After considerable correspondence, claim was adjusted informally by the allowance of \$180.00 to cover cars ordered strictly in conformity with rules and not furnished within the prescribed time.

#### CARS FOR WOOD.

I. C. 2099.

September 29, 1913.

Butterway Bros., Cottonwood, entered a complaint with the Commission alleging that the Southern Pacific Company was discriminating in the distribution of cars, neglecting to furnish equipment for the transportation of wood.

The complaint was taken up with the traffic department of the railroad company who arranged to have cars furnished more promptly in the future.

#### FREIGHT—POULTRY FOOD.

I. C. 2100.

September 24, 1913.

F. R. Wilson & Company, Kenwood, wrote the Commission with reference to rate on poultry food from San Francisco to Kenwood. The tariffs were checked, and the information required by the firm furnished.

#### FREIGHT—LUMBER.

I. C. 2103.

September 25, 1913.

Frank G. Noyes, Napa, complained to the Commission alleging that certain charges were collected by the Napa Transportation Company for the movement of a shipment

of lumber from San Francisco to Napa, which were not in accordance with the tariffs.

Investigation was made and it was found that the rates as charged were in conformity with lawful tariffs filed with the Commission.

## FREIGHT VIA BOAT LINE.

I. C. 2105.

September 24, 1913.

McLeran & Peterson, San Francisco, referred to the Commission bills for transportation of machinery from Eureka to San Francisco, which they claim were excessive and unreasonable.

The Commission has as yet secured no control over coastwise steamers operating on irregular schedules, and therefore advised complainant that it had no jurisdiction.

## LOSS AND DAMAGE CLAIM.

I. C. 2109.

September 26, 1913.

P. G. Williams, auditor, Associated Oil Company, referred to the Commission claim against the Southern Pacific Company for alleged shortage of a carload of fuel oil.

The Commission has no jurisdiction over loss and damage claims, and notified complainant accordingly.

## REPARATION REFUND.

I. C. 2119.

September 26, 1913.

*Lompoc Grain and Seed Company vs. Pacific Coast Railway Company.* Permission granted October 8, 1913, to make a reparation refund of \$93.16, account unreasonable rate applied on seven carloads of small white beans, forwarded from Guadalupe to Port San Luis on April 4, 1913.

## FREIGHT RATES—BEET PULP.

I. C. 2120.

September 19, 1913.

A. Taix, Sr., San Juan Bautista, entered a complaint against California Central Railway Company alleging that the charges assessed for the transportation of beet pulp, Chittenden to San Juan Bautista, were excessive.

An investigation was made but the railroad company declined to reduce its rate informally, and complainant was advised that if he desired to continue the matter further it would be necessary to file a formal complaint. This was not done.

## REPARATION REFUND.

I. C. 2129.

September 24, 1913.

*Johnson Shea Company, Inc., vs. the Atchison, Topeka and Santa Fe Company.* Permission granted October 19, 1913, to make a reparation refund of \$30.89, account unreasonable rate applied on four carloads of crushed rock, forwarded from Colton to Porphyry on May 2 to May 5, 1913.

## FREIGHT—WASTE PAPER.

I. C. 2130.

September 30, 1913.

Charles Harley Company, San Francisco, made a complaint to the Commission alleging that rate on waste paper in carloads from San Jose to Antioch, routed via the Southern Pacific and Santa Fe, was excessive and unreasonable.

The matter was taken up informally with the interested transportation companies, who finally agreed to reduce the rate from \$2.00 to \$1.55 per ton.

## REPARATION REFUND.

I. C. 2133.

September 24, 1913.

*Whittier Brick Company vs. Pacific Electric Railway Company.* Permission granted October 11, 1913, to make a reparation refund of \$32.50, account unreasonable rate applied on two carloads of common brick forwarded from Whittier to Loftus, on August 22, 1913.

## LOSS AND DAMAGE CLAIM.

I. C. 2138.

October 2, 1913.

T. C. Gaumer, Burlingame, referred to the Commission papers in a loss and damage claim against the Western Pacific Railway Company.

An effort was made to informally adjust the claim but without a satisfactory result and complainant was advised that redress could only be secured in the civil courts.

## FREIGHT—LUMBER RATES.

I. C. 2140.

October 1, 1913.

Consolidated Lumber Company, Los Angeles, submitted to the Commission papers in a claim against the Atchison, Topeka and Santa Fe Railway Company, involving



charges assessed against thirteen carloads of lumber moved from East Wilmington to Placentia. The claim was based on a subsequent reduction in rates but the Commission was unable to authorize reparation refund for the reason that it was not shown that the charges, as assessed at time the shipment moved, were unreasonable.

## FAILURE TO FURNISH CARS.

I. C. 2156.

September 27, 1913.

G. F. Covell, Modesto, complained to the Commission against the Southern Pacific Company not furnishing cars promptly for a movement of wine grapes to San Jose.

The complaint was taken up by telephone with the transportation department of the company, who arranged to have cars furnished as ordered.

## HANDLING OF FREIGHT ON WHARF.

I. C. 2160.

October 6, 1913.

Pioneer Salt Company wrote the Commission, stating that they had been notified that all shipments of salt loaded from cars handled at Pier 38 must be transferred by the Occidental Forwarding Company.

Complaint was investigated, and interested transportation companies advised the Commission that no such orders had been issued and that the situation was misunderstood, there being no objection to the Pioneer Salt Company handling shipments in any manner they desired.

## FREIGHT RATES—GRAIN.

I. C. 2166.

October 7, 1913.

C. D. Bunker, San Francisco, submitted freight bills covering shipments of grain forwarded from Willows to Stockton, alleging that certain combinations of rates were lower than those applied to the shipments in question.

Check was made of the tariffs and charges as collected found to be correct and in conformity with lawful tariffs on file with the Commission.

## REPARATION REFUND.

I. C. 2172.

October 6, 1913.

*Newmark Grain Company vs. Pacific Electric Railway Company.* Permission granted October 11, 1913, to make a reparation refund of \$15.46, account unreasonable rate applied on two carloads of barley forwarded from Gardena to Hermosillo on September 9, 1912.

## FREIGHT RATES—INTERSTATE.

I. C. 2174.

October 8, 1913.

Smith & Parks, Modesto, entered a complaint with the Commission stating that their business was injured because there were no through transcontinental rates from points in eastern cities to Modesto in connection with the Western Pacific Railway and the Tidewater Southern Railway Company.

The matter, being interstate, is under the jurisdiction of the Interstate Commerce Commission, but complaint was taken up informally with the Western Pacific Railway who advised that, while they were willing to establish transcontinental rates in connection with the Tidewater Southern, they were unable to agree as to the division of the earnings.

Complainant was therefore notified that the matter would have to be taken up with the Commission at Washington for final adjustment.

## FREIGHT RATES ON GRAIN.

I. C. 2178.

October 19, 1913.

Newmark Grain Company, Los Angeles, filed an informal complaint alleging that rates on grain in carloads from San Fernando were excessive.

After a lengthy correspondence it was arranged to have the following reductions made:

From San Fernando to—	Old rate New rate	
Palmdale .....	\$2 00	\$1 75
Newhall .....	1 00	75
Piru .....	2 30	2 25
Fillmore .....	2 30	2 25
Santa Paula .....	2 50	2 25
Acton .....	2 00	1 75



While this adjustment was not entirely satisfactory to complainant, it was the best that could be informally arranged.

## JOINT FREIGHT RATES.

I. C. 2181.

October 9, 1913.

Sherry-Freitas Company, San Francisco, entered a complaint to the effect that there were no joint rates from San Francisco to points on the Tidewater Southern Railway in connection with the Western Pacific.

Considerable correspondence was entered into but without results, and complainant was notified that it would be necessary to file a formal complaint as the Commission found it impossible to adjust the matter by informal proceedings.

## FREIGHT—PLATE GLASS.

I. C. 2187.

October 10, 1913.

W. P. Fuller Company referred to the Commission freight bill covering a shipment of plate glass forwarded from San Francisco to Paso Robles. The tariffs were checked and complainant was notified that charges assessed were in conformity with lawful rates on file with this Commission.

## REPARATION REFUND.

I. C. 2188.

December 15, 1913.

*California Building Material Company vs. Southern Pacific Company.* Permission granted December 22, 1913, to make a reparation refund of \$4.88, account unreasonable rate applied on two carloads of rock forwarded from Niles to Port Costa on July 3, 1913.

## FREIGHT—JUNK.

I. C. 2191.

October 10, 1913.

M. White, Los Angeles, entered a complaint against the Southern Pacific Company alleging that the charges assessed against shipment of junk forwarded from Lompoc to Los Angeles were not in accordance with the tariff.

Claim was checked and charges were found to be correct.

## REPARATION REFUND.

I. C. 2192.

October 11, 1913.

*Miller & Lur, Inc., vs. Butte County Railroad Company.* Permission granted October 16, 1913, to make a reparation refund of \$3.80, account refund stockdrovers' fares, caretakers in charge of four carloads of sheep forwarded from Stirling City to San Francisco on July 21 and 28, 1913.

## FREIGHT RATES.

I. C. 2196.

October 13, 1913.

The Judson Manufacturing Company, San Francisco, wrote the Commission making comparison between the freight rates charged from San Francisco to San Diego and Los Angeles and those assessed to Bakersfield from Los Angeles and San Francisco.

It was explained to the complainant that the rates to San Diego and Los Angeles, being water compelled, were lower than those to Bakersfield and that the lower rates to the more distant point were permissible under the circumstances.

## DEMURRAGE CHARGES.

I. C. 2197.

October 13, 1913.

Pacific Car Demurrage Bureau, San Francisco, wrote the Commission for information with reference to the adjustment of reciprocal demurrage claims.

Desired information was furnished.

## FREIGHT—GRANITE.

I. C. 2198.

October 13, 1913.

E. P. Dubois, Lakeport, complained to the Commission with reference to freight rates on granite in carloads from San Francisco and Petaluma to Hopland.

Investigation developed the fact that rates complained of were in error and that the actual rates were much lower. The correct information with reference to the rates apparently satisfied the complainant as nothing further has been heard in regard to the matter.

## MISSENT FREIGHT.

I. C. 2206.

October 14, 1913.

J. D. Rice, San Francisco, called at the office of the Commission and entered a verbal complaint with reference to a shipment of bedding forwarded from Modesto to Richmond, which should have gone to Berkeley.

The shipment was located and reshipped to its proper destination.

## FREIGHT RATES.

I. C. 2209.

October 11, 1913.

R. G. Dupuy, San Pedro, requested information regarding certain freight rates, and desired data was forwarded.

## FREIGHT—VIA OCEAN STEAMERS.

I. C. 2212.

October 11, 1913.

G. W. Brandt, Gualala, entered a complaint against freight and passenger rates assessed by steamers plying between San Francisco and Point Arena.

Since the Commission, because of a Supreme Court injunction, is not permitted to exercise authority over steamer rates, it was compelled to notify complainant that no assistance could be rendered until the injunction had been dissolved.

## FREIGHT—ROPE.

I. C. 2214.

October 4, 1913.

Weed Lumber Company referred to the Commission freight bill covering a carload of bale rope from San Francisco to Weed, November 9, 1911, alleging that charges were excessive as compared with tariff rates on binding twine.

The charges as collected were in conformity with lawful tariffs and as the transportation company declined to make any change in rates, shippers were advised that it would be necessary to file a formal complaint should they desire to bring the question to an issue.

## FREIGHT—EMIGRANT MOVABLES.

I. C. 2220.

October 7, 1913.

H. J. Malliett, San Francisco, called in person on the Commission with reference to charges assessed against a carload of emigrant movables forwarded from Richmond to Templeton.

It was found on checking over the situation that the agent at Richmond had billed the shipment in error and overcharges amounting to \$18.00 were refunded.

## MINIMUM CARLOAD WEIGHT—SALT.

I. C. 2225.

October 15, 1913.

Linder Hardware Company, Tulare, complained to the Commission that the minimum weight for the transportation of salt, in carloads, had been increased from 30,000 to 40,000 pounds. Complainant was informed that the change in minimum weight was authorized by the Commission May 16, 1913, after hearing had been held. The increase in minimum was permitted in order that cars might be more heavily loaded.

## FREIGHT—EMPTY BARRELS.

I. C. 2227.

October 11, 1913.

Curtis Olive Company, Los Angeles, referred to the Commission bill covering the transportation of carload of empty barrels from Bloomington to San Francisco, alleging that the shipment, while consigned to San Francisco for repairs, eventually went to Oroville and the barrels were repacked and returned to Bloomington.

Tariff does not provide for a rate on empty carriers returning when same are sent to factory for repairs and complainants were therefore notified that the charges as assessed were correct and lawful.

## DEMURRAGE CHARGES.

I. C. 2230.

October 11, 1913.

R. P. Shields & Son, San Diego, referred to the Commission papers in a claim against the San Diego and Southeastern Railway, involving demurrage charges alleged to have been wrongfully assessed.

The Commission was unable to adjust the matter informally, and notified complainant that it would be necessary to begin formal proceedings in order to bring the matter to a conclusion. This, however, was not done.

## FREIGHT—INTERSTATE.

I. C. 2232.

October 17, 1913.

C. B. Heizer, Oakland, asked for information with reference to charges assessed against shipment of printed matter forwarded from Coshocton, Ohio, to Oakland.

The freight bill was checked and complainant informed that charges were in conformity with tariffs on file.

## REPARATION REFUND.

I. C. 2243.

October 16, 1913.

*Orbon Lumber Company vs. Atchison, Topeka and Santa Fe.* Permission granted October 31, 1913, to make a reparation refund of \$6.15, account unreasonable rate

applied on two carloads of sand forwarded from Vidrio to Pasadena on July 10 and 12 and November 16, 1911.

REPARATION REFUND.

I. C. 2244.

October 18, 1913.

*Pacific Gas & Electric Company vs. Southern Pacific Company.* Permission granted October 27, 1913, to make a reparation refund of \$1,663.75, account unreasonable rate applied on 121 carloads of gravel forwarded from Colfax to Smart during July, 1913.

FREIGHT—WOOD.

I. C. 2250.

October 20, 1913.

Mission Cash Store, Sacramento, forwarded to the Commission freight bills covering carload shipments of wood shipped from Lamoine to Sacramento, alleging that the minimum weight used was not in conformity with published tariffs.

Complainant's contention was found to be incorrect, for the reason that they were basing the charges upon minimum weight which had been cancelled a number of years ago.

COLLECTION WAIVED.

I. C. 2253.

October 20, 1913.

*F. J. Murphy, Larkspur; J. B. Blake, Larkspur; LaBlanc Laundry, Sausalito; Hong Lee Laundry, Sausalito; G. S. Lunar, Sausalito vs. Northwestern Pacific Railroad Company.* Permission granted October 23, 1913, to waive collection of undercharges of \$4.68, account unreasonable rate applied on five shipments of coal forwarded from San Francisco to Larkspur and Sausalito on September 12, 13, 22, 24, and 26, 1913.

FREIGHT—CEMENT RATES.

I. C. 2254.

October 18, 1913.

Riverside Portland Cement Company called the Commission's attention to increases shown in Southern Pacific Company's Cement Tariff No. 584-A, issued to become effective November 12, 1913. The rates complained of had been published through a misunderstanding and the Southern Pacific Company restored the rates formerly in effect.

FREIGHT CHARGES—WOOD.

I. C. 2258.

October 21, 1913.

Bay City Wood Company referred to the Commission freight bill covering one carload of wood from Chittenden to Drumm Street, alleging that charges were based on the minimum of 13 cords, while the car carried but 11.96 cords.

Complainant alleged that car was loaded to its full visible capacity, but the Southern Pacific Company, upon investigation, maintained that shippers were at fault in not properly loading the car and declined to make any informal adjustment of the claim.

FREIGHT CHARGES.

I. C. 2262.

October 16, 1913.

Dr. L. Hensel, Portola, referred to the Commission freight bills covering a shipment of lumber forwarded from Loyalton to Portola.

The bills were checked and claimant was notified that charges as assessed were in conformity with tariffs, no overcharge existing.

LOSS AND DAMAGE CLAIM.

I. C. 2264.

October 21, 1913.

H. M. Leete, San Francisco, referred to the Commission a claim against the Southern Pacific Company involving loss of empty fruit boxes forwarded from West Berkeley to Union station.

The Commission has no jurisdiction over loss and damage claims, but, nevertheless, endeavored to adjust the difficulty, but without results, as the transportation company maintained that the boxes had been delivered as billed at the non-agency station. Complainant was accordingly notified that a final settlement must be secured in the civil courts.

COMPETITIVE FREIGHT.

I. C. 2265.

October 18, 1913.

Richmond Feed and Grain Company, Richmond, submitted to the Commission papers in a claim against the Southern Pacific Company involving switching charges assessed at Richmond.

A check was made of the claim and it was found that the charges had been correctly assessed.



## FREIGHT—BOILERS.

I. C. 2268.

October 22, 1913.

The Union Oil Company, San Francisco, referred to the Commission papers in a claim against the Pacific Electric and the Southern Pacific, alleging that charges had been assessed in error on a shipment of boilers forwarded from Orcutt on the Pacific Coast Railway to Oleo on the Pacific Electric.

Investigation developed the fact that the shipment had not been properly handled when transferred to broad gauge cars at San Luis Obispo and transportation companies were authorized to make reparation refund in the sum of \$88.56.

## FREIGHT—WINE.

I. C. 2271.

October 27, 1913.

The Roma Wine Company of Healdsburg wrote the Commission for certain information with reference to the transportation of wine in tanks and vats fastened on flat cars.

The matter was investigated and the information furnished.

## LOSS AND DAMAGE CLAIM.

I. C. 2273.

October 22, 1913.

A. L. Cross, Kingsburg, submitted to the Commission papers in an unpaid claim against the Southern Pacific Company involving charges assessed against a shipment of household goods forwarded from Kingsburg to Santa Barbara November 27, 1909.

The complaint was taken up with the traffic department of the railroad company and a satisfactory adjustment secured.

## RATE ON WOOD.

I. C. 2277.

October 22, 1913.

Chowchilla Construction Company, Chowchilla, entered a complaint against the rate on wood from Algodon, on the Northern Electric, to Chowchilla, on the Southern Pacific, which they alleged was excessive.

After some correspondence, complainant decided to drop the matter, as the tonnage involved was not sufficient to justify making application for commodity rates.

## FREIGHT RATES.

I. C. 2293.

October 18, 1913.

Curtis Olive Corporation, Los Angeles, asked that joint freight rates be established between points located on the San Pedro, Los Angeles and Salt Lake Railroad and the Crescent City Railway.

The complaint was taken up with the transportation companies and they published the same rates via the Salt Lake Route as were in effect via the rails of the Southern Pacific Company. This adjusted the matter satisfactorily.

## FREIGHT—HAY.

I. C. 2295.

October 27, 1913.

Omer Fughmaster, Biggs, complained to the Commission with reference to rate of \$1.50 per ton on hay in carloads from Biggs to Chico.

The matter was taken up with the Southern Pacific Company, which arranged to reduce the rate to 95 cents per ton between the points named, and also refund to consignee excess charges collected in excess of the new rate.

## REPARATION REFUND.

I. C. 2303.

October 24, 1913.

*Fresno Fuel Company vs. Southern Pacific Company.* Permission granted October 31, 1913, to make a reparation refund of \$58.90, account unreasonable rate applied on two carloads of oak wood forwarded from Lodge to Fresno on December 14, 1912, and January 13, 1913.

## FREIGHT—LUMBER.

I. C. 2305.

October 27, 1913.

San Joaquin and Eastern Railroad Company wrote the Commission, asking for information with reference to making reparation refunds on shipments of lumber moved from Indian Mission to Fresno.

The desired information was given.

## REPARATION REFUND.

I. C. 2305.

June 19, 1914.

*E. Welton vs. San Joaquin and Eastern Railroad Company.* Permission granted July 13, 1914, to make a reparation refund of \$145.18, account unreasonable rate



applied on three carloads of box shooks forwarded from Indian Mission and Auberry to DeWolf and Clotho on July 1, 19, and 24, 1913.

## FREIGHT—SAND.

I. C. 2311.

October 28, 1913.

Frank Davis, Lindsay, entered a complaint with the Commission with reference to rate on sand in carloads from Lort to Lindsay.

The Commission informally arranged to have the rate of 65 cents per ton reduced to 25 cents per ton, and also secured reparation refund in the sum of \$47.25 against charges collected on four cars moved before the reduction became effective.

## REPARATION REFUND.

I. C. 2312.

October 24, 1913.

*Henry Cowell Lime and Cement Company vs. Southern Pacific Company.* Permission granted November 8, 1913, to make a reparation refund of \$111.81, and waive collection of \$9.92 account unreasonable rate applied on nine carloads of cement forwarded from Cowell to Concord and Brentwood in March, May, June and July, 1913.

## FREIGHT TRAIN SERVICE.

I. C. 2314.

October 28, 1913.

J. C. Baseman, Adin, entered a complaint against the Nevada-California-Oregon Railway alleging that perishable shipments were not promptly transported via that line.

After considerable correspondence the Commission arranged for the proper handling of the freight.

## FREIGHT—LIVE STOCK.

I. C. 2315.

August 4, 1913.

American National Live Stock Association, Denver, Colorado, entered a complaint alleging that the rates on live stock from points in the Imperial Valley were excessive and unreasonable.

After a lengthy correspondence and several interviews with the traffic officials of the Southern Pacific Company it was arranged informally to have the rates materially reduced. The new and old rates are set forth in the following schedule:

## To Los Angeles, California.

## Rate per single-deck 36-foot car.

New rates shown in Special Freight Tariff No. 2245 C. R. C. No. 1769.

Effective May 29, 1914.

From—		Cattle	Sheep	Hogs
Palm Springs	Old	\$49 00	\$38 95	\$38 95
	New	44 50	31 00	34 00
Indio	Old	59 60	47 20	47 20
	New	47 50	33 00	33 50
Coachella	Old	59 60	47 20	47 20
	New	48 00	33 50	37 00
Salton	Old	64 90	51 90	51 90
	New	50 00	35 00	40 00
Imperial Junction	Old	70 80	56 65	56 65
	New	54 00	37 00	43 50
Brawley	Old	70 80	56 65	53 65
	New	60 00	42 00	49 50
Imperial	Old	70 80	56 65	53 65
	New	62 00	43 00	50 50
El Centro	Old	74 35	57 80	57 80
	New	62 00	43 00	50 50
Heber	Old	74 35	59 00	59 00
	New	63 00	44 00	52 00
Calexico	Old	76 70	59 00	59 00
	New	63 00	44 00	52 00
Glamis	Old	84 35	59 00	59 00
	New	57 50	39 00	48 00
Ogilby	Old	84 95	59 00	59 00
	New	58 00	40 00	51 00
Colorado	Old	84 95	59 00	59 00
	New	59 00	40 50	52 00

## FREIGHT—CEMENT.

I. C. 2317.

October 27, 1913.

Pacific Portland Cement Company, San Francisco, entered a complaint with the Commission alleging that the rates on cement from Cement station to points between Bakersfield and Mojave were excessive and unreasonable.

Complaint was taken up with the traffic departments of interested transportation companies, but the Commission was unable to arrange informally any adjustment of the rates. It was suggested to complainant that, if it was desired to carry the matter to a conclusion, formal proceedings be filed.

## LOSS AND DAMAGE CLAIM.

I. C. 2321.

November 3, 1913.

Coulson Poultry and Stock Food Company, Petaluma, referred to the Commission some papers with reference to a loss and damage claim against the North Pacific Steamship Company and the Atchison, Topeka and Santa Fe Railway Company. An effort was made to secure a settlement, but without results, and since the Public Utilities Act does not delegate authority to this Commission to adjust loss and damage claims complainant was advised that it would be necessary to secure redress in the civil courts.

## LOSS AND DAMAGE CLAIMS.

I. C. 2323.

November 1, 1913.

Wm. G. Antonovich, San Francisco, submitted papers in claim against the Ocean Shore Railroad, alleging that two carload shipments of manure forwarded from San Francisco to Thornton had never reached their destination.

The claim was investigated and an effort made to secure a settlement, but the transportation company maintained that their records showed cars had been delivered as billed and declined any responsibility. Complainant was therefore notified that since the Commission had no jurisdiction over loss and damage claims final adjustment would have to be secured in the civil courts.

## REPARATION REFUND.

I. C. 2327.

October 30, 1913.

Wm. Casey vs. Southern Pacific Company. Permission granted November 15, 1913, to make a reparation refund of \$27.14, account unreasonable rate applied on one carload of barley forwarded from Salinas to San Lucas on September 24, 1913.

## DELAY TO FREIGHT.

I. C. 2330.

November 3, 1913.

R. Rogers, Los Angeles, made a complaint to the Commission alleging that a carload of hay forwarded from Garvanza to Lancaster was unnecessarily delayed and the firm damaged thereby.

Complaint was investigated and it was found that the delay was unavoidable, owing to bad condition of car, which had to be sent to the shop for repairs. Complainant was notified accordingly.

## REPARATION REFUND.

I. C. 2333.

October 30, 1913.

Pacific Lime and Plaster Company vs. Southern Pacific Company. Permission granted November 8, 1913, to make a reparation refund of \$9.91, account unreasonable rate applied on four carloads of lime forwarded from Sonora to Lemoore in June, July and December, 1912.

## FREIGHT RATE—SILICA ROCK.

I. C. 2334.

November 4, 1913.

The Pacific Mineral Products Company, Los Angeles, advised the Commission that the Southern Pacific Company was endeavoring to collect an undercharge of 25 cents per ton against three carloads of silica rock forwarded from Palmdale to Los Angeles.

It was found upon investigation that before the shipments moved the transportation company had promised to reduce the rate from \$1.00 to 75 cents per ton, but the tariff making the reduction was erroneously published and the rates were not effective at the time of movement.

Authority was granted to make reparation refund and cancel uncollected bills.

## FREIGHT RATE—PAPER.

I. C. 2336.

November 5, 1913.

Alfred Harrell, Bakersfield, wrote the Commission with reference to rate on paper in carloads, San Francisco to Bakersfield, stating that the charge had recently been increased.

Upon checking the tariffs it was found that through a mistake rate intended to apply on paper, carload, San Francisco, only, to San Pedro, only, had been used in combination for shipments destined to points in the San Joaquin Valley and increase referred to by complainant was brought about when the error was discovered and tariffs corrected.

• DELAY TO TRAINS.

I. C. 2343.

October 6, 1913.

The Commission received a complaint with reference to delay to trains between San Francisco and Los Angeles, and failure of the trains to make connection at Saugus for Santa Barbara.

Investigation developed the fact that trains were delayed because of burning of tunnel on the coast division, which required all trains to be operated via Tehachapi, thus causing a congestion which could not be avoided.

LOSS AND DAMAGE CLAIM.

I. C. 2349.

November 8, 1913.

H. W. Low, San Francisco, referred to the Commission a claim against the Santa Fe involving the value of a shipment of cream which had been lost in transit.

The Commission endeavored to settle claim, but without success, and having no jurisdiction over loss and damage claims notified complainant that relief must be secured in the courts.

FREIGHT SERVICE.

I. C. 2350.

November 8, 1913.

Schmeiser Manufacturing Company, Davis, entered a complaint with the Commission alleging poor freight train service in the transportation of a carload of automatic derricks forwarded from Davis to Phoenix, Arizona.

The matter was at once taken up with the interested transportation company, which promised to locate the shipment and rush same to destination.

LOSS AND DAMAGE CLAIM.

I. C. 2352.

November 9, 1913.

Mrs. P. J. Daley, Winters, referred to the Commission papers in a loss and damage claim involving a shipment of household goods forwarded from Raymond to Winters.

The Commission has no jurisdiction over loss and damage claims, and its efforts informally not meeting with success notified complainant that settlement would have to be secured in the courts.

DEMURRAGE CHARGES.

I. C. 2354.

November 8, 1913.

Duncans Mills Land and Lumber Company, San Francisco, referred to the Commission papers in a claim against the Northwestern Pacific Railroad Company involving demurrage charges assessed against shipments of tan bark.

Charges had been assessed in accordance with the lawful tariffs, and complainant was notified that no overcharges appeared to exist.

FREIGHT—MULES.

I. C. 2355.

November 10, 1913.

C. D. Bunker & Company, San Francisco, referred to the Commission papers in claim against the Southern Pacific Company involving charges assessed against two carloads of mules moved from Westley to San Francisco.

It was found upon checking the claim that charges had been assessed in conformity with tariffs and that no overcharges existed.

FREIGHT—INTERSTATE.

I. C. 2362.

November 11, 1913.

L. N. Adamson, Los Molinos, requested information with reference to rate on apples and pears in less than carloads from Ashland, Oregon, to Los Molinos.

The desired information was furnished.

REPARATION REFUND.

I. C. 2367.

November 13, 1913.

*California Fruit Cannery Association vs. Southern Pacific Company.* Permission granted November 15, 1913, to make a reparation refund of \$57.55, account unreasonable rate applied on twenty-four carloads of empty boxes returning, forwarded between various points during June and July, 1912.



## COLLECTION WAIVED.

I. C. 2368.

November 13, 1913.

*M. Belli & Co. vs. Southern Pacific Company.* Permission granted November 17, 1913, to waive collection of \$14.74, account unreasonable rate applied on two carloads of hay forwarded from Bay Shore to Colma on August 30 and September 3, 1913.

## REPARATION REFUND.

I. C. 2369.

November 13, 1913.

*Western Meat Company vs. Southern Pacific Company.* Permission granted November 20, 1913, to make a reparation refund of \$3.95, account unreasonable rate applied on one carload of manure forwarded from Stock Yards to San Jose on February 24, 1913.

## REPARATION REFUND.

I. C. 2370.

November 13, 1913.

*California Pine Box and Lumber Company vs. Southern Pacific Company.* Permission granted November 15, 1913, to make a reparation refund of \$3.45, account unreasonable rate applied on one carload of box shooks forwarded from Pioneer to Cordelia on June 12, 1913.

## FREIGHT—LUMBER.

I. C. 2373.

December 26, 1913.

Amalgamated Freight Traffic Bureau, San Francisco, submitted to the Commission papers in a claim against the Southern Pacific Company involving charges assessed against a carload of lumber forwarded from Bay Point to Paestee.

It was found upon investigation that an overcharge of \$2.50 existed, which amount was refunded to consignee.

## REPARATION—CLAY.

I. C. 2389.

May 1, 1914.

*Inglewood Brick and Tile Company vs. The Atchison, Topeka and Santa Fe.* Permission granted May 16, 1914, to make a reparation refund of \$291.60, account unreasonable rate applied on seventeen carloads of clay forwarded from Alberhill to Inglewood on February 14 to June 17, 1913.

## FREIGHT—ASPHALTUM.

I. C. 2390.

November 17, 1913.

Barber-Asphalt Paving Company wrote the Commission requesting information with reference to the charges assessed against shipments of asphalt moving from Los Angeles to San Diego prior to August 31, 1912.

The desired information was furnished.

## LOSS AND DAMAGE CLAIM.

I. C. 2398.

November 19, 1913.

John A. Thorne, Fairfield, wrote the Commission with reference to a loss and damage claim involving damages to a shipment of household goods forwarded from Sargent to Suisun.

Commission endeavored to secure a settlement, but without success, and notified complainant that jurisdiction over loss and damage claims rested with the courts.

## LOSS AND DAMAGE CLAIM.

I. C. 2401.

November 20, 1913.

S. Hagan, Reedley, referred to the Commission papers in a claim for damages sustained to a shipment of household goods forwarded from Aberdeen, South Dakota, to Reedley.

While the Commission has no jurisdiction over loss and damage claims, the matter was nevertheless taken up with the transportation company and an adjustment of the claim secured, in amount \$51.00.

## FREIGHT—EGGS.

I. C. 2408.

November 22, 1913.

Makins Produce Company, San Francisco, forwarded to the Commission papers in a claim against the Southern Pacific Company, alleging that overcharges existed in connection with two less-carload shipments of eggs forwarded from San Francisco to Los Angeles.

Investigation developed that charges had been lawfully assessed, although a lower rate could have been secured had the shipment been routed via the Santa Fe. Complainants were notified accordingly.



## FREIGHT RATES.

I. C. 2409.

November 22, 1913.

Smith's Cash Store, San Francisco, applied to the Commission for information with reference to freight rates on shipments moving from San Francisco to Willow Ranch. The desired information was furnished.

## FREIGHT RATE—HAY.

I. C. 2410.

November 21, 1913.

D. F. Brandt et al., Bard, referred to the Commission papers in a complaint alleging that the rate on hay in carloads from points on the Laguna Dam branch of the Southern Pacific Company to Los Angeles was excessive.

It was arranged to have the rate reduced from \$4.50 to \$4.00 per ton, this adjustment being satisfactory to complainants.

## FREIGHT RATE—BOX SHOOKS.

I. C. 2412.

November 21, 1913.

The Atchison, Topeka and Santa Fe Railway, San Francisco, referred to the Commission papers in a claim entered by the California Pine Box and Lumber Company, involving charges assessed against a shipment of box shooks forwarded from Weed to Antioch, and requested authority to refund charges via a junction point other than that through which the shipment moved.

The Commission ruled that charges could only be assessed in conformity with tariffs on file and that no overcharge existed against the shipment in question.

## FREIGHT VIA STEAMER.

I. C. 2417.

November 24, 1913.

Students Express and Transfer Company, Berkeley, entered a complaint against Chas. Nelson Company, in connection with a shipment of household goods forwarded from Berkeley to Eureka, alleging that shipment was consigned shipper's order and should not have been delivered without the surrender of original bill of lading.

The Commission at this time is not exercising jurisdiction over steamer lines and was, therefore, unable to render complainant any assistance.

## FREIGHT—CEMENT.

I. C. 2424.

December 10, 1913.

California Portland Cement Company forwarded to the Commission papers in a claim against the Pacific Electric Railway involving charges assessed against a carload of cement forwarded from Los Angeles to Inglewood.

On investigation it was found that the shipment had been misrouted and the Commission, therefore, authorized Pacific Electric Railway to refund the excessive charges.

## REPARATION REFUND.

I. C. 2424a.

July 29, 1914.

*California Portland Cement Company vs. Pacific Electric Railway Company.* Permission granted August 18, 1914, to make a reparation refund of \$20.99, account unreasonable rate applied on one carload of cement forwarded from Colton to Sawtelle on September 23, 1913.

## FREIGHT—INTERSTATE.

I. C. 2425.

November 25, 1913.

Los Angeles Berry Growers' Cooperative Association, Los Angeles, referred to the Commission papers in a claim involving charges assessed against a carload of potatoes forwarded from Ocean Avenue to Trinidad, Colorado.

The transaction not being under the jurisdiction of this Commission, complainant was referred to the Interstate Commerce Commission, Washington, D. C.

## REPARATION REFUND—CRUDE OIL.

I. C. 2426.

March 19, 1914.

*Southern Counties Gas Company vs. Southern Pacific Company.* Permission granted March 27, 1914, to make a reparation refund of \$159.25, account unreasonable rate applied on eighteen carloads of crude oil forwarded from Los Nietos to Santa Ana from November 25, 1911, to January 17, 1912.

## FREIGHT—CRUDE OIL.

I. C. 2426a.

November 18, 1913.

Southern Counties Gas Company of California, Los Angeles, requested that the Commission present to certain transportation companies reparation claims involving charges for the transportation of crude oil in carloads.

Complainant was advised to file claims direct with interested companies, and, if claims were not satisfactorily adjusted, same could then be presented to this office for further consideration.

#### FREIGHT—MISROUTING.

I. C. 2431.

November 5, 1913.

Pacific Coast Mail Order House, Los Angeles, referred to the Commission papers in a claim against the Southern Pacific Company, amounting to \$3.48, involving charges assessed against a shipment of groceries forwarded from Los Angeles to Lebec. Claim was based on fact that consignment was waybilled to Lancaster instead of Monarch, the latter being the station where consignee called for his freight.

Investigation failed to place the responsibility upon the railroad company for misrouting of the freight and consignee was therefore advised that the local charges from Los Angeles to Lancaster could not be refunded.

#### LOSS AND DAMAGE CLAIM.

I. C. 2434.

November 29, 1913.

Mrs. Wm. Boydston, Termo, forwarded to the Commission papers in a loss and damage claim involving a shipment moved from Brentwood to Termo via Reno, Nevada. The Commission has no jurisdiction over loss and damage claims, but took the matter up informally with interested transportation companies, who advised that the claim would be given prompt consideration.

#### FREIGHT—FLOUR.

I. C. 2439.

December 1, 1913.

California Transportation Company requested permission to make a reparation refund to H. F. Allen Company, involving a carload shipment of flour forwarded from San Francisco to Chico. Authority to make reparation adjustment and refund sum of \$15.03 to shipper was authorized, for the reason that the freight had been improperly handled by the transportation company.

#### REPARATION REFUND.

I. C. 2447.

January 21, 1914.

*Sacramento Valley Sugar Company vs. Southern Pacific Company.* Permission granted January 27, 1914, to make a reparation refund of \$1,386.63 and waive the collection of \$44.70, account unreasonable rate applied on sixty-one carloads of sugar beets, forwarded from Briggsston to Hamilton July 31 to August 29, 1913.

#### REPARATION REFUND.

I. C. 2448.

December 2, 1913.

*Santa Cruz Portland Cement Company vs. Southern Pacific Company.* Permission granted December 11, 1913, to make a reparation refund of \$52.86, account unreasonable rate applied on six carloads of cement forwarded from Davenport to Willows, Gridley, and Hamilton during June, 1913.

#### FREIGHT CHARGES—LUMBER.

I. C. 2451.

December 2, 1913.

Elder Building Material Company, Los Angeles, submitted to the Commission freight bills covering lumber shipments moved from San Pedro to Wildasin, alleging that the charges were excessive.

The bills were checked and charges found to be in conformity with regular tariff; complainant was, therefore, notified that no overcharge existed.

#### FREIGHT RATES—POULTRY FOOD.

I. C. 2456.

November 21, 1913.

San Mateo County Poultry Association, San Gregorio, entered a complaint against the Ocean Shore Railway, alleging that rates on poultry food in carload and less-carload lots between San Francisco and Tunitas Glen were excessive and unreasonable.

The Commission took the matter up, but was unable to secure informally any adjustment, and advised complainant that it would be necessary to file formal proceedings.

#### FREIGHT CHARGES—REPARATION.

I. C. 2460.

December 27, 1913.

Independent Steamship Company, Los Angeles, referred to the Commission papers involved in a claim against the San Pedro, Los Angeles and Salt Lake Railway,

covering charges assessed on shipments moved prior to December 7, 1911, date upon which class rates were reduced between San Pedro and Los Angeles.

Satisfactory adjustment of the claim was arranged by the Commission.

#### FREIGHT RATES—FRESH FRUIT.

I. C. 2465.

December 4, 1913.

Grupe-Holmquist Hills Company, San Francisco, wrote the Commission with reference to rates applying on oranges from Fair Oaks to Folsom, when same are to be consolidated into carload lots for reshipment.

The tariff provides that the commodity rate will only apply when oranges are reshipped to points located on or via Southern Pacific Company lines. The matter was taken up informally, but the transportation company declined to change its tariff, and complainant was notified accordingly.

#### FREIGHT CHARGES—HAY.

I. C. 2469.

December 3, 1913.

J. W. Lea, Napa Junction, referred to the Commission a freight bill involving charges against a carload of hay forwarded from Red Bluff to Napa Junction.

The bill was checked and charges found to be in accordance with lawful tariff; complainant was notified that no overcharges existed against the shipment.

#### FREIGHT CHARGES—CATTLE.

I. C. 2471.

December 5, 1913.

Walt, Schilling & Company, Santa Cruz, referred to the Commission papers in a claim alleging that charges had been wrongfully assessed against carload shipments of cattle forwarded from Coalinga to Turlock.

It was found upon investigation that, while the agent at Santa Cruz quoted shipper a wrong rate, the charges as collected were in conformity with the tariff and lawful. Transportation company refused to publish a reduced schedule of rates and the Commission was, therefore, unable to authorize any reparation refund.

#### TRANSFER CHARGES.

I. C. 2478.

December 8, 1913.

Thor Raje, Los Angeles, referred to the Commission papers in a claim alleging overcharges of \$20.00 by a transfer and storage company at San Francisco in connection with a shipment of household goods forwarded from San Francisco to Los Angeles. Being unable to adjust the matter informally, complainant was advised that the Commission had no jurisdiction over a charge of transfer companies.

#### FREIGHT CHARGES—OLIVES.

I. C. 2479.

December 8, 1913.

B. H. Paul, Los Angeles, referred to the Commission a freight bill covering charges assessed against a carload of olives forwarded from Bloomington to Los Angeles via Riverside.

The charges were correct via the route over which the car traveled, and complainant was notified that even though a lower rate was possible via the short line of the Southern Pacific Company, such lower rate could not be applied to a shipment traveling by a circuitous route of the Crecent Railway and the Santa Fe.

#### REPARATION REFUND.

I. C. 2482.

December 9, 1913.

*Beers Brothers vs. San Pedro, Los Angeles and Salt Lake Railroad Company.* Permission granted December 12, 1913, to make a reparation refund of \$118.18; account unreasonable rate applied on forty-two carloads of mineral water forwarded from Riverside to Los Angeles in September and October, 1913.

#### FREIGHT CHARGES—SALVAGE.

I. C. 2489.

December 10, 1913.

The Atchison, Topeka and Santa Fe Railway, San Francisco, forwarded to this Commission claim entered in connection with a carload of second-hand merchandise termed salvage, upon which consignee claimed rate applicable on junk. As consignment consisted of merchandise, part of which was practically new, it could not be accepted as junk and charges were assessed in conformity with lawful tariffs.

The railway company was notified that it would be necessary to publish a special commodity rate covering should it desire to make reparation refund against the shipment.



## FREIGHT—FERTILIZER.

I. C. 2491.

December 10, 1913.

Pacific Manure and Fertilizer Company, San Francisco, wrote the Commission that erroneous charges had been assessed against a carload of manure forwarded from San Francisco to Windsor, Sonoma County.

It was found upon investigation that the car, by mistake, had been way-billed to Windsor, Tuolumne county, and forwarded from that point to Windsor, Sonoma county, thus bringing about overcharges in the freight rates. The Southern Pacific Company admitted that an error had been made, and arranged for refunding of charges in excess of what would have applied had the shipment moved direct in the first instance.

## REPARATION REFUND.

I. C. 2493.

December 5, 1913.

*Beaulieu Vineyard Company vs. Southern Pacific Company.* Permission granted December 10, 1913, to make a reparation refund of \$32.66, account unreasonable rate applied on four carloads of wine forwarded from Armona to Rutherford on May 29 and June 10, 1913.

## REPARATION REFUND.

I. C. 2497.

December 10, 1913.

*Holly Sugar Company vs. Southern Pacific Company.* Permission granted December 12, 1913, to make a reparation refund of \$625.28, account unreasonable rate applied on 190 carloads of sugar beets forwarded from Los Alamitos to La Balsa on July 23 to October 25, 1913.

## REPARATION REFUND AND WAIVE.

I. C. 2498.

December 4, 1913.

*California and Hawaiian Sugar Refining Company vs. Southern Pacific Company.* Permission granted December 11, 1913, to make a reparation refund of \$61.04 and waive \$133.22, account unreasonable rate applied on ten carloads of sugar forwarded from Alvarado to Port Costa during September, 1913.

## REPARATION REFUND.

I. C. 2499.

December 6, 1913.

*J. W. Browning vs. Southern Pacific Company.* Permission granted December 10, 1913, to make a reparation refund of \$120.14, account unreasonable rate applied on fourteen carloads of cattle forwarded from Tres Pinos to Marcuse on May 16, 1913.

## FREIGHT—HOUSEHOLD.

I. C. 2501.

December 9, 1913.

A. C. Leslie, Orcutt, referred to the Commission papers in a claim involving charges assessed against a shipment of household goods forwarded from Gardena to Orcutt. Through a misunderstanding the consignment was carried to San Francisco and then returned by steamship company involving overcharges in the sum of \$17.86.

It was arranged to have the overcharges refunded.

## FREIGHT—LIME.

I. C. 2503.

December 10, 1913.

W. J. Chastain, Oakland, made a complaint with reference to the rate on lime in carloads from Gazelle to San Francisco.

After considerable correspondence it was arranged to have a reduced rate of \$3.00 per ton published in lieu of the \$4.00 rate theretofore in effect.

## REPARATION REFUND.

I. C. 2505.

December 13, 1913.

*Lamoine Lumber and Trading Company vs. Southern Pacific Company.* Permission granted December 18, 1913, to make a reparation refund of \$451.73, account unreasonable rate applied on 119 carloads of dry lumber forwarded from various points to Lamoine during June, July, August, September and October, 1913.

## REPARATION REFUND.

I. C. 2506.

December 12, 1913.

*California Pine Box and Lumber Company vs. Southern Pacific Company.* Permission granted December 17, 1913, to make a reparation refund of \$1.85, account unreasonable rate applied on one carload of box lumber forwarded from Sacramento to Acampo on July 10, 1913.



## FREIGHT—BUGGY.

I. C. 2513.

December 11, 1913.

A. K. Ware, San Bernardino, requested the Commission to investigate the charges assessed against one buggy forwarded from Los Angeles to San Bernardino.

Check of the bill revealed an overcharge of \$1.99, which amount was refunded by the transportation company.

## REPARATION REFUND.

I. C. 2518.

December 15, 1913.

*Libby, McNeill & Libby vs. Northern Electric Railway Company.* Permission granted December 24, 1913, to make a reparation refund of \$28.25, account unreasonable rate applied on 113 carloads of various commodities switched over spur track of complainant on July 21 to December 10, 1913.

## FREIGHT CHARGES—FLAG POLE.

I. C. 2522.

December 15, 1913.

Peterson & Wilson, San Francisco, referred to the Commission freight bill covering charges assessed against a flag pole transported on a flat car from San Francisco to Crows Landing.

Charges as assessed were in conformity with lawful tariffs, and complainants were notified accordingly.

## FREIGHT—EMIGRANT MOVABLES.

I. C. 2526.

December 15, 1913.

O. Wells, Calpella, forwarded to the Commission papers in connection with carload of household goods forwarded from Napa Junction to Laughlin, alleging that same had been overcharged. Check of the bills was made and it was found that charges had been assessed in conformity with lawful rates.

## DEMURRAGE—INTERSTATE.

I. C. 2528.

December 13, 1913.

Corning Rochdale Company, Corning, complained to the Commission that an erroneous demurrage charge had been assessed against a car of potatoes forwarded from a point in Oregon.

The transaction being interstate, complainant was advised to take the matter up with the Commission at Washington, D. C.

## STORAGE CHARGES.

I. C. 2530.

December 13, 1913.

G. W. Braden, Oroville, entered a complaint alleging that storage charges had been assessed during the time he was delayed in securing a bill of lading covering consignment to shipper's order.

Investigation developed the fact that the transportation company could not deliver the goods without surrender of the original bill of lading and were not responsible for the delay, therefore charges assessed were lawful and in conformity with published tariffs.

## FREIGHT—INTERSTATE.

I. C. 2531.

December 12, 1913.

Home Furniture Company, San Bernardino, forwarded to the Commission papers in a claim involving charges assessed against a shipment of furniture forwarded as part of a carload from the East to San Bernardino.

The Commission having no jurisdiction over a claim of this kind, advised the complainant to that effect.

## REPARATION REFUND.

I. C. 2538.

December 4, 1913.

*San Joaquin Light and Power Company vs. Southern Pacific Company.* Permission granted December 20, 1913, to make a reparation refund of \$8.96, account unreasonable rate applied on one carload of power line material forwarded from Fresno to Klink on June 3, 1912.

## FREIGHT—HAY AND GRAIN.

I. C. 2542.

December 15, 1913.

Vincent Jones, Sacramento, wrote the Commission complaining of the rates on hay and grain from Knights Landing and Zamora to San Francisco and Sacramento.

The complaint was taken up with the traffic department of the Southern Pacific Company, who, after an investigation, took the position that the rates were extremely low because of water competition and that they could not informally offer to change the same.

Mr. Jones was therefore notified that it would be necessary to bring formal proceedings should he desire to have the matter definitely adjusted.

#### FREIGHT—DEMURRAGE CHARGES.

I. C. 2544.

December 16, 1913.

Fred Meier, Woodland, wrote the Commission alleging that demurrage charges assessed against a carload of hay forwarded from Woodland to San Jose and re-shipped from San Jose to Coyote, were improperly assessed.

Investigation developed the fact that demurrage should have been \$3.00 instead of \$6.00. The transportation company refunded the overcharges.

#### REPARATION REFUND.

I. C. 2551.

December 4, 1913.

*Pacific Portland Cement Company vs. Southern Pacific Company.* Permission granted December 19, 1913, to make a reparation refund of \$3.83, account unreasonable rate applied on one carload of cement forwarded from Cement to Mare Island on October 10, 1912.

#### FREIGHT—FRUIT.

I. C. 2553.

October 10, 1913.

Stockton, Terminal and Eastern Railroad Company requested information with reference to collection of undercharges on carload shipments of fruit, stating that through some misunderstanding charges had been assessed on a basis of a minimum of 24,000 pounds when the tariff provided a minimum of 30,000 pounds.

Since transportation companies can not deviate from published tariffs on file in this office, the railroad company was advised that it would be necessary to protect tariffs and collect undercharges.

#### DELAY TO FREIGHT.

I. C. 2557.

December 17, 1913.

J. S. Malsbary, Colusa, wrote the Commission alleging that a shipment of shoes destined to Colusa from some eastern point was being held at Arbuckle. The matter was taken up with the Southern Pacific Company by telephone and arrangements were made to have the shipment forwarded to Colusa by the first train.

#### FREIGHT RATES.

I. C. 2559.

December 18, 1913.

Monterey Chamber of Commerce, Monterey, made a general complaint against rates applying to and from Monterey, alleging that same were discriminatory and excessive.

No rates or distances were named and the Commission requested further information, which was not forthcoming; claim was therefore filed without action, it being understood that a general complaint against all rates would be filed.

#### FREIGHT—TAN BARK.

I. C. 2561.

December 28, 1913.

Kullman, Salz & Company, Benicia, referred to the Commission papers in a claim involving charges assessed against balance-of-lot shipment of tan bark.

Complainant was advised that no overcharges existed against the shipments as tariffs did not provide for the application of carload rates on balance-of-lot consignments of tan bark.

#### FREIGHT—EMPTY CARRIERS.

I. C. 2568.

December 19, 1913.

Myers, Darling & Hinton Company, Los Angeles, complained to the Commission with reference to charges assessed for the transportation of new fruit boxes forwarded from Los Angeles to Exeter.

Charges as collected were in conformity with lawful tariffs and complainant was advised that no overcharges existed against the shipment.

#### FREIGHT—LIVE STOCK.

I. C. 2569.

December 19, 1913.

Shattuck-Edinger Company, San Francisco, wrote the Commission for information with reference to correct rate applying on a carload shipment of live stock forwarded from El Centro to Tracy.

The desired information was furnished.

FREIGHT—LUMBER.

I. C. 2575.

December 22, 1913.

Palmdale Lumber Company, Palmdale, registered a complaint with the Commission alleging that rates assessed by the Southern Pacific Company for transportation of lumber in carloads from San Pedro to Palmdale were excessive.

After some correspondence the complaint was withdrawn for the reason that the Commission now has under investigation all lumber rates within the State and when decision is rendered thereon the Palmdale rates will be adjusted.

REPARATION REFUND.

I. C. 2576.

April 17, 1914.

*Riley Hart vs. Southern Pacific Company.* Permission granted April 30, 1914, to make a reparation refund of \$10.00, account unreasonable rate applied on one carload of hay forwarded from Laws to Little Lake on December 4, 1913.

FREIGHT—DIVERSION CHARGES.

I. C. 2580.

December 18, 1913.

Southern Pacific Company requested the authority of the Commission to assess through rates plus a diversion charge against a carload of cantaloupes forwarded from Thermal to Los Angeles and reshipped from Los Angeles to San Luis Obispo.

The letter authorizing diversion at Los Angeles went astray and therefore the Commission authorized the publication of the through rate to conform with the consignor's original instructions.

REPARATION REFUND.

I. C. 2581.

December 20, 1913.

*California Wine Association vs. Southern Pacific Company.* Permission granted December 31, 1913, to make a reparation refund of \$9.63, account unreasonable rate applied on two carloads of wine forwarded from Las Palmas to Richmond on September 27, 1913.

FREIGHT CHARGES—WEIGHT.

I. C. 2582.

December 20, 1913.

Aggeler & Musser Seed Company, Los Angeles, entered a complaint with the Commission, alleging that weight used in assessing charges against a carload of potatoes was excessive.

Sufficient details were not furnished by complainant and information requested by the Commission was not supplied; file was, therefore, closed without action.

FREIGHT—CEMENT.

I. C. 2583.

December 16, 1913.

Riverside Portland Cement Company, Los Angeles, alleged that charges assessed on cement in carloads from Crestmore to National City were in violation of the long and short haul provision of the Constitution, for the reason that the charge to National City was higher than to Marmarosa, a more distant point.

Check of the bills revealed that there was a switching charge involved in making delivery at National City which did not exist at Marmarosa. The switching charge was in order for the extra service rendered, and, therefore, rates to National City could not be considered higher than those to Marmarosa.

REPARATION REFUND.

I. C. 2585.

December 20, 1913.

*F. J. Sifford vs. Southern Pacific Company.* Permission granted December 31, 1913, to make a reparation refund of \$32.48, account unreasonable rate applied on one carload of horses forwarded from San Lucas to Ventura on October 29, 1913.

DEMURRAGE CHARGES.

I. C. 2589.

December 19, 1913.

San Diego and Southeastern Railway requested permission to cancel demurrage bills amounting to \$36.00 assessed against six carloads of rock not unloaded at San Diego within the free time provided in terminal tariffs.

Investigation developed the fact that the cars were not unloaded on account of stormy weather and inability to reach tracks owing to repair work in the yards. Authority was accordingly issued to cancel the bills.

REPARATION REFUND.

I. C. 2592.

December 20, 1913.

*Alameda Sugar Company vs. Southern Pacific Company.* Permission granted December 31, 1913, to make a reparation refund of \$607.26, account unreasonable rate



applied on twenty-seven carloads of sugar forwarded from Alvarado to Crockett during October, 1913.

#### LOSS AND DAMAGE CLAIM.

I. C. 2596.

December 1, 1913.

W. T. Ellis Company, Marysville, referred to the Commission papers in a claim amounting to \$9.00 against the Northern Electric Railway Company, account damages to a shipment of corn delayed in transit.

Arrangements were made to have the claim adjusted to the satisfaction of interested parties.

#### REPARATION REFUND.

I. C. No. 2599.

January 21, 1914.

*C. A. Holst et al. vs. Southern Pacific Company.* Permission granted February 9, 1914, to make a reparation refund of \$160.69, account unreasonable rate applied on nine carloads of barley forwarded from Graves to King City and San Lucas on September 13 to October 27, 1913.

#### FREIGHT—COAL SCREENINGS.

I. C. 2601.

December 23, 1913.

Stone Canon Coal Company, San Francisco, wrote the Commission, stating that the rate on coal screenings shipped from McKay to San Jose was excessive, as compared with the rate on commercial coal.

The complaint was taken up with the Southern Pacific Company, but since the rates on coal had been recently reduced by order of this Commission, in Case 360, further reduction was refused. Complainants' only recourse, therefore, was to file formal proceedings, and they were advised accordingly.

#### FREIGHT—CANNED GOODS.

I. C. 2611.

December 24, 1913.

California Fruit Canners' Association, San Francisco, entered an informal protest with the Commission against the changing of commodity rates on canned goods between San Francisco and Marysville.

Complainant was advised that no application had been made to the Commission to change rates, but should one be made proper notice would be given all interested parties.

#### FREIGHT—HAY.

I. C. 2613.

December 24, 1913.

Jackson & Russell, Colusa, referred to the Commission papers in a claim against the Southern Pacific Company, involving charges assessed against two carloads of hay forwarded from Colusa to Knights Landing at the rate of \$2.55 per ton.

It was arranged to have a rate of \$1.80 per ton established and overcharges refunded.

#### FREIGHT—LOSS AND DAMAGE.

I. C. 2618.

December 20, 1913.

J. J. Barton, Reno, Nevada, referred to the Commission papers in a claim against the Western Pacific and the Nevada-California-Oregon Railway, involving the value of a survey outfit lost in transit between Winnemucca and Davis Creek.

While the Commission has no jurisdiction over loss and damage claims, it, nevertheless, took the matter up by letter with interested carriers and arranged to have a prompt settlement of the claim.

#### COLLECTION WAIVED.

I. C. 2630.

December 19, 1913.

*T. N. Scofield vs. Atchison, Topeka and Santa Fe Railway Company.* Permission granted January 7, 1914, to waive collection of undercharges amounting to \$39.60, account erroneous billing on two carloads of fuel wood forwarded from Tehachapi to Bakersfield on October 29 and 30, 1912.

#### REPARATION REFUND—ASPHALTUM.

I. C. No. 2632.

December 19, 1913.

*General Construction Company vs. Atchison, Topeka and Santa Fe.* Permission granted February 10, 1914, to make a reparation refund of \$35.74, account unreasonable rate applied on four carloads of asphaltum forwarded from Kerto to Mojave and two carloads Kerto to Lancaster on April 30 and May 31, 1913.

#### FREIGHT—LONG AND SHORT HAUL.

I. C. 2634.

December 29, 1913.

Mrs. Grace L. Gillis, Hesperia, called the attention of the Commission to the fact that the freight rates of the Santa Fe from Tulare to Hesperia were in excess of those from Tulare to Los Angeles, Hesperia being intermediate.



Complainant was advised that under the Constitution the Santa Fe was permitted to charge a lower rate to Los Angeles than to Hesperia for the reason that it met at Los Angeles the short line rates of the Southern Pacific, the distance via the Southern Pacific from Tulare to Los Angeles being 129 miles less than the mileage of the Santa Fe between the same points.

## FREIGHT—PAPER.

I. C. 2644.

December 27, 1913.

Everett Pulp and Paper Company, Everett, Washington, referred to the Commission papers in a complaint against the Southern Pacific Company, wherein they requested a carload rate on mixed shipments of blank or note books, school composition books, school exercise or practice pads or tablets, San Pedro to Los Angeles.

The Southern Pacific Company declined to make any change in their rates and complainant was, therefore, notified that it would be necessary to file formal proceedings should it desire to bring the matter to a conclusion.

## FREIGHT AND DEPOT SERVICE.

I. C. 2647.

December 29, 1913.

Ravendale Mercantile Company, Ravendale, entered a complaint against the Nevada-California-Oregon Railway, alleging that freight was not promptly handled at Ravendale and that there was no agent at that point.

After an extended correspondence with the railway company, they advised the Commission that arrangements had been made to erect a depot and provide an agent at Ravendale.

## FREIGHT—LOSS AND DAMAGE.

I. C. 2650.

January 2, 1914.

C. N. Oulie, Los Angeles, referred to the Commission papers in loss and damage claim amounting to \$9.50 against the San Pedro, Los Angeles and Salt Lake Railroad Company, involving a shipment of household goods forwarded from Black River Falls to Los Angeles.

While the Commission has no jurisdiction, the matter was taken up informally and arrangements made to have the claim vouchered.

## REPARATION REFUND—COTTON.

I. C. 2652.

March 19, 1914.

*O. P. Thornton vs. Southern Pacific Company.* Permission granted March 24, 1914, to make a reparation refund of \$58.20 and waive collection of \$1.00, account unreasonable rate applied on one carload of cotton forwarded from Sellev to El Centro on December 24, 1913.

## FREIGHT—TABLES.

I. C. 2655.

December 30, 1913.

R. B. Crowley, Los Angeles, forwarded to the Commission papers in claim involving charges assessed against a shipment described as wooden tables moved from New York to Pasadena. Complainant alleged that the actual contents of the shipment were notions and not tables.

The transportation in question being interstate, complainant was notified to take the matter up with the Commission at Washington, D. C.

## REPARATION REFUND.

I. C. 2665.

January 2, 1914.

*General Construction Company vs. Atchison, Topeka and Santa Fe.* Permission granted February 2, 1914, to make a reparation refund of \$44.11, account unreasonable rate applied on five carloads of machinery forwarded from Shale to Mojave on April 20 and April 27, 1913.

## STORAGE CHARGES.

I. C. 2667.

December 31, 1913.

H. A. Woodard, Los Angeles, entered a protest against the rules and regulations governing storage of baggage in effect in the State of California.

As the transportation companies declined to informally change the present regulations existing in this and other states, complainant was advised that the matter would have to be set for formal hearing should he desire to continue the same.

## FREIGHT—DESTINED PANAMA-PACIFIC EXPOSITION GROUNDS.

I. C. 2668.

January 3, 1914.

Golden West Iron Works, San Francisco, wrote the Commission, stating that there was no published freight rate for the transportation of construction material

shipped from private industry tracks in San Francisco to the grounds of Panama-Pacific Exposition.

Upon investigation it was found that a combination of local rates provided a satisfactory charge for the service performed, and complainant was advised of the tariffs covering the rates.

#### COLLECTION WAIVED.

I. C. 2683.

January 5, 1914.

*Chas. E. Goss & Son vs. Southern Pacific Company.* Permission granted January 12, 1914, to waive collection of \$8.55, account unreasonable rate applied on one carload of hay forwarded from Stegeman to San Francisco on September 26, 1913.

#### REPARATION REFUND.

I. C. 2684.

January 5, 1914.

*Richmond Chemical Company vs. Southern Pacific Company.* Permission granted January 12, 1914, to make a reparation refund of \$28.49, account unreasonable rate applied on two carloads of ore forwarded from Caliente to Richmond on May 17 and July 29, 1913.

#### REPARATION REFUND.

I. C. 2685.

January 5, 1914.

*Jackson & Russell vs. Southern Pacific Company.* Permission granted January 12, 1914, to make a reparation refund of \$11.25, account unreasonable rate applied on one carload of hay forwarded from Colusa to San Francisco on September 17, 1913.

#### FREIGHT—VAULT MATERIAL.

I. C. 2689.

January 5, 1914.

Donnelly & Glavis, San Francisco, referred to the Commission papers in a claim against the Sacramento Transportation Company, alleging that an overcharge existed against a carload shipment of vault material forwarded from Sacramento to Grimes.

The transportation company insisted that charges had been assessed in strict conformity with the tariffs and declined to make any adjustment of the claim. Since the claim involved a question of fact, complainants were notified that it would be necessary to file formal proceedings should they desire to carry the matter to a conclusion.

#### REPARATION REFUND AND COLLECTION WAIVED.

I. C. 2694.

January 7, 1914.

*Frank Davis vs. Southern Pacific Company.* Permission granted January 14, 1914, to make a reparation refund of \$47.25 and waive collection of \$6.75, account unreasonable rate applied on four carloads of sand forwarded from Lort to Lindsay on October 8 and December 2, 1913.

#### FREIGHT—WOOD.

I. C. 2711.

January 8, 1914.

T. E. Smith, Bakersfield, referred to the Commission a claim against the Atchison, Topeka and Santa Fe with reference to the rate assessed against a carload of wood moved from Tehachapi to Bakersfield. It was found upon investigation that the shipment moved in accordance with consignor's instructions, that the rates as collected were lawful and no overcharges existed.

#### FREIGHT—SHIPPER'S ORDER.

I. C. 2712.

January 3, 1914.

J. H. H. Peshine, Santa Barbara, entered a complaint with the Commission stating that the delivery of a shipment of household goods forwarded from Los Angeles to Santa Barbara had been delayed because the transfer company had forwarded consignment to shipper's order, thereby compelling consignee to secure the bill of lading before goods would be delivered by the railroad company.

Investigation developed that the transfer company handled the shipment erroneously and shipment should have been delivered direct to consignee.

#### REPARATION REFUND.

I. C. 2713.

January 8, 1914.

*Ciocca-Lombardi Wine Company, French-American Wine Company, Italian-Swiss Colony and C. Schilling & Company vs. Southern Pacific Company.* Permission granted January 15, 1914, to make a reparation refund of \$42.71, account unreasonable rate applied on twenty-four carloads of wine forwarded from Trenton, Healdsburg, Simi and Cloverdale to San Francisco, April 25 to July 9, 1913.

## REPARATION REFUND.

January 8, 1914.

I. C. 2714.  
*T. K. Temple vs. Southern Pacific Company.* Permission granted January 14, 1914, to make a reparation refund of \$20.15, account unreasonable rate applied on two carloads of hay forwarded from Lancaster to Mojave on September 23 and 29, 1913.

## REPARATION REFUND.

January 8, 1914.

I. C. 2715.  
*Libby, McNeil & Libby vs. Southern Pacific Company.* Permission granted January 14, 1914, to make a reparation refund of \$31.99, account unreasonable rate applied on one carload of canned goods forwarded from Sunnyvale to Sacramento on August 29, 1913.

## FREIGHT—INTERSTATE.

January 8, 1914.

I. C. 2716.  
*C. W. Badger, Los Angeles,* wrote the Commission alleging that charges on freight in general from eastern points to California were excessive as compared with shipments from the same points destined to Philippine Islands, China and Japan.

The Commission having no jurisdiction over these rates, so advised complainant, and referred him to the Interstate Commerce Commission.

## FREIGHT—INTERSTATE.

January 1, 1914.

I. C. 2724.  
The R. E. C. Company, Meadow Valley, referred to the Commission papers in a claim against the Western Pacific Railway, involving damages sustained because of delay to a shipment of goods intended for the Christmas trade, which moved from Chicago to Quincy.

The transaction being interstate, complainant was notified that it would be necessary to take up the matter with the Interstate Commerce Commission at Washington, D. C.

## FREIGHT—FRUIT BOXES.

January 19, 1914.

I. C. 2728.  
California Fruit Cannery Association, San Francisco, submitted to the Commission papers in claim against the Sacramento Transportation Company, involving charges assessed against shipments of empty fruit boxes.

Upon investigation it was found that the claim amounting to \$32.31 should be paid and transportation company arranged voucher for the same.

## REPARATION REFUND.

January 10, 1914.

I. C. 2729.  
*San Joaquin Valley Sugar Company vs. Atchison, Topcka and Santa Fe Railway Company.* Permission granted January 15, 1914, to make a reparation refund of \$104.00, account unreasonable rate applied on twenty-six carloads of sugar beets forwarded from Loma to Visalia from August 4 to August 15, 1913.

## DEMURRAGE CHARGES.

January 9, 1914.

I. C. 2748.  
J. M. Campbell, San Diego, registered a complaint with the Commission alleging that demurrage charge of \$3.00 had been wrongly assessed against a carload of steel not unloaded within free time limit at San Diego.

Upon investigation it was found that consignee had not been properly notified of arrival of shipment and was therefore not responsible for the delay. Demurrage charge was accordingly refunded.

## FREIGHT—LOSS AND DAMAGE.

January 12, 1914.

I. C. 2753.  
Sonoma State Home, Eldridge, made a complaint with reference to the pilfering of freight in carload and less-carload while same was being held at Eldridge, a station without an agent.

Arrangements were made to have the transportation companies furnish freight-house locks in order that the freight might be properly protected.

## INTERSTATE FREIGHT.

January 13, 1914.

I. C. 2758.  
Ewart Grain Company, Lincoln, Nebraska, wrote the Commission with reference to alleged overcharges against a carload of grain forwarded from Lyons, Nebraska, to Pasadena.



The transaction being interstate, the complainant was advised to take the matter up direct with the Interstate Commerce Commission at Washington, D. C.

#### LOSS AND DAMAGE CLAIM.

I. C. 2761.

January 16, 1914.

P. E. Slaughter, Berkeley, wrote the Commission with reference to damages sustained in connection with a shipment of household goods forwarded from Nebraska to Berkeley.

The Commission was unable to arrange adjustment, and being without jurisdiction, notified complainant that settlement of claim would have to be secured in the civil courts.

#### FREIGHT—COTTON.

I. C. 2762.

January 13, 1914.

Calexico Cotton Gin and Compress Company, Calexico, wrote the Commission asking that the rates on compressed cotton in carloads be reduced from Imperial Valley points to San Francisco. The matter was taken up with the Southern Pacific Company, which offered to reduce the rate from Imperial Valley to San Francisco and Oakland from 65 cents to 55 cents, provided they were permitted to increase the rate from Imperial Valley to San Pedro from 40 cents to 50 cents. This arrangement was not satisfactory to interested shippers, and the matter was dropped for the present, it being the intention to revive the question a little later.

#### REPARATION REFUND.

I. C. 2763.

January 14, 1914.

*Guggenheim & Co. vs. Southern Pacific Company.* Permission granted January 22, 1914, to make a reparation refund of \$85.68, account unreasonable rate applied on three carloads of dried fruit forwarded from Santa Ana to Fresno on September 4 and 25 and October 3, 1913.

#### REPARATION REFUND.

I. C. 2764.

January 14, 1914.

*Pacific Gas & Electric Company vs. Southern Pacific Company.* Permission granted January 22, 1914, to make a reparation refund of \$79.20, account unreasonable rate applied on one carload of gravel forwarded from Rumsey to Suisun on April 15, 1913.

#### FREIGHT RATES—LUMBER ROAD.

I. C. 2765.

January 14, 1914.

Salvage & Dierke, Eureka, wrote the Commission alleging that the Bay Side Lumber Company was using its logging road for the transportation of freight for outside parties and should be required to file tariffs and establish reasonable rates for the service performed.

The lumber company in defense of its contention stated that the road was very poorly constructed and intended only for the transportation of logs used in their own mill, that they had no cars, and were not in a position to serve the public, further, that since the timber supply had become exhausted, the line was to be discontinued within a few months.

Under the circumstances the Commission was unable to adjust the complaint without a formal hearing, and as no formal complaint was entered the matter was dropped without action.

#### CULVERT UNDER RAILROAD TRACK.

I. C. 2785.

January 17, 1914.

City clerk for Turlock entered a complaint with the Commission alleging that the Southern Pacific did not provide necessary culverts under tracks at Turlock, and as a result certain streets in the city have frequently flooded during the winter season.

After considerable correspondence the Southern Pacific Company advised that they had held a conference with the city authorities at Turlock and would arrange to take care of the water so as to prevent further trouble.

#### FREIGHT—CEMENT.

I. C. 2807.

January 20, 1914.

Pacific Portland Cement Company, San Francisco, entered a complaint alleging that rate on cement, carloads, from Tolenas to Glides Landing was excessive, and asked for a lower rate through Sacramento.

While the Commission was unable informally to secure a change in the rates via Sacramento, it arranged for the establishment of a rate of \$1.80 per ton from Tolenas to Glides via Bay Point, which adjustment was satisfactory.



## REPARATION REFUND.

I. C. 2810.

January 20, 1914.

*California Building Material Company vs. Southern Pacific Company.* Permission granted January 27, 1914, to make a reparation refund of \$9.69, account unreasonable rate applied on four carloads of gravel forwarded from Niles to Martinez on June 18 and 20 and August 2 and 6, 1913.

## FREIGHT RATE—INTERSTATE.

I. C. 2821.

January 22, 1914.

*Caldwell Hudson Company, Montague,* wrote the Commission asking for information with reference to rate on lumber in carloads from Wendling, Oregon, to Weed and Montague.

Desired information was furnished.

## FREIGHT RATES—SEWER PIPE.

I. C. 2823.

January 21, 1914.

*Sacramento Valley Colony Company, San Francisco,* asked for information with reference to the rates on sewer pipe in carload and less-carload shipments from Lincoln to Hamilton.

Desired information furnished.

## FREIGHT RATES—HIGHWAY MATERIALS.

I. C. 2824.

January 21, 1914.

The Highway Commission of Sonoma County addressed a communication to the Commission asking for information with reference to reduced rates on material to be used for the construction of public highways in the County of Sonoma.

Copies of tariffs giving desired information were furnished.

## FREIGHT RATE—BOX SHOOKS.

I. C. 2825.

January 21, 1914.

*Illinois Pacific Glass Company, San Francisco,* forwarded to the Commission papers in a claim against the Southern Pacific Company involving charges assessed against carload shipments of box shooks forwarded from North Beach via Drumm street to Colma.

It was found upon checking the bills that charges were assessed in conformity with lawful tariffs and therefore no overcharges existed against shipments.

## REPARATION REFUND.

I. C. 2829.

January 23, 1914.

*Klein Simpson Fruit Company vs. Southern Pacific Company.* Permission granted February 9, 1914, to make a reparation refund of \$3.59, account unreasonable rate applied on one carload of empty boxes returning, forwarded from Los Angeles to Visalia, diverted to Lindsay on June 27, 1913.

## REPARATION—WOODEN CRATES.

I. C. 2830.

January 23, 1914.

*Weed Lumber Company vs. Southern Pacific Company.* Permission granted May 16, 1914, to make a reparation refund of \$128.11, waive 10 cents, account unreasonable rate applied on twelve carloads of wooden crates forwarded from Weed to Brawley, Thermal and Coachella on various dates.

## DEMURRAGE CHARGES.

I. C. 2836.

January 13, 1914.

*E. I. Ames, Pasadena,* in a communication to the Commission stated that the Pacific Electric Railway was endeavoring to collect a \$3.00 demurrage charge against a carload of oil forwarded to Loftus and not unloaded within the free time limit provided in demurrage tariff.

Upon making an investigation the Commission learned that the car had not been promptly unloaded because of heavy rain storms which prevented teaming over county road.

Authority was accordingly issued to cancel the demurrage bill.

## FREIGHT CHARGES—TRACTION ENGINE.

I. C. 2837.

January 22, 1914.

*R. W. Lohman, Los Altos,* submitted to the Commission papers in an alleged overcharge claim against the Southern Pacific Company involving charges assessed against a traction engine forwarded from Los Altos to Germantown.

It was found upon investigation that charges had not been made in strict conformity with the tariff and the Southern Pacific Company arranged to adjust the charges to the basis of the lawful rates.

#### DEMURRAGE CHARGES.

I. C. 2845.

January 20, 1914.

E. Sutcliffe, East Cambridge, Massachusetts, wrote the Commission with reference to a claim involving demurrage charges assessed by the Southern Pacific Company during the year 1910.

Complainant was advised that the Commission had no jurisdiction over the claims at the time the shipment moved.

#### FREIGHT RATE—CEMENT.

I. C. 2855.

January 24, 1914.

Pacific Portland Cement Company entered a complaint alleging that the rate on cement from Tolenas to Angiola is excessive. It was arranged informally to have the rate reduced from \$4.20 to \$3.60 per ton.

#### FREIGHT RATES—GRAIN AND HAY.

I. C. 2858.

November 21, 1913.

Claremont Board of Trade entered a protest with the Commission against the freight rates assessed to and from Claremont.

The complaint did not go into the matter in great detail, and the Commission wrote a number of letters endeavoring to ascertain just what was desired, but without result.

File temporarily closed, pending further information.

#### FREIGHT RATE—WOOD.

I. C. 2861.

January 26, 1914.

T. E. Smith, traffic manager of the San Joaquin Traffic Association, Bakersfield, asked for information with reference to the rate on wood from Lodge to Fowler.

The desired information was furnished.

#### FREIGHT CHARGES—HAY.

I. C. 2862.

January 26, 1914.

F. H. Sherwood, Sacramento, referred to the Commission papers in a claim against the Southern Pacific Company alleging that charges had been wrongfully assessed against a carload of hay forwarded from Antelope to Berkeley.

Upon investigation it was found that the railroad company furnished a smaller car than was ordered and therefore the charges should have been assessed on the basis of the actual weight of the hay instead of the minimum for a carload. The overcharges against the shipment were refunded.

#### REPARATION REFUND.

I. C. 2865.

January 28, 1914.

*California Building Material Company vs. Southern Pacific Company.* Permission granted February 9, 1914, to make a reparation refund of 34 cents and waive \$2.39, account unreasonable rate applied on one carload of crushed rock forwarded from Niles to San Francisco on August 26, 1913.

#### TRAIN SERVICE.

I. C. 2870.

January 28, 1914.

W. Locke Paddon, San Francisco, wrote the Commission reciting the fact that the Southern Pacific Company did not provide proper train service between San Francisco and Watsonville on January 26th. It was found upon investigation that the trains were not running on schedule time because of high water and land slides.

#### FREIGHT RATES—BRICK.

I. C. 2873.

January 14, 1914.

Mulford Vitrified Paving Brick Company, Los Angeles, filed a complaint against the Southern Pacific Company, alleging that certain rates on paving brick were excessive.

After considerable correspondence the Commission arranged for the reductions shown below which were satisfactory to complainant:

	Rates per ton	
	Old	New
Newmark to Santa Barbara.....	\$4 30	\$2 50
Newmark to Hollywood.....	1 45	1 10
Newmark to Colegrove.....	1 45	1 10
Newmark to Wildasin Switch.....	1 00	1 00
Newmark to Newport Beach.....	2 20	1 25
Newmark to Cienega.....	1 30	1 00

#### FREIGHT RATES—FUEL OIL.

I. C. 2884.

January 2, 1914.

Pasadena Ice Company, Pasadena, entered a complaint against the Southern Pacific and Santa Fe alleging that the rates on fuel oil in carloads from Los Angeles and El Segundo to Pasadena were excessive. The complaint was taken up with interested transportation companies who maintained that charges were reasonable and refused to make any reduction. Complainant was accordingly notified that it would be necessary to begin formal proceedings should it desire to carry the matter to a conclusion.

#### FREIGHT CHARGES—COBBLES.

I. C. 2890.

December 16, 1913.

Frank LaKamp, Dutch Flat, referred to the Commission papers involving charges against a shipment of cobbles forwarded from Alta to Stockton.

Investigation developed the fact that shipment had been wrongly described, and the transportation company refunded the overcharges.

#### DRIED BEET PULP.

I. C. 2891.

January 29, 1914.

S. T. Fleener, Ceres, wrote the Commission stating that he was unable to purchase dried beet pulp from any of the sugar companies, but could only secure the article through a selling company f.o.b. cars at destination.

The Commission had no jurisdiction over the matter and referred the communication to the Attorney-General.

#### REFRIGERATION RATES—LESS-CARLOAD SHIPMENTS.

I. C. 2894.

June 23, 1914.

Crescent Creamery Company, Los Angeles, called the attention of the Commission to the fact that the Southern Pacific Company's tariffs did not provide for the transportation of perishable freight including milk and cream from points in the San Joaquin Valley to Los Angeles, although such accommodations were to be had via the Santa Fe.

After considerable correspondence the Southern Pacific Company arranged to furnish the desired service.

#### FREIGHT CHARGES—INTERSTATE.

I. C. 2895.

January 29, 1914.

Louis Glickman, Oakland, referred to the Commission papers in a claim involving charges assessed against a shipment of household goods and framed pictures forwarded from Kansas City to Oakland.

The Commission having no jurisdiction over the transportation in question, advised complainant to communicate direct with the Interstate Commerce Commission, Washington, D. C.

#### LOSS AND DAMAGE CLAIM—BAGGAGE.

I. C. 2896.

January 28, 1914.

H. L. Van Loan, Fullerton, referred to the Commission a claim against the San Pedro, Los Angeles and Salt Lake Railroad involving a claim for damages to a trunk checked as baggage.

The transportation company denied responsibility, alleging that the trunk was damaged before it reached their possession. Since the Commission is without authority in the matter of loss and damage claims, complainant was advised that it would be necessary to seek compensation through some court of competent jurisdiction.



## FREIGHT CHARGES—LUMBER.

I. C. 2897.

January 24, 1914.

Patten & Davies Lumber Company, Los Angeles, referred to the Commission claim amounting to \$256.74 involving lawful charges assessed against carload shipments of lumber and shingles forwarded from San Pedro to Los Angeles during the year 1911 and yarded and milled on the rails of the Santa Fe and forwarded from Los Angeles to interior points via the Southern Pacific subsequent to April 23, 1912.

Since movement into Los Angeles was made before tariffs authorized yarding and milling in transit on rails other than the Southern Pacific, no overcharges exist against the shipments in question, and the Commission was unable to offer any relief.

## REPARATION REFUND—DRIED FRUIT.

I. C. 2912.

February 3, 1914.

*Guggenheim & Company vs. Northwestern Pacific Railroad Company.* Permission granted February 10, 1914, to make a reparation refund of \$41.36, account unreasonable rate applied on seven carloads of dried fruit forwarded from Finlayson to San Francisco during September, 1913.

## REPARATION REFUND—STEEL.

I. C. 2914.

January 31, 1914.

*M. B. White vs. Stockton Terminal and Eastern Railway.* Permission granted February 10, 1914, to make a reparation refund of \$4.99, account unreasonable rate applied on two carloads of steel forwarded from Stockton to Bellota on January 13 and 20, 1914.

## REPARATION REFUND—CEMENT.

I. C. 2922.

February 5, 1914.

*Henry Cowell Lime and Cement Company vs. Atchison, Topeka and Santa Fe Railway Company.* Permission granted February 20, 1914, to make reparation refund of \$39.41, account unreasonable rate applied on six carloads of cement forwarded from Cowell to Hayward January 23 to October 4, 1913.

## REPARATION REFUND—CEMENT.

I. C. 2923.

July 10, 1914.

*California Portland Cement Company vs. Southern Pacific Company.* Permission granted July 22, 1914, to make a reparation refund of \$98.57, account unreasonable rate applied on ten carloads of cement forwarded from Colton to Long Beach during the period of December 16, 1911, to May 20, 1913.

## REPARATION REFUND—TAN BARK.

I. C. 2926.

February 6, 1914.

*E. M. McKee, vs. Northwestern Pacific Railroad.* Permission granted February 10, 1914, to make a reparation refund of \$38.82, account unreasonable rate applied on twelve carloads of tan bark forwarded from McKee's Mill to Arcata September 20 to October 31, 1913.

## SWITCHING CHARGES.

I. C. 2932.

February 2, 1914.

Southern Pacific Company requested permission to adjust switching charges in connection with the movement of some cars handled at Redwood City.

The company was notified that when tariffs had been amended permitting adjustment desired the Commission would authorize refunds.

## DRAINAGE CULVERT.

I. C. 2934.

February 9, 1914.

Geo. O. Daly, Wineville, entered a complaint alleging that the San Pedro, Los Angeles and Salt Lake Railroad did not provide a proper culvert for the drainage of water under its tracks near Wineville and that therefore land of complainant was damaged by the overflow.

The matter was taken up with the manager of the Salt Lake line who advised that they had constructed a new and larger culvert and that there would be no further cause for complaint.

## MINIMUM WEIGHTS—HAY AND GRAIN.

I. C. 2947.

February 7, 1914.

C. N. Thorup, Salinas, entered a complaint with the Commission alleging that the minimum weights on hay and grain, carloads, were unsatisfactory for the reason that in a great many cases it was impossible to load the minimum weight into the car furnished.



The Commission was unable to secure an informal adjustment and complainant was accordingly notified that if he desired to carry the matter to a conclusion it would be necessary to bring formal proceedings in order that the Commission might hear testimony and go into the situation in full detail; no formal complaint, however, was filed.

## FREIGHT VIA STEAMER.

I. C. 2950.

February 9, 1914.

J. D. Vanderbilt, Point Arena, filed a complaint with reference to freight rates assessed by steamer line operating between San Francisco and Point Arena.

Since the Commission cannot regulate ocean steamers because question of jurisdiction is before the United States Supreme Court, it was necessary to notify complainant that the matter would have to be held in suspense until final decision was rendered in the case now before the court.

## FREIGHT RATE—LUMBER.

I. C. 2955.

February 10, 1914.

E. K. Wood Lumber Company, Los Angeles, asked for information with reference to the rate of \$1.20 per ton on lumber from San Pedro via the Salt Lake route and the Santa Fe to Wildasin as compared with the rate of \$1.00 per ton to the same point from East San Pedro via the same lines.

Desired information was furnished.

## DELIVERY OF FRUIT.

I. C. 2956.

February 11, 1914.

Santa Barbara Fruit and Produce Company, Santa Barbara, entered a complaint against the Southern Pacific Company, stating that they were unable to secure prompt delivery of fruit at Santa Barbara unless draymen surrendered bill of lading to agent at time of taking delivery of goods.

Complainant was notified that if a proper indemnity bond was given the railroad company there would be no further difficulty in securing proper delivery of all shipments.

## FREIGHT CHARGES—LUMBER.

I. C. 2959.

February 12, 1914.

Amalgamated Freight Traffic Bureau, San Francisco, referred to the Commission papers in a claim against the Southern Pacific involving charges assessed against six carloads of lumber moved from Merced to Alameda.

It was found that overcharges in the sum of \$15.00 existed against the shipment, which amount the Southern Pacific Company arranged to refund.

## FREIGHT—BOTTLES.

I. C. 2961.

February 18, 1914.

California Cider Company, West Berkeley, referred to the Commission freight bills covering charges assessed against carload shipments of bottles forwarded from San Francisco to Berkeley via the Santa Fe. The rate to Berkeley on bottles, in car loads via the Southern Pacific was 50 cents per ton, and via the Santa Fe 80 cents per ton. Consignees asked that the Santa Fe be requested to publish the same rate as the Southern Pacific, which the Santa Fe declined to do, stating that the charge of 50 cents per ton would not be remunerative over their line.

Complainants were therefore notified that since no informal adjustment could be secured, it would be necessary to file a formal complaint in order that the Commission might take formal action.

## FREIGHT CHARGE ON SIGN BOARD.

I. C. 2968.

November 19, 1913.

San Pedro Lumber Company, Los Angeles, submitted papers to the Commission with reference to charges assessed against a sign board forwarded from San Pedro to Yorba Linda.

It was found upon investigation that the charges as assessed were correct and in conformity with the lawful tariff.

## FREIGHT RATES.

I. C. 2972.

February 11, 1914.

Geo. Croydon, El Granada, filed a petition with the Commission alleging that the freight rates assessed by the Ocean Shore Railroad between San Francisco and El Granada were excessive and unreasonable.

The Commission was unable to secure any adjustment by informal action and notified complainant that it would be necessary to bring the matter formally before them should he desire further investigation.

## REPARATION REFUND—GRAVEL.

I. C. 2977.

February 16, 1914.

*California Building Material Company vs. Southern Pacific Company.* Permission granted February 24, 1914, to make a reparation refund of \$83.27, account unreasonable rate applied on thirty-three carloads of gravel forwarded from Niles to San Mateo, Easton, and Burlingame, March 10 to May 16, 1913.

## COLLECTION WAIVED.

I. C. 2978.

February 16, 1914.

*American Beet Sugar Company vs. Southern Pacific Company.* Permission granted February 20, 1914, to waive collection of \$275.15, account unreasonable rate applied on 172 carloads of sugar beets forwarded from Compton to Chino August 6 to September 26, 1913.

## FREIGHT—WOOD.

I. C. 2980.

February 11, 1914.

Chamber of Commerce, Williams, entered a complaint against the Southern Pacific Company, alleging that the rates on cord wood from Williams to San Francisco, Oakland, and Sacramento were excessive.

The Commission took up the complaint informally with the Southern Pacific Company, but was unable to secure an adjustment, and, therefore, notified complainant that should it desire to carry the matter further it would be necessary to begin formal proceedings, which will be done.

## ADVANCE CHARGES.

I. C. 2981.

February 13, 1914.

Jones Transfer Company, Stockton, wrote the Commission with reference to a misunderstanding in connection with charges advanced for drayage charges against a piano forwarded by them from Stockton.

The Commission having no jurisdiction over transfer companies and being unable to adjust matter informally, so advised complainant.

## BILL OF LADING.

I. C. 2990.

February 17, 1914.

Lake County Canning Company, Ukiah, wrote the Commission, stating that they were unable to secure clear bills of lading for carload shipments of canned goods forwarded from Ukiah.

Complaint was taken up with the Northwestern Pacific Railway, which arranged to have all carload shipments checked and proper bill of lading issued in the future.

## FREIGHT—FUEL OIL.

I. C. 2994.

February 17, 1914.

W. S. Upham, San Francisco, entered a complaint alleging that the rate of \$1.00 per ton on fuel oil from Monterey to Capitola was excessive, for the reason that the rate was but 50 cents per ton from Monterey to Santa Cruz, Davenport and points between, and claimed that Capitola could secure the same transportation by water as was had at Santa Cruz. After considerable correspondence, the railroad company agreed to publish rate of 50 cents to Capitola.

## REPARATION REFUND.

I. C. 2997.

February 18, 1914.

*H. Cowell Lumber and Cement Company vs. Southern Pacific Company.* Permission granted March 2, 1914, to make a reparation refund of \$20.00, account unreasonable rate applied on four carloads of lumber forwarded from Bay Point to Cowell on January 19, 1912.

## REPARATION REFUND.

I. C. 2998.

February 18, 1914.

*Western Rock Products Company vs. Northwestern Pacific Railroad Company.* Permission granted March 2, 1914, to make a reparation refund of \$6.34 and waive collection of \$6.34, account unreasonable rate applied on two carloads of powdered lime rock forwarded from Napa Junction to Sebastopol on August 30 and September 3, 1913.

## REPARATION REFUND.

I. C. 3001.

February 18, 1914.

*Elmann Olive Company vs. Northern Electric Railway Company.* Permission granted February 20, 1914, to make a reparation refund of \$9.40, account unreasonable rate applied on one carload of olives forwarded from Peltier to Oroville on January 8, 1914.

## REPARATION REFUND.

I. C. 3004.

February 19, 1914.

*Dodge & Lathrop vs. The Atchison, Topeka and Santa Fe Railway.* Permission granted March 2, 1914, to make reparation refund of \$35.68, account unreasonable rate applied on five carloads of gravel forwarded from Niles to Schmidt on January 13 and 14, 1913.

## COLLECTION WAIVED.

I. C. 3009.

February 20, 1914.

*Clark & Henery et al. vs. Southern Pacific Company.* Permission granted March 2, 1914, to make a waiver of collection of \$176.14, account unreasonable rate applied on sixty-nine carloads of macadam forwarded from Fair Oaks to Stockton, November 8 to December 29, 1913.

## FREIGHT—WATERMELONS.

I. C. 3014.

February 20, 1914.

Clifford Traffic Bureau, San Francisco, made a complaint against rates applying on watermelons, alleging that rate on watermelons in carloads should not be in excess of rate of fruit shipments, carloads.

Complaint was taken up with the interested transportation companies, who advised the Commission that they would at once reissue their tariffs and provide that in no case would the rate on vegetables be in excess of rate on fruit.

## REPARATION REFUND.

I. C. 3017.

February 21, 1914.

*E. H. Tryon vs. Western Pacific Railway Company.* Permission granted February 27, 1914, to make a reparation refund of \$16.01, account unreasonable rate applied on twenty shipments of wool in grease, less-carload lots, forwarded from Marysville to Stockton, April 5 to October 21, 1913.

## REPARATION REFUND.

I. C. 3019.

February 20, 1914.

*Standard Oil Company vs. Northwestern Pacific Railroad Company.* Permission granted March 2, 1914, to make a reparation refund of \$74.97, account unreasonable rate applied on two carloads of petroleum gas oil forwarded from Richmond to Ukiah on September 12 and 27, 1913.

## REPARATION REFUND.

I. C. 3020.

February 20, 1914.

*W. F. Boardman Company vs. Northwestern Pacific Railroad Company.* Permission granted March 2, 1914, to make a reparation refund of \$50.43, account unreasonable rate applied on two carloads of petroleum gas oil forwarded from Richmond to Ukiah, August 25 to September 30, 1913.

## FREIGHT—ORE.

I. C. 3027.

February 19, 1914.

W. D. Richmond, Auberry, entered a complaint with the Commission, alleging that charges had been erroneously assessed against shipment of ore forwarded from Auberry to Selby, via San Joaquin and Eastern Railway.

Investigation developed the fact that wrong rate had been used and transportation company arranged to refund overcharges.

## FREIGHT—MACHINERY.

I. C. 3031.

February 19, 1914.

Southern California Sugar Company, Santa Ana, referred to the Commission papers in a claim against the Southern Pacific Company amounting to \$266.60, involving charges assessed against a number of carloads of sugar-making machinery forwarded from Watsonville to New Delhi, based on a rate constructed via Santa Ana.

Tariffs, however, do not provide for the interchange of traffic between the Southern Pacific and the Pacific Electric at Santa Ana, and as charges had been assessed in conformity with lawful tariffs complainants were notified that no overcharge existed.

## REPARATION REFUND.

I. C. 3035.

February 25, 1914.

*Standard Oil Company vs. Northwestern Pacific Railroad Company.* Permission granted March 7, 1914, to make a reparation refund of 55 cents, account unreasonable rate applied on one iron barrel, gasoline, forwarded from San Francisco to Ridgewood on July 31, 1913.



## FREIGHT—JUNK.

I. C. 3037.

February 25, 1914.

B. Shapiro, Oakland, entered a complaint alleging that the Southern Pacific Company had wrongfully assessed charges against carload shipment of mixed junk forwarded from Grass Valley to San Francisco.

Upon making a check of the tariff it was found that charges as collected were lawful. Consignment contained articles not permitted in a mixed carload of junk upon which less-carload rate had been assessed, and consignee's contention that all of the articles were junk and should have taken the carload rate was not correct.

## FREIGHT—TRANSFER CHARGES.

I. C. 3039.

February 24, 1914.

Mayer & Lewis, Los Alamos, in a communication to the Commission, alleged that the Southern Pacific Company intended to increase the charges for transferring freight, especially rock, from broad to narrow gauge cars at San Luis Obispo.

The matter was taken up with the Southern Pacific Company, which advises that it did not contemplate making any immediate changes in the arrangements now in effect.

Complainant was, therefore, advised that should the matter of increasing the charges be brought officially before the Commission notification would be given before any increase in rates would be authorized.

## FREIGHT VIA STEAMER.

I. C. 3040.

February 26, 1914.

E. R. Deming, San Francisco, entered a complaint alleging that there was an overcharge by the Pacific Navigation Company for the transportation of iron drums forwarded from Los Angeles to San Francisco.

At the present time the Commission is restricted by an injunction from exercising jurisdiction over steamship lines, and, therefore, was compelled to notify complainant that it could render no assistance until the injunction had been dissolved.

## FREIGHT—INTERSTATE.

I. C. 3042.

February 22, 1914.

E. L. Lewis, Los Angeles, referred to the Commission papers in a claim alleging that an erroneous weight had been used in connection with a shipment of household goods forwarded from Fairmont, Minnesota, to Los Angeles.

The matter was taken up informally but nothing accomplished, as the shipment was interstate. Complainant was advised to communicate with the Interstate Commerce Commission at Washington, D. C.

## REPARATION REFUND.

I. C. 3046.

May 20, 1914.

*J. F. Dunne vs. Oakland, Antioch and Eastern Railway.* Permission granted June 1, 1914, to make a reparation refund of \$23.42, account unreasonable rate applied on fifteen carloads of cattle forwarded from Bay Point to Chaplin on October 11, 1913.

## REPARATION REFUND.

I. C. 3053.

February 28, 1914.

*J. B. Johnson vs. Southern Pacific Company.* Permission granted March 17, 1914, to make a reparation refund of \$10.24, account unreasonable rate applied on one carload of wood forwarded from Outlet to Benicia on December 4, 1913.

## REPARATION REFUND.

I. C. 3054.

February 28, 1914.

*Terry Lumber Company vs. Southern Pacific Company.* Permission granted March 7, 1914, to make a reparation refund of \$881.22, account unreasonable rate applied on four carloads of narrow gauge log trucks forwarded from Molino to Anderson on May 12 and 15, 1913.

## REPARATION REFUND.

I. C. 3055.

February 28, 1914.

*Natomas Consolidated of California vs. Southern Pacific Company.* Permission granted March 11, 1914, to make a reparation refund of \$54.14, account unreasonable rate applied on seven shipments of dredger machinery forwarded from San Francisco and Marysville to Donnelly (M. P. 112), December 8, 1911, to February 24, 1912.

## DEMURRAGE CHARGES.

I. C. 3071.

February 28, 1914.

San Diego and Southeastern Railway, San Diego, referred to the Commission papers in a claim entered by the Barber Asphalt Paving Company, involving demurrage



charges assessed against car of asphaltum not unloaded at San Diego within the free time limit.

Investigation developed the fact that because of heavy rainfall it was impossible to unload the car.

The Commission, therefore, authorized the cancellation of the two days' demurrage, amounting to \$6.00, under Rule 3 of its General Order No. 2.

## FREIGHT—SWITCHING CHARGES.

I. C. 3073.

February 7, 1914.

J. B. Bradford & Sons, Bruceville, entered a complaint with the Commission against the Southern Pacific Company, alleging that charges assessed for the switching of cars from Glannvale to the winery at that point were excessive.

The railroad company maintained that the charges were reasonable, as the cars were switched by main line engines a distance of 8,400 feet and that the rates could not be reduced without making the service unremunerative to the railroad company.

## FREIGHT—SWITCHING CHARGES.

I. C. 3075.

April 28, 1914.

Walter J. Blackie, Salinas, entered a complaint against the Southern Pacific Company, alleging that the assessing of switching charges for placing cars on private industry tracks at Salinas was discriminatory, for the reason that the charge was not uniformly assessed at all stations in the vicinity.

The Southern Pacific Company declined to make any informal adjustment, explaining that conditions at Salinas required the use of a special switching engine, which was not required at other points where no switching charge was assessed in connection with main-line shipments.

The Commission notified complainant that in the very near future an investigation would be made with reference to all switching charges in the State of California, and his complaint would be taken care of at that time.

## REPARATION REFUND.

I. C. 3076.

August 5, 1914.

*Monterey Brick and Stone Company vs. Southern Pacific Company.* Permission granted August 8, 1914, to make a reparation refund of \$405.42, account of unreasonable rate applied on nine carloads of lime rock forwarded from Eblis to Seaside, March 2 to July 5, 1910.

## EXPRESS—BUTTER RATES.

I. C. 3078.

June 25, 1914.

Sierra Valley Creamery, Loyalton, wrote for information with reference to the express rates on butter between Loyalton and Sacramento and San Francisco.

The desired information was furnished.

## REPARATION REFUND.

I. C. 3080.

March 3, 1914.

*San Diego Stone Company vs. San Diego and Southeastern Railway.* Permission granted March 11, 1914, to make a reparation refund of \$9.00, account unreasonable rate applied on three carloads of crushed rock forwarded from Sweetwater Quarry to Bonita on January 13, 21 and 22, 1914.

## FREIGHT—INTERSTATE.

I. C. 3090.

March 5, 1914.

Thos. Stone, Pasadena, referred to the Commission a claim against the Santa Fe involving charges assessed against a shipment of household goods forwarded from Weedsport, New York, to Pasadena.

It appears that agent at initial point applied wrong rate and balance due as per lawful tariff was collected upon delivery of the shipment at Pasadena. Shipment, being interstate, was not under the jurisdiction of this Commission; complainant, however, was advised that the law required transportation companies to collect the rates shown in tariffs; this regardless of erroneous quotation or collection made by employee of the railroad company.

## FREIGHT—TREE SPRAY.

I. C. 3093.

March 6, 1914.

W. S. Bullis, Los Angeles, entered a complaint against the Southern Pacific alleging that the charges assessed against a shipment of tree spray moved from Stock Yards to Colton was excessive. Upon investigation it was found the shipment had been wrongfully classified and the Southern Pacific Company arranged to refund the overcharges.

## REPARATION REFUND.

I. C. 3100.

March 11, 1914.

*Baker & Hamilton vs. Southern Pacific Company.* Permission granted March 11, 1914, to make a reparation refund of \$972.09, account unreasonable rate applied on nineteen carloads of jobbers' outfit forwarded from Sacramento to San Francisco January 2 to 23, inclusive, 1914.

## FREIGHT RATES--STEAMER COMPETITION.

I. C. 3105.

March 10, 1914.

*Fleischmann-Clarke Company, San Francisco,* wrote the Commission making a comparison of rates assessed for transportation of liquors from San Francisco to Los Angeles with those applicable San Francisco to Portland and Seattle, the rates to Los Angeles being somewhat higher.

It was explained to complainant that water competition was the cause of the difference in rates; further, that the steamship companies operating to Seattle do not file tariffs with the Commission and are not under its jurisdiction.

## FREIGHT--LUMBER.

I. C. 3108.

March 9, 1914.

*San Diego and Southeastern Railway Company* referred to the Commission papers in a claim entered by the *Benson Lumber Company*, amounting to \$19.04, involving charges assessed against 22,050 feet of lumber forwarded from San Diego to Santee. The tariff of the railway company carried a rate of \$1.25 per thousand for quantities of 20,000 feet and over, and rate of \$2.00 per thousand for smaller shipments. The railway company was unable to furnish a car large enough to carry the entire shipment and assessed a higher rate for the reason that two cars were used.

Commission held that shipper was entitled to the lower rate and could not be penalized because the transportation company found it inconvenient to furnish proper car to carry shipment.

## FREIGHT--HAY.

I. C. 3109.

March 9, 1914.

*Mrs. John N. Porter, Oakland,* entered a protest against the rate on hay and straw in carloads from Esparto to Warm Springs.

After considerable correspondence the *Southern Pacific Company* arranged informally to have the rate reduced from \$2.55 to \$2.05 per ton.

## FREIGHT--CALIFORNIA HIGHWAY COMMISSION.

I. C. 3110.

March 11, 1914.

*Pacific Coast Railway Company* advised that shipments of rock belonging to the California Highway Commission had been transported over their line at regular commercial rates, for the reason that the shipments by mistake were consigned to a contracting firm.

Upon securing written evidence to the effect that the rock was actually the property of the Highway Commission and had been erroneously way-billed, authority was issued to refund charges collected in excess of what would have been paid had the shipments been properly billed in the first instance.

## FREIGHT--WOOD.

I. C. 3114.

January 20, 1914.

*Pacific Portland Cement Company, San Francisco,* referred to the Commission papers in a claim against the *Southern Pacific Company* alleging that charges had been wrongfully assessed against a carload of wood moved from Shellville Junction to Tolenas.

Check of the freight bill revealed the fact that charges were in conformity with tariff in effect at the time shipment moved and complainant was notified that since the transportation company refused to offer any reparation adjustment the Commission could render no assistance.

## DEMURRAGE CHARGES.

I. C. 3117.

March 7, 1914.

*San Joaquin and Eastern Railroad Company, Los Angeles,* made application to the Commission for permission to waive demurrage charges assessed against carloads of construction material consigned to *Stone & Webster Construction Company* at Casada.

Correspondence developed that cars were not promptly unloaded for the reason that the railroad company was unable to furnish sufficient track room for proper handling.

Authority was granted to make satisfactory adjustment of the charges.

FREIGHT—LEATHER MACHINERY.

I. C. 3118.

March 11, 1914.

Kullman, Salz & Company, Benicia, referred to the Commission a number of freight bills covering less than carload shipments of tanning machinery and supplies forwarded from San Francisco to Benicia during the years 1906 to 1912, inclusive. It was found upon checking up the bills that charges in most cases had been correctly assessed and complainant was advised to submit the few bills against which overcharges existed, and which had not expired by the statute of limitation, to the transportation company for refunds.

LOSS AND DAMAGE CLAIM.

I. C. 3119.

March 11, 1914.

A. Rinkenberger, Los Angeles, referred to the Commission papers in a claim against the Southern Pacific Company for a shipment of household goods destroyed in transit between Oakland and Los Angeles.

The Commission having no jurisdiction over loss and damage claims notified Mr. Rinkenberger that it would be necessary to secure redress through the civil courts.

DEMURRAGE CHARGES.

I. C. 3120.

March 12, 1914.

Pacific Car Demurrage Bureau, San Francisco, requested authority to refund \$192.00 to the Nevada County Narrow Gauge Railroad Company, this representing demurrage charges assessed against forty-two cars not unloaded within free time limit at Colfax.

Upon investigation it was found that cars had not been unloaded for the reason that equipment had been derailed and locomotives disabled by fire, and since the delays were for causes beyond the control of consignee, the Commission, in conformity with Rule 3, paragraph B, of the demurrage tariff, authorized the refunding of the charges.

LIVESTOCK CONTRACT.

I. C. 3125.

March 11, 1914.

Hauser Packing Company, Los Angeles, entered a complaint against the transportation companies alleging that the present livestock contract was unreasonable to the extent that it required loss and damage claims to be presented within ten days after cattle were unloaded at destination, and placed the released valuation of cattle too low.

The transportation companies declined to make any changes in the standard contract now in use, and complainant was accordingly notified that it would be necessary to institute formal proceedings should it desire to carry the matter further.

FREIGHT—HOUSEHOLD GOODS.

I. C. 3136.

March 11, 1914.

G. A. von Krusze, Hemlock, referred to the Commission freight bill covering a shipment of household goods forwarded from Redding to Ukiah, stating that he believed charges as collected to be unlawful.

Upon checking the shipment charges were found to be in conformity with lawful tariffs and complainant was notified accordingly.

FREIGHT—GRAIN.

I. C. 3137.

March 12, 1914.

Albers Bros., San Francisco, referred to the Commission a claim against the Napa Transportation Company, involving charges assessed against a shipment of grain which, by mistake, had been taken to Napa instead of Petaluma.

The movement to the wrong destination appeared to be the fault of carrier's agent and the Commission authorized satisfactory adjustment of the claim.

FREIGHT—WAGON.

I. C. 3143.

August 3, 1914.

G. A. Sapp, Mojave, referred to the Commission freight bill covering charges assessed against delivery wagon forwarded from Pasadena to Gloster.

Check was made of the charges and same found to be in accordance with tariffs.

FREIGHT—GRAVEL.

I. C. 3147.

March 12, 1914.

Yorba Gravel Company entered a complaint against the Pacific Electric Railway, stating that rate on gravel, in carloads, from Stern to Los Angeles was excessive.

Upon taking the matter up with the railroad company the Commission was advised that tracks had not yet been laid to the gravel pit at Stern and that when shipments



were ready to move the railroad company would publish rates on the same basis as in effect from gravel pits at other points.

## FREIGHT—FERTILIZER.

I. C. 3157.

April 2, 1914.

Valley View Winery, Sebastopol, entered a complaint with the Commission alleging that the rate on sheep manure in carloads from Stock Yards to Sebastopol was excessive.

After investigation it was found that the rate as shown on freight bill was in error and transportation company arranged to refund the overcharge.

## FREIGHT—LIVESTOCK.

I. C. 3173.

March 17, 1914.

T. J. Weldon, Ukiah, entered a protest against the charges assessed against a shipment of livestock moved from San Francisco to Ukiah, taking the position that the actual weight and not the estimated weight of the animal should be used. It was explained to complainant that estimated weights were applied to livestock for the reason that almost every case required the use of half a car and the practice of applying estimated weights was in use all over the United States.

## FREIGHT—CATTLE.

I. C. 3175.

March 15, 1914.

Duncan Ingraham, Elsinore, entered a complaint alleging overcharges and improper service in the transportation of cattle from Escondido to Highgrove. No particular shipment was referred to and as complainant failed to furnish the desired information the file was closed without any action being taken.

## DEMURRAGE CHARGES.

I. C. 3179.

March 18, 1914.

Federal Transfer and Draying Company, San Francisco, referred to the Commission papers in the matter of a demurrage charge of \$3.00 assessed against a carload of cement not unloaded at San Francisco within the free time limit.

Investigation developed that charges were in conformity with lawful tariffs, and complainant was notified accordingly.

## FREIGHT—LUMBER.

I. C. 3180.

March 14, 1914.

Madary's Planing Mill, Fresno, wrote the Commission alleging that the rate charged for the transportation of lumber by the Sugar Pine Railroad from Middlecamp to Ralph was excessive.

It was found upon investigation that the railroad was not making operating expenses and therefore declined to change its rates at the present time. Upon the facts being given complainant the protest was withdrawn.

## FREIGHT—REFUND OF OVERCHARGES.

I. C. 3191.

March 20, 1914.

N. Clark & Sons, San Francisco, entered a complaint against the Northwestern Pacific Railway, alleging that they were unable to secure refund of an excessive amount prepaid on a freight bill, for the reason that an assignment of the claim could not be obtained, owing to the fact that consignee of shipment had retired from business.

Arrangements were made to have the overcharges refunded.

## REPARATION REFUND—CEMENT.

I. C. 3192.

March 19, 1914.

*California Portland Cement Company vs. Southern Pacific Company.* Permission granted March 27, 1914, to make a reparation refund of \$98.04 and waive collection of \$3.04, account unreasonable rate applied on fourteen carloads of cement forwarded from Colton to Chino, Pomona and Ontario, May 7 to November 8, 1913.

## FREIGHT—NAPHTHA.

I. C. 3202.

March 19, 1914.

San Diego and Southeastern Railway Company referred to the Commission papers in a claim involving charges assessed against a shipment of naphtha forwarded from San Diego to Santee.

Charges had been assessed on the basis of western classification rates, notwithstanding there was a lower rate in effect applying on freight in straight or mixed carloads between the points in question.



The Commission ruled that the rate on a carload of naphtha could not be in excess of rate applying on freight, n. o. s., and authorized refunding of the overcharges.

## FREIGHT—HAY.

I. C. 3205.

March 24, 1914.

E. I. Hutchinson, Concord, wrote the Commission with reference to a claim against the Oakland, Antioch and Eastern Railway, involving charges assessed against a carload of hay forwarded from Armona to Gavin.

Upon investigation it was found that shipment had been overcharged \$1.71, which amount was refunded by the transportation company.

## FREIGHT—WOOD.

I. C. 3223.

April 14, 1914.

The Finnish Colony, Redwood Valley, entered a complaint against the Northwestern Pacific Railroad, alleging that the rate on cordwood from Redwood Valley to Ukiah was excessive. The complaint was taken up informally with the railroad company, which voluntarily reduced the rate from \$1.25 to \$1.00 per cord. This adjustment was satisfactory to complainants.

## REPARATION REFUND—WHITING.

I. C. 3224.

April 9, 1914.

*Hercules Powder Company vs. Southern Pacific Company.* Permission granted April 13, 1914, to make a reparation refund of \$12.12, account unreasonable rate applied on four carloads of whiting forwarded from Nobel to Hercules during September, November and December, 1913.

## REPARATION REFUND.

I. C. 3224a.

March 26, 1914.

*Hercules Powder Company vs. Southern Pacific Company.* Permission granted April 4, 1914, to make a reparation refund of \$6.05, account unreasonable rate applied on two carloads of whiting forwarded from Nobel to Hercules on June 18 and August 19, 1913.

## REPARATION REFUND—WINE.

I. C. 3225.

March 26, 1914.

*H. Lancel Company vs. Southern Pacific Company.* Permission granted April 4, 1914, to make a reparation refund of \$15.27, account unreasonable rate applied on two carloads of wine forwarded from Maple to Martinez on March 1 and 12, 1913.

## FREIGHT—INTERSTATE.

I. C. 3233.

March 26, 1914.

F. A. Weck, San Francisco, forwarded to the Commission papers in a loss and damage claim against a shipment moving to San Francisco from Philadelphia.

The transaction being interstate, over which the Commission has no control, complainant was referred to the Interstate Commerce Commission, Washington, D. C.

## FREIGHT—ROCK.

I. C. 3236.

March 17, 1914.

Chas. McElvaine, San Bernardino, entered a complaint alleging that the rates assessed for the transportation of crushed rock from Colton and Crestmore to San Bernardino were considered excessive, in view of the fact that the material was to be used by the city of San Bernardino in making street repairs.

The Commission was, however, without authority to establish reduced rates for the benefit of municipalities, and, as the railroad declined to change the regular published rate, no assistance was rendered to complainant.

## LIGHTS AT STATIONS.

I. C. 3245.

March 30, 1914.

Foothill Improvement Club, Oakland, addressed a communication to the Commission, alleging that there were no lights at certain stations on the Melrose extension of the Southern Pacific.

Complaint was taken up with the general manager of the railroad, who took immediate steps to have the lights installed.

## FREIGHT VIA STEAMER.

I. C. 3246.

March 23, 1914.

H. A. Blier, Fortuna, requested information with reference to a shipment of household goods forwarded from Santa Cruz to Fortuna.

Check was made of the rates and complainant furnished the information desired.

## FREIGHT—RAILS.

I. C. 3247.

March 27, 1914.

Holmes Eureka Lumber Company, Eureka, made a complaint alleging that the rate on carload shipments of steel rails from South Bay to Carlotta was excessive and unreasonable.

The complaint was taken up informally with the Northwestern Pacific, which finally agreed to reduce the rate from \$2.20 to \$1.25 per ton.

## FREIGHT—LIME.

I. C. 3250.

March 30, 1914.

Tacoma and Roche Harbor Lime Company, San Francisco, filed a complaint with the Commission, alleging that rates on lime in carloads from San Francisco were discriminatory and excessive when compared with rates on the same commodity from Felton, Rincon and Santa Cruz.

The Commission entered into an extensive correspondence with the Southern Pacific Company but was unable to secure any informal reduction in the rates, and was, therefore, compelled to notify complainants that it would be necessary to begin formal proceedings should they desire to carry the matter to a conclusion.

## FREIGHT—SALT.

I. C. 3253.

March 30, 1914.

J. F. Lewis, Camarillo, requested information with reference to charges assessed against carload shipment of salt forwarded Long Beach to Camarillo.

It was found on checking tariffs that charges as assessed were correct.

## FREIGHT—INTERSTATE.

I. C. 3254.

March 29, 1914.

H. E. Stewart, Santa Cruz, wrote the Commission with reference to a shipment of household goods moving from Poplar, Montana, to Corona, California.

The Commission conducted an extensive correspondence in an effort to informally adjust the claim, but not securing a settlement notified complainant that the matter would have to be adjudicated in the civil courts.

## DEMURRAGE CHARGES.

I. C. 3255.

March 31, 1914.

Hanson & Gordon Lumber Company, San Anselmo, referred to the Commission a bill for \$3.00, representing a demurrage charge assessed against a carload of finished lumber not unloaded within the free time limit at San Geronimo.

It was found upon investigation that the car was not promptly unloaded for the reason that it was raining so hard that the material would have been damaged if removed from the car. The demurrage charge of \$3.00 was refunded.

## FREIGHT—GRAPES.

I. C. 3263.

April 1, 1914.

California Fruit Distributors' Association submitted to the Commission papers in a claim against the Stockton Terminal and Eastern Railroad, involving the charges assessed against eight shipments of grapes moved in refrigerator cars from Largo to Stockton. It was alleged that the less than carload rate, instead of the carload rate, should apply against the shipments. The refrigerator cars were specially ordered for the shipments, and the exclusive use of the cars secured.

The Commission ruled that the charges as assessed, that is, minimum carload for each shipment, were in conformity with tariffs and that no overcharges existed.

## LOSS AND DAMAGE CLAIM.

I. C. 3278.

April 1, 1914.

H. P. Dixon, Los Angeles, wrote the Commission with reference to a loss and damage claim entered against the Santa Fe, involving a carload of lumber forwarded from Tacoma to Wildasin. The Commission was without jurisdiction over the transaction and notified the complainant accordingly.

## FREIGHT—FERTILIZER.

I. C. 3286.

April 4, 1914.

P. E. Blalack, Hopland, entered a protest against the rate on fertilizer, carloads, from South San Francisco to Hopland.

After considerable correspondence it was arranged to have the rate reduced from \$3.85 per ton to \$2.80 per ton, which adjustment was satisfactory to complainant.

## REPARATION REFUND—SCRAP IRON.

I. C. 3288.

April 6, 1914.

*Pacific Coast Steel Company vs. Southern Pacific Company.* Permission granted April 13, 1914, to make a reparation refund of \$15.88, account unreasonable rate applied on one carload of scrap iron forwarded from Anderson to South San Francisco on November 6, 1913.

## REPARATION REFUND—SILICA QUARTZ—ALSO WAIVER OF COLLECTION.

I. C. 3289.

April 6, 1914.

*Pacific Mineral Products Company vs. Southern Pacific Company.* Permission granted April 13, 1914, to make a reparation refund of \$11.52 and waive collection of \$56.30, account unreasonable rate applied on six carloads of silica quartz forwarded from Palmdale to Los Angeles July 8 to October 30, 1913.

## WAIVER OF COLLECTION—HAY.

I. C. 3290.

April 6, 1914.

*E. Callaghan vs. Southern Pacific Company.* Permission granted April 13, 1914, to waive the collection of \$4.47, account unreasonable rate applied on two carloads of hay forwarded from Danville to Livermore on August 5 and 8, 1913.

## FREIGHT—ALFALFA SEED.

I. C. 3296.

April 6, 1914.

*C. C. Chandler, Alturas,* called the Commission's attention to the fact that a shipment of alfalfa seed forwarded from Alturas to Chittenden had been by mistake sent by the agents of the transportation company to Sanger.

It was arranged to have the shipment forwarded to its correct destination without additional charge to the consignee.

## REPARATION REFUND—METAL.

I. C. 3298.

April 8, 1914.

*Salt Lake Route vs. Great Western Smelting and Refining Company.* Permission granted April 14, 1914, to make a reparation refund of \$34.39, account unreasonable rate applied on four carloads of metal, etc., forwarded from East San Pedro to Los Angeles on May 9, 14 and 23, and July 21, 1913.

## FREIGHT—HOUSEHOLD GOODS.

I. C. 3302.

April 7, 1914.

*H. Morgan, Eureka,* entered a complaint against the American Transfer Company, alleging excessive charges for transferring shipment of household goods from the railroad depot to the wharf of connecting line.

The Commission, having no jurisdiction over the matter, was unable to secure any relief.

## DEMURRAGE CHARGES.

I. C. 3305.

April 10, 1914.

*California Building Material Company, San Francisco,* referred to the Commission papers in a claim wherein application was made for the cancellation of a demurrage charge amounting to \$18.00, which accrued because of an accident to one of the company's employees at the point where cars were being loaded.

The Commission ruled that relief could not be granted under Section B of Rule 3 carried in General Order No. 2, as consignee should have been able to arrange for the loading of cars even though one of its men was injured.

## LOSS AND DAMAGE CLAIM.

I. C. 3306.

April 9, 1914.

*William Graybiel, Turlock,* wrote the Commission with reference to a loss and damage claim involving damage to a shipment of household goods moved via the Southern Pacific.

The Commission having no jurisdiction over claims of this character notified complainant that the matter would have to be settled by the courts.

## FREIGHT—AUTOMOBILE.

I. C. 3308.

April 8, 1914.

*Theo. Crossley, Riverside,* forwarded to the Commission papers in a claim against the Salt Lake line involving the charges assessed against a damaged automobile. Complainant took the position that the automobile was nothing but junk and should be given the rate applying on junk. Since the shipment in question was not included in the items shown under the head of junk it was found that the charges had been correctly assessed and that there was no refund due.



## REPARATION REFUND.

I. C. 3312.

April 10, 1914.

*Sacramento Valley Sugar Company vs. Southern Pacific Company.* Permission granted April 28, 1914, to make a reparation refund of \$36.96, account unreasonable rate applied on one carload of coke forwarded from Hamilton to Stockton on February 14, 1914.

## DEPOT TELEPHONE SERVICE.

I. C. 3318.

April 9, 1914.

Dr. Chelsey Bush, Colfax, entered a complaint alleging that information could not be secured over the telephone with reference to passenger trains or the arrival of freight service, from the depot of the Southern Pacific at Colfax.

Upon making an investigation, the agent of the railroad company maintained that telephones were given careful attention and all inquiries promptly satisfied.

Complaint was later withdrawn.

## SWITCHING CHARGES.

I. C. 3319.

April 10, 1914

Southern Pacific Company asked for an interpretation with reference to switching charges to assess for the movement of cars between certain transfer tracks in the City of Oakland.

The desired information was given.

## FREIGHT—CRUSHED ROCK.

I. C. 3327.

April 13, 1914.

Phillip A. Lauman, Pasadena, entered a complaint with the Commission alleging that rates on crushed rock from Porphyry to Los Angeles and other points were excessive.

Complaint was taken up with the interested transportation company which advised that there was no rock crushing plant in existence at Porphyry, but that as soon as complainant was ready to ship satisfactory commodity rates would be established.

## FREIGHT—SHEEP.

I. C. 3330.

April 14, 1914.

Miller & Lux, Inc., entered a complaint against the Southern Pacific Company involving charges assessed against thirteen carloads of sheep moved from San Francisco to Mendota, upon which they asked the application of a rate established subsequent to the date shipments moved.

Complainant was notified to present the claim direct to the transportation company who, if they desired to make reparation, would in turn request authority from the Commission to make the adjustment.

## WAIVER OF COLLECTION—SHEEP.

I. C. 3330a.

June 8, 1914.

*Miller & Lux vs. Southern Pacific Company.* Permission granted June 15, 1914, to waive the collection of \$125.14, account unreasonable rate applied on thirteen carloads of sheep forwarded from San Francisco to Mendota on March 21, 1914.

## WESTERN CLASSIFICATION.

I. C. 3335.

April 14, 1914.

F. P. Gregson, Los Angeles, wrote the Commission alleging that a supplement to the classification had changed the rates being assessed for the transportation of grain. Inspection of the classification developed the fact that complainant was mistaken and had read the item wrong. There was no change in the commodity referred to.

## SCRIP TRANSPORTATION.

I. C. 3336.

April 27, 1914.

A. R. Bird, Visalia, wrote for information with reference to the use of transportation scrip. The desired information was given.

## BERRY SHIPMENTS—EXPRESS INTERSTATE.

I. C. 3343.

April 17, 1914.

On April 17th Richardson, Holmes & Lamb Company, Los Angeles, wired the Commission that the American Express Company refused to permit its refrigerator cars to go to Gardena for loading of berries to be returned to them at Los Angeles via the Pacific Electric, with ultimate destination Salt Lake City, Utah; that such had been the custom in the past, and refusal on the part of the company to continue the arrangement was causing them great loss as their fruit was rotting on the ground for lack of transportation facilities.



While the Commission is without jurisdiction in the premises, the matter of prompt relief was taken up with the Express Company and the service prayed for installed on the following day.

## FREIGHT—OIL.

I. C. 3349.

April 18, 1914.

Western Adjusting Company, San Francisco, referred to the Commission a claim involving charges assessed against a shipment of oil forwarded from Modesto to Bay Shore.

It was found upon investigation that there were no overcharges and that collection as made was in conformity with lawful tariff.

## FREIGHT—GRAVEL.

I. C. 3353.

April 15, 1914.

E. R. Brainerd, Los Angeles, called attention to the fact that there was no commodity rate on gravel in carloads from Sycamore Grove to Los Angeles.

On making an investigation the Commission developed the fact that there were no shipping facilities at Sycamore Grove. Transportation company, however, advised that they would publish satisfactory rates just as soon as complainant was ready to make shipments.

## FREIGHT—CLASS RATES.

I. C. 3361.

April 18, 1914.

Krieger Vinegar Company, Watsonville, wrote the Commission stating that they considered the class rates from Watsonville to Grass Valley excessive.

The transportation company maintain that the rates are reasonable and decline to make any changes. Complainant was therefore notified that it would be necessary to file formal proceedings should they desire to continue the matter.

## FREIGHT—AUTOMOBILE.

I. C. 3363.

April 18, 1914.

O. B. Hubbell, Van Nuys, wrote the Commission stating that he had been quoted an erroneous rate for the transportation of an automobile from San Francisco to Van Nuys and that had rate been correctly quoted by the agent of the railroad company the shipment in question would have been forwarded by a steamship line at a less expense.

Under the law the rate shown in tariff must be charged regardless of any erroneous quotation by railroad agents. Complainant was notified that no assistance could be rendered by the Commission in this particular case.

## LOSS AND DAMAGE CLAIM.

I. C. 3364.

April 18, 1914.

W. S. Ramey, Denver, Colorado, wrote the Commission with reference to loss and damage claim against the Southern Pacific Company. The Commission having no jurisdiction notified complainant that it could be of no assistance in the matter as the claim was one for adjustment in the civil courts.

## FREIGHT—INTERSTATE.

I. C. 3366.

April 13, 1914.

F. M. Lombard, Portland, Oregon, referred to the Commission papers in a claim against the Southern Pacific Company involving the charges assessed against shipments of raisins forwarded from Hanford to Portland. Complainant was notified that apparently the charges as assessed were correct but in any event the transaction being interstate would have to be adjusted by the Commission at Washington, D. C.

## FERRY TRANSPORTATION OF AUTOMOBILES.

I. C. 3369.

April 21, 1914.

Motor Car Dealers' Association, San Francisco, filed a complaint with the Commission alleging that the Northwestern Pacific Railroad was not operating sufficient boats between San Francisco and Sausalito to accommodate the automobile traffic between those points on Sundays and holidays.

After some correspondence the Railroad Company agreed to run extra trips, which adjusted the situation to satisfaction of complainants.

## REFUND AND WAIVER.

I. C. 3376.

April 22, 1914.

*Pacific Portland Cement Company vs. Atchison, Topeka and Santa Fe Railway.* Permission granted April 30, 1914, to make a reparation refund of \$112.84, and waive collection of \$37.62 undercharge, account unreasonable rate applied on six

carloads of cement forwarded from Cement to Angiola September 20 to November 20, 1913.

## REPARATION REFUND.

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I. C. 3377.

April 20, 1914.

*Fruit Growers' Supply Company vs. Pacific Electric Railway Company et al.* Permission granted April 30, 1914, to make a reparation refund of \$122.29, account unreasonable rate applied on two carloads of box shooks forwarded from Hilt to Alta Loma on November 28 and December 3, 1913.

## REPARATION REFUND.

I. C. 3378.

April 20, 1914.

*General Chemical Company of California vs. Southern Pacific Company.* Permission granted April 28, 1914, to make a reparation refund of \$23.43, account unreasonable rate applied on four carloads of lime sulphur solution—tree wash, forwarded from Nichols to San Francisco in February and March, 1914.

## REPARATION REFUND.

I. C. 3379.

April 20, 1914.

*Fancher Creek Nurseries vs. Southern Pacific Company.* Permission granted April 30, 1914, to make a reparation refund of \$202.40, account unreasonable rate applied on sixteen carloads of tules forwarded from Mikon to Fresno October 15 to November 1 (inclusive), 1913.

## FREIGHT—HAY.

I. C. 3381.

April 21, 1914.

Perris Chamber of Commerce wrote the Commission alleging that rates on hay from Perris to Los Angeles were excessive.

No action was taken on this complaint for the reason that after making investigation and holding conferences, complainant decided that the rates should not be disturbed at the present time.

## FREIGHT—GRAIN.

I. C. 3389.

April 22, 1914.

W. G. Pearne, Biggs, called to the Commission's attention the fact that there was no commodity rate on grain from Gridley to Biggs and that the class rate of 80 cents per ton was excessive.

The Commission arranged to have a commodity rate of 50 cents per ton published, which rate was satisfactory to complainant.

## REPARATION REFUND.

I. C. 3390.

April 20, 1914.

*California Portland Cement Company vs. San Pedro, Los Angeles and Salt Lake Railroad Company.* Permission granted May 8, 1914, to make a reparation refund of \$38.00, account unreasonable rate applied on six carloads of cement forwarded from Colton to Ontario and Pomona on July 14, August 1, 2, 5, and 20, and September 3, 1913.

## FREIGHT—SHALE.

I. C. 3392.

April 23, 1914.

W. J. Dillman, Lincoln, wrote the Commission alleging that the new adjustment of rates for the transportation of shale forwarded from Lincoln was unsatisfactory to his company. The Commission made a detailed explanation of the reasons for changing the rates to the satisfaction of complainant.

## FREIGHT—TREES.

I. C. 3396.

April 23, 1914.

J. B. Carson, Hammonton, referred to the Commission freight bills covering a shipment of trees moved from Fresno to Willows alleging that the charges were excessive. The bills were checked and it was found that the charges as collected were in conformity with the tariffs. Complainant was notified accordingly.

## FREIGHT—LONG AND SHORT HAUL.

I. C. 3428.

April 30, 1914.

W. F. Ware, Los Angeles, requested information with reference to the freight rates, Bakersfield to Arlington, as compared with the rates, Bakersfield to Los Angeles.

Desired information was furnished.

## FREIGHT—INTERSTATE.

I. C. 3432.

April 30, 1914.

G. A. Foerschler, Germantown, wrote the Commission asking for information with reference to the rate on household goods from St. Louis to Germantown. The desired information was furnished.

## REPARATION REFUND.

I. C. 3423.

May 1, 1914.

Weyl, Zuckerman & Company vs. Atchison, Topeka and Santa Fe Railway. Permission granted May 21, 1914, to make a reparation refund of \$36.45, account unreasonable rate applied on three carloads of potatoes forwarded from Stockton to Los Angeles on February 15, 16 and 17, 1912.

## FREIGHT—INTERSTATE.

I. C. 3434.

May 1, 1914.

E. W. Lewis, Campbell, referred to the Commission Campbell freight bill covering a boxed trunk which had by mistake been forwarded to Campbell, Sonoma County, instead of Campbell, Santa Clara County, from Mt. Clemens, Michigan, and asked for an investigation of the alleged overcharge assessed by the Southern Pacific Company. Informal efforts to adjust the charges proved ineffectual, and, since the Commission has no jurisdiction over the shipment, complainant was directed to take the matter up with the Interstate Commerce Commission at Washington, D. C.

## FREIGHT—WELL CASING.

I. C. 3441.

April 30, 1914.

E. B. Crisman, Los Molinos, wrote the Commission asking for information with reference to freight charges in the Sacramento Valley.

Desired information was furnished.

## FREIGHT—FUEL OIL.

I. C. 3461.

May 4, 1914.

Union Oil Company, San Francisco, requested information with reference to the rates on fuel oil from Oleum to points in the Sacramento Valley.

Desired information was furnished.

## FREIGHT—CEREAL PRODUCTS.

I. C. 3462.

May 5, 1914.

Hochheimer & Company, Bakersfield, forwarded to the Commission papers in a claim against the Santa Fe alleging that charges had been wrongly assessed against two carload shipments of cereal products forwarded from Los Angeles to Bakersfield.

A check of the bills developed the fact that charges were in accordance with published tariffs. Complainant was notified accordingly.

## FREIGHT—SWITCHING CHARGES.

I. C. 3481.

May 5, 1914.

Southern Pacific Company requested permission to adjust switching charges assessed for the movement of carloads of gravel at Redwood City.

The company was advised that as soon as they published a tariff to cover the movement regular reparation authority to adjust the charges would be given by the Commission.

## FREIGHT—DEMURRAGE CHARGES.

I. C. 3486.

May 7, 1914.

T. E. Smith, manager, San Joaquin Valley Traffic Association, Bakersfield, referred to the Commission papers in a claim alleging that \$15.00 had been erroneously assessed for demurrage charges against a car loaded at Waits.

An investigation of the records developed the fact that the charges were in conformity with tariffs, and complainant was asked for additional information, which was not forthcoming, and the file was closed without definite action being taken.

## FREIGHT—KAOLIN.

I. C. 3489.

May 7, 1914.

Dill-Crosett Company, San Francisco, entered a protest against charges assessed in connection with carload shipments of kaolin forwarded from Ione to San Francisco and Oakland with final destination Vancouver, British Columbia. The rate on these shipments, which are interstate, was \$1.65 per ton; there was, however, a rate of \$1.00 per ton in effect between Ione and San Francisco applying only on intrastate shipments.

After some correspondence the Southern Pacific Company advised that they would accord interstate shipments the same rate as intrastate and would arrange with the Interstate Commerce Commission for reparation refund on shipments which had already moved. This adjustment was satisfactory to complainants and reduced the charge on shipments in question from \$1.65 to \$1.00 per ton.



## FREIGHT—INTERSTATE.

I. C. 3507.

May 12, 1914.

R. P. Shields & Sons, San Diego, wrote to the Commission asking for information with reference to an undercharge against a shipment of automobiles forwarded from Alpena, Michigan, to San Diego.

The transportation was not under the control of this Commission and complainant was advised to communicate direct with the Interstate Commerce Commission at Washington, D. C.

## FREIGHT—WOOD.

I. C. 3510.

May 12, 1914.

Walter Wolf, Longvale, entered a complaint against the Northwestern Pacific Railroad alleging that the rate on cordwood, in carloads, from Parley to Longvale was excessive. The movement was between points on a newly constructed line between which no commodity rates were in effect. The Commission arranged for satisfactory rates to cover the tonnage.

## FREIGHT—HAY.

I. C. 3525.

May 13, 1914.

George Matheson, Glendora, requested information with reference to the rate on hay, in carloads, from Visalia to Glendora. The desired information was furnished.

## FREIGHT—LUMBER.

I. C. 3526.

May 12, 1914.

Tidewater Southern Railway Company requested permission to make a reparation refund in connection with a carload of lumber moved from San Francisco to Aurora.

The Commission advised that refund would be authorized when claim was properly presented in conformity with Rule 100 of Tariff Circular No. 2.

## FREIGHT—FLOUR.

I. C. 3533.

May 14, 1914.

Tidewater and Southern Railway Company, Stockton, requested permission to make a reparation refund in connection with a carload shipment of flour moved from San Francisco to Modesto.

The Commission's rules and regulations provide that before reparation can be awarded the rate upon which the claim is based must first have been published in conformity with Rule 100 of Tariff Circular, and the railway company was notified to transmit application in regular form after rate had been published in its tariff.

## FREIGHT—LUMBER.

I. C. 3535.

May 19, 1914.

W. H. Holabird, Los Angeles, called attention to the fact that the rate on lumber, carloads, from San Bernardino to Calexico was \$6.50 per ton while the rate from Los Angeles to Calexico on the same commodity was \$6.00 per ton.

Complaint was taken up informally with the Southern Pacific Company, and it was arranged to have the same rate published from San Bernardino as was in effect from Los Angeles.

## SWITCHING OF CARS.

I. C. 3539.

May 14, 1914.

M. O'Keefe, San Francisco, filed a complaint against the Ocean Shore Railroad alleging that Twelfth street was used for yard purposes and the switching of cars, much to the discomfort of the people living in that vicinity. The Commission having no jurisdiction notified the complainant to take the matter up with the city of San Francisco.

## TRAIN SERVICE.

I. C. 3544.

May 15, 1914.

R. M. Blodget, Yosemite Valley, filed a complaint with the Commission alleging that a ticket agent had furnished wrong information with reference to the train service of the Yosemite Valley Railroad between Merced and El Portal. The passenger train schedule on that line was recently changed and apparently the agent giving the information was not in possession of the current time table. The situation was referred to the transportation company at fault and arrangements made to prevent future trouble.

## FREIGHT—SWITCHING CHARGES.

I. C. 3550.

May 18, 1914.

Steiger Terra Cotta and Pottery Works, San Francisco, filed with the Commission a complaint alleging that charges assessed for switching cars from train yards to their



private industry tracks at Sixteenth and Harrison streets were excessive and unreasonable, in that cars were switched from other industries without charge.

The Commission endeavored to secure an informal adjustment, but without success, and notified complainant that it had called into question all switching rates within the State and would adjust the situation complained of when a decision and order was rendered in Case No. 630.

## REPARATION REFUND.

I. C. 3555.

July 6, 1914.

*Garden City Pottery Company vs. Southern Pacific Company.* Permission granted July 15, 1914, to make a reparation refund of \$42.98, account unreasonable rate applied on two carloads of clay forwarded from Lincoln to San Jose on May 15 and 27, 1914.

## CARLOAD RATES ON CLAY.

I. C. 3555a.

May 19, 1914.

Steiger Terra Cotta and Pottery Works complained of rate of \$1.50 per ton on clay, carloads, from Valley Springs to San Jose as against rate of \$1.00 per ton on same commodity from Ione to San Jose, a greater distance.

Matter was taken up informally with carrier who agreed to publish rate of \$1.00 per ton on clay, carloads, Valley Springs to San Jose, which was satisfactory to complainant.

## WAIVER OF COLLECTION—CRUSHED ROCK.

I. C. 3564.

May 20, 1914.

*Fuller Meisner Company, et al. vs. Southern Pacific Company.* Permission granted June 2, 1914, to waive collection of \$7.82, account unreasonable rate applied on three carloads of crushed rock forwarded from Fair Oaks to Lodi on November 8 and December 11 and 13, 1913.

## REPARATION REFUND.

I. C. 3565.

May 20, 1914.

*California Fruit Cannery Association vs. Southern Pacific Company.* Permission granted May 29, 1914, to make a reparation refund of \$46.50, account unreasonable rate applied on eight carloads of tin cans forwarded from San Francisco to Santa Rosa October 10 to October 23, 1913.

## REPARATION REFUND.

I. C. 3566.

May 20, 1914.

*Pacific Wire Rope Company vs. Southern Pacific Company.* Permission granted May 29, 1914, to make a reparation refund of \$22.81, account unreasonable rate applied on one carload of galvanized strand iron rope forwarded from Los Angeles to Paesteel on January 23, 1914.

## FREIGHT—CLAY.

I. C. 3570.

May 20, 1914.

Merchants' Traffic Association, Los Angeles, referred to the Commission freight bills covering carload shipments of clay forwarded from Los Nietos to Los Angeles and requested that reparation be secured at the rate promised shippers prior to the date of shipment and not published until after movement had been accomplished.

Complainants were notified to present the claim in the regular manner to the interested transportation company and if same was rejected, the Commission would make an investigation.

## REPARATION REFUND.

I. C. 3571.

May 12, 1914.

*Pacific Portland Cement Company vs. Southern Pacific Company.* Permission granted May 20, 1914, to make a reparation refund of \$1,086.64, account unreasonable rate applied on sixty-seven carloads of cement forwarded from Cement to Brentwood March 1, 1913, to March 14, 1914.

## FREIGHT—SEWER PIPE.

I. C. 3572.

May 20, 1914.

Merchants' Traffic Association, Los Angeles, presented to the Commission claim involving charges assessed against a shipment of sewer pipe moved from Alberhill to Elsinore.

Claim was based on the fact that subsequent to the date of movement rates between the points in question had been reduced.

Transportation company declined to offer any reparation refund and as charges had been assessed in conformity with rates on file at the time service was performed, no overcharges existed.

## HOURS OF LABOR.

I. C. 3573.

May 20, 1914.

H. Hollaender, Oakland, asked for information with reference to the number of hours which a transportation company could require its employees to work at certain employment.

Desired information was furnished.

## FREIGHT—IRON WATER TANK.

I. C. 3577.

May 19, 1914.

A. M. Judson, Hinkley, referred to the Commission papers in a claim against the Santa Fe Railway involving charges assessed against an iron water tank forwarded from South Pasadena to Hinkley.

It was found upon investigation that the tank was too large to be loaded into a 36-foot box car and under the rules charges were assessed on a minimum weight of 5000 pounds at first-class rate. This charge, while appearing high for the article transported, could not be avoided for the reason that shipment required a flat car for its exclusive use. Complainant was notified accordingly.

## FREIGHT—HAY.

I. C. 3591.

May 21, 1914.

Scott, Magner & Miller, San Francisco, entered a complaint alleging that the rate on hay in carloads from Decoto to Colma was excessive and asked that the same be reduced.

The Commission by informal action secured a reduction from \$1.50 to \$1.00 per ton, to become effective September 27, 1914, which adjustment was satisfactory to complainant.

## FREIGHT—LOSS AND DAMAGE CLAIM.

I. C. 3600.

May 22, 1914.

Baker Iron Works, Los Angeles, asked for information with reference to clause in bill of lading requiring presentation of damage claims within four months after delivery.

Desired information was furnished.

## FREIGHT RATES.

I. C. 3608.

May 22, 1914.

Miners Mercantile Company, Amador City, requested information with reference to minimum charge on freight from Sacramento to Martell.

Requested information was furnished.

## REPARATION REFUND.

I. C. 3609.

May 23, 1914.

*Branagan Glass Manufacturing Company vs. Southern Pacific Company.* Permission granted May 28, 1914, to make a reparation refund of \$219.77, account unreasonable rate applied on eight carloads of brick forwarded from Los Angeles to Newport July 30 to October 8, 1913.

## REPARATION REFUND—PEARS.

I. C. 3610.

May 23, 1914.

*Libby, McNeill & Libby vs. Southern Pacific Company.* Permission granted May 29, 1914, to make a reparation refund of \$28.96, account unreasonable rate applied on three carloads of green pears forwarded from Milpitas to Sunnyvale on August 1 and 21, 1913.

## REPARATION REFUND—FERTILIZER.

I. C. 3612.

May 18, 1914.

*Gold Ridge Land and Improvement Company vs. Northwestern Pacific Railroad Company.* Permission granted May 28, 1914, to make a reparation refund of \$2.95, account unreasonable rate applied on one carload of fertilizer forwarded from Corona to Woolsey on April 10, 1914.

## FREIGHT—WHEAT.

I. C. 3619.

May 23, 1914.

J. D. Lord, Sacramento, referred to the Commission papers with reference to undercharge on shipment of wheat forwarded from Dunnigan to Woodland.

Upon investigation the bill was found to be correct and complainant was advised that same should be paid. It was further explained that, because of a commodity rate north-bound which did not apply to a south-bound movement, the rates were higher in the one direction than in the other, but that this situation would probably be adjusted within the near future.

## FREIGHT—ICE CANS.

I. C. 3622.

May 27, 1914.

Paget Engineering Company, San Francisco, submitted to the Commission papers in a claim against a shipment of ice cans moved from Sacramento to San Francisco.

Statements of transportation company and consignee being contradictory, the Commission advised complainant that an adjustment could only be secured by formal proceedings.

## FREIGHT—BEET PULP.

I. C. 3629.

May 28, 1914.

Lewis-Simas-Jones Company, San Francisco, referred to the Commission papers in a claim against the Southern Pacific Company wherein they allege that the rate charged for the transportation of beet pulp from San Francisco to Arden station is excessive and unreasonable.

Arrangements were made informally to have the rate reduced from \$1.00 to 85 cents per ton but the transportation company declined to grant reparation refund on shipments previously moved.

## FREIGHT—SALT.

I. C. 3631.

May 28, 1914.

Leslie Salt Refining Company, San Francisco, made a complaint alleging that an overcharge existed against a carload of salt forwarded from Leslie to Petaluma.

A check of the tariff showed that the charges as collected were lawful and that no overcharge existed; complainant was notified accordingly.

## FREIGHT—LUMBER.

I. C. 3638.

May 29, 1914.

Petaluma Box Company, Inc., Petaluma, entered a complaint against the Northwestern Pacific Railroad Company in connection with the charges assessed on lumber, carloads, from Tuolumne, on the Sierra Railway, to Petaluma.

The Commission secured a reduction in the rate from \$4.40 to \$3.95, and also arranged to have reparation made in connection with one car moved before the reduced rate was published. This adjustment was satisfactory to complainant.

## WAREHOUSE—GROUND RENTAL.

I. C. 3645.

May 29, 1914.

Russi & Sonner, Concord, entered a complaint alleging that the Southern Pacific Company was making a discriminatory charge for the rental of land at Concord station.

Complaint was taken up with the railroad company and it developed that charges paid by complainant were the same as those paid by others using the land of the company at the same point.

## FREIGHT—GRAIN.

I. C. 3647.

May 29, 1914.

Southern Pacific Company requested authority to make reparation refund in the sum of \$96.08 against certain carloads of grain forwarded from Salinas, Graves, and Chualar to San Miguel.

Authority to make adjustment was granted.

## OVERCROWDING OF STEAMERS.

I. C. 3649.

June 1, 1914.

J. W. McCarthy, Jr., San Francisco, called attention to the fact that steamers operating between San Francisco and Vallejo were very much overcrowded.

The Commission having no jurisdiction thereover referred the communication to the Department of Commerce, steamboat inspection service.

## FREIGHT—MINIMUM WEIGHT ON HAY.

I. C. 3654.

June 1, 1914.

Chas. Campodonico, San Francisco, referred to the Commission freight bills covering shipments of hay upon which charges had been assessed at the minimum weight provided in the tariff for a car of the size used. It was contended that because no particular car had been ordered the railroad company should have supplied a car large enough to have carried the minimum weight provided in the tariff.

The Commission took the position that since the cars furnished were used without objection, the charges as collected were in conformity with the tariffs.

## REPARATION REFUND.

I. C. 3663.

June 3, 1914.

*Delta Implement Company vs. Southern Pacific Company.* Permission granted June 11, 1914, to make a reparation refund of \$7.02, account unreasonable rate



applied on one carload of tents, poles and fixtures forwarded from Los Angeles to El Centro on November 15, 1913.

## REPARATION REFUND.

I. C. 3664.

June 11, 1914.

*L. Lyons & Sons vs. Southern Pacific Company.* Permission granted June 3, 1914, to make a reparation refund of \$86.10, account unreasonable rate applied on nine carloads of hay forwarded from El Centro and Heber to Crafton May 28 to July 11, inclusive, 1913.

## FREIGHT—GRAIN BAGS.

I. C. 3666.

June 2, 1914.

*S. Schwab, Esparto,* referred to the Commission bill involving charges assessed against a carload of grain bags forwarded from San Francisco to Esparto, via Southern Pacific Company.

Upon checking the charges it was found that an error had been made in the rate. Transportation company arranged to refund the overcharges existing against the shipment.

## REPARATION REFUND.

I. C. 3668.

June 3, 1914.

*Trona Railway Company vs. Southern Pacific Company.* Permission granted June 15, 1914, to make a reparation refund of \$2,012.99, account unreasonable rate applied on fifteen carloads of railroad ties forwarded from East San Pedro to Searles on October 10 and 17, 1913.

## FREIGHT—LUMBER.

I. C. 3669.

June 2, 1914.

Southern Pacific Company requested information with reference to granting reparation refund in connection with shipments of box shooks moved from Weed to Petaluma in January, 1907. The desired information was given.

## FREIGHT—PETROLEUM OIL.

I. C. 3672.

June 3, 1914.

*Acme Oil Company, Pixley,* entered a complaint alleging that rates on oil moving from Pixley were excessive.

The communication failed to supply any definite points to which commodity moved and as complainant did not reply to our letter for further data, the file was closed without action.

## LOSS AND DAMAGE CLAIM.

I. C. 3675.

June 4, 1914.

*Dalziel-Moller Company, San Francisco,* referred to the Commission papers in a loss and damage claim against the San Francisco, Napa and Calistoga Railway.

The Commission having no jurisdiction over damage claims informed complainant accordingly.

## FREIGHT—LUMBER.

I. C. 3677.

June 4, 1914.

*L. F. Sayre, Felton,* entered a complaint alleging that the rate on lumber in carloads between San Francisco and Felton was excessive.

Upon investigation it was arranged to have the rate of \$2.55 per ton reduced to \$1.80 per ton, which adjustment was satisfactory to complainant.

## FREIGHT CHARGES—SWITCHING.

I. C. 3683.

June 4, 1914.

*H. O. Gibson, Sacramento,* wrote the Commission asking for information with reference to the application of switching charges against a car which was in transit at the time switching rates were changed.

Since the through bill of lading did not show the point on the Northern Electric as the final destination, the Commission held that the movement from the yards of the Southern Pacific to the point of delivery on the Northern Electric was a separate and distinct transaction and, therefore, the switching charges should be those in effect at the time car was moved by the latter line and not the rate in effect at the time bill of lading was signed by agent of the Southern Pacific Company at initial point.

## DELAY IN FORWARDING PERISHABLE FRUIT—EXPRESS.

I. C. 3686.

June 5, 1914.

*G. H. Stoddard, Soquel,* complained to the Commission that cherry shipments were not taken out of Capitola by Wells Fargo & Company on the same day they were received, as had been the custom during former seasons, and that the delay resulted in the fruit arriving in Los Angeles in a poor condition.



The matter was taken up by telephone with the express company's traffic manager at San Francisco, and a satisfactory service at once arranged.

## GROUND RENTAL.—WAREHOUSE.

June 6, 1914.

I. C. 3690.

J. M. Hampton, Jr., Live Oak, wrote the Commission complaining of the ground rental assessed by the Southern Pacific Company for land upon which a warehouse was located at Live Oak.

The Commission has no jurisdiction over matters of this character and so informed complainant.

## STATE TOLL.

June 6, 1914.

I. C. 3691.

Loop Lumber Company, San Francisco, wrote the Commission asking if the practice of the Northwestern Pacific in collecting state toll in addition to regular freight charges was lawful.

The firm was notified that freight charges on the road named did not include the state toll, and therefore the charge as shown in the tariff was proper until such time as rates were made to include the state toll.

## REPARATION REFUND.

June 8, 1914.

I. C. 3708.

*California Fruit Cannery Association vs. Southern Pacific Company.* Permission granted June 15, 1914, to make a reparation refund of \$7.50, account unreasonable rate applied on one carload of dried fruit forwarded from Reedley to Hanford on January 9, 1914.

## PURCHASE OF ICE-CREAM.

June 7, 1914.

I. C. 3710.

W. P. Crane, Oakland, wrote the Commission advising that a certain ice cream company refused to sell him ice cream on the same terms as it was furnished to his competitors.

This Commission having no jurisdiction referred the communication to the Attorney General.

## FREIGHT—OIL WELL SUPPLIES.

June 10, 1914.

I. C. 3714.

Associated Oil Company, San Francisco, referred to the Commission papers in claim against the Santa Fe Railway alleging overcharges against a shipment of oil well supplies moved from Gaviota to Suplico.

Investigation of the tariffs revealed the fact that charges as assessed were correct and lawful, no overcharges existing against the shipment.

## REFUND—CATTLE.

June 11, 1914.

I. C. 3720.

*Pioneer Truck Company vs. Southern Pacific Company.* Permission granted June 16, 1914, to make a reparation refund of \$495.00, account unreasonable rate applied on forty-two carloads of range cattle forwarded from Calexico to Athlone, on February 26, 1914.

## REPARATION REFUND.

June 10, 1914.

I. C. 3724.

*Henderson & Loughton Company vs. Southern Pacific Company.* Permission granted June 18, 1914, to make a reparation refund of \$22.42, account unreasonable rate applied on two carloads of oranges forwarded from Redlands to Sacramento on March 21, 1911, and March 8, 1912.

## FREIGHT—OVERCHARGE.

June 11, 1914.

I. C. 3727.

Clifford Traffic Bureau, San Francisco, wrote the Commission with reference to claims which had been filed with the San Pedro, Los Angeles and Salt Lake Railroad Company involving charges assessed against shipments moving between East San Pedro and Los Angeles.

It was found upon investigation that the claims had been paid direct to firm to whom the goods were consigned.

## FREIGHT—LUMBER.

June 12, 1914.

I. C. 3738.

Tidewater Southern Railway Company, Stockton, requested permission to make a reparation refund in connection with a carload of lumber forwarded from Stockton to Aurora.

The Commission advised that refund would be authorized after rates upon which

reparation was based had been published and made effective, and the claim presented in conformity with Rule 100 of Tariff Circular No. 2.

#### FREIGHT—GRAIN.

I. C. 3740.

June 13, 1914.

Wesley W. Miller, Maine Prairie, requested information with reference to the rate on grain, in carloads, from Millar to Port Costa as compared with the rate on the same commodity from Dixon to Port Costa. The desired information was given.

#### FREIGHT—ALFALFA SEED.

I. C. 3744.

June 13, 1914.

Somers & Company, San Francisco, referred to the Commission papers in a claim against the Southern Pacific Company involving charges assessed against two less-carload shipments of alfalfa seed forwarded from Gerber to Kingsburg. It was claimed that had the shipments been properly forwarded same could have been treated as a carload and secured the benefit of a carload rate.

Investigation developed the fact that two bills of lading had been issued and that shipments were consigned to two different parties, and therefore, under the rules governing such transactions, charges could not be assessed on the carload basis.

#### FREIGHT—INTERSTATE.

I. C. 3755.

November 4, 1913.

John Barnes, Huntington Park, made a complaint alleging that the rate on household goods from Niagara Falls to Long Beach was excessive.

This Commission being without jurisdiction advised complainant to communicate with the Interstate Commerce Commission.

#### FREIGHT—WHARFAGE CHARGES.

I. C. 3776.

November 4, 1913.

P. Gundlach, Los Angeles, referred to the Commission papers with reference to charges assessed against a horse unloaded and passed over the city wharf at Los Angeles.

This Commission, having no jurisdiction over wharfage charges at San Pedro, notified complainant that the matter would have to be taken up with the authorities of the city of Los Angeles who passed the ordinance establishing the rates.

#### FREIGHT—GRAIN RATES.

I. C. 3782.

June 13, 1914.

Pasadena Milling Company, Pasadena, made a protest to the Commission to the effect that the rates on grain and grain products to Pasadena should be the same as those to Los Angeles.

Interested transportation companies took the position that additional services were rendered in moving the traffic to Pasadena which were not involved in Los Angeles business and declined to make any change in the present schedule of rates.

Complainant was notified that it would be necessary to bring formal action if it desired to carry the matter further.

#### STOCK IN STEAMSHIP COMPANY.

I. C. 3788.

June 15, 1914.

W. B. Couson, Santa Cruz, referred to the Commission claim affecting the value of some stock which he held in a steamship company.

The Commission having no jurisdiction over the matter was unable to render complainant any assistance.

#### FREIGHT—INTERSTATE.

I. C. 3792.

June 17, 1914.

The Stenotype Sales Company, San Francisco, referred to the Commission papers involving storage charge assessed at Los Angeles in connection with an interstate shipment.

An effort was made to adjust the matter informally, but without successful termination, and complainant was notified that it would be necessary to take the matter up with the Interstate Commerce Commission in order to reach a definite conclusion, as this Commission is without jurisdiction.

#### REPARATION REFUND—RANGE CATTLE.

I. C. 3796.

June 16, 1914.

*Te Jon Ranch vs. Southern Pacific Company.* Permission granted June 18, 1914, to make a reparation refund of \$4,189.50, account unreasonable rate applied on ninety-six carloads of range cattle forwarded from Calexico to Caliente on January 1 to 22, 1914.

## REPARATION REFUND—CEMENT.

I. C. 3808.

June 9, 1914.

*Pacific Portland Cement Company vs. Southern Pacific Company.* Permission granted June 19, 1914, to make a reparation refund of \$16.72, account unreasonable rate applied on one carload of cement forwarded from Cement to Sonora on February 16, 1914.

## FREIGHT TRAIN SERVICE.

I. C. 3818.

June 18, 1914.

Tulare County Growers' Association, Porterville, entered a complaint against the Southern Pacific Company to the effect that freight train service from Exeter to Porterville was unsatisfactory, and that fruit reached the cannery in a damaged condition.

The Commission took the matter up by wire and it was arranged to establish a new schedule to meet the requirements of the shippers.

## FREIGHT—SWITCHING CHARGES.

I. C. 3825.

June 20, 1914.

Tarr & McComb, Los Angeles, entered a complaint against the practice of railroads absorbing switching charges on competitive business and refusing to absorb when shipments were destined to non-competitive points.

Reasons for making the absorptions were explained and complainant was further advised that the practice was lawful and commonly in effect in the United States where transportation companies were in competition.

## WAIVER OF COLLECTION.

I. C. 3829.

July 2, 1914.

*Anaheim Sugar Company vs. Southern Pacific Company.* Permission granted July 15, 1914, to waive collection of \$3,007.88, account unreasonable rate applied on 266 carloads of sugar beets forwarded from Sidings Nos. 1 and 2 on Narlon Spur to Betteravia during beet shipping seasons 1912-1913.

## REPARATION REFUND.

I. C. 3831.

June 22, 1914.

*Anaheim Sugar Company vs. Southern Pacific Company.* Permission granted July 15, 1914, to make a reparation refund of \$519.89, account unreasonable rate applied on thirty-one carloads of sugar beets forwarded from Mesmer to Anaheim September 8 to November 18, 1913.

## FREIGHT—RETURN OF SHIPMENT.

I. C. 3837.

June 20, 1914.

Southern Pacific Company requested permission to make a reparation refund in connection with carload shipment of poles which by mistake was forwarded to wrong destination.

Authority was granted to adjust charges on basis of one-half rate for the out-of-line movement.

## FREIGHT—INTERSTATE.

I. C. 3838.

June 22, 1914.

C. Schnaidt, Lodi, referred to the Commission papers involving the movement of a carload of grapes to a point in North Dakota and alleged overcharges had been assessed by the railroad company.

The movement in question being interstate over which the Commission has no jurisdiction, complainant was referred to the Interstate Commerce Commission at Washington, D. C.

## FREIGHT—HAY.

I. C. 3839.

June 22, 1914.

Sacramento Valley Sugar Company, Hamilton, requested certain information with reference to the minimum weight applicable to carload shipments of hay.

Desired information was furnished.

## REPARATION REFUND.

I. C. 3842.

June 23, 1914.

*Pacific Portland Cement Company vs. Southern Pacific Company.* Permission granted July 15, 1914, to make a reparation refund of \$19.75, account unreasonable rate applied on one carload of cement forwarded from Cement to Colusa on September 23, 1913.



I. C. 3863.

## REPARATION REFUND.

June 20, 1914.

*Chas. Stern & Sons, Inc., vs. Southern Pacific Company.* Permission granted July 10, 1914, to make a reparation refund of \$153.88, account unreasonable rate applied on three carloads of brandy forwarded from Armona to Los Angeles on October 8, 22 and 23, 1913.

I. C. 3872.

## PRICE OF GRAVEL.

June 26, 1914.

M. B. Anderson, Oakland, wrote the Commission asking for information as to the proper charge to be made for carload shipments of gravel to be sold to a transportation company.

The matter being entirely out of our jurisdiction, we were unable to render the party any assistance.

I. C. 3874.

## FREIGHT—DEMURRAGE CHARGES.

June 25, 1914.

Weyl-Zuckerman & Company, San Francisco, called attention to the fact that the Southern Pacific Company was attempting to collect a \$3.00 demurrage charge which accrued on a car not unloaded at Fresno. Complainant took the position that because certain business firms refused to accept freight on Raisin Day, April 30, charges could not lawfully be assessed.

Complainant was notified that the only holidays exempt from demurrage were those set forth in Rule No. 1, Car Demurrage Tariff No. 2-D, C.R.C. 6, and as Raisin Day was not one of the designated holidays, demurrage charges were in order.

## FREIGHT—LUMBER.

I. C. 3879.

May 27, 1914.

Southern California Hardwood and Manufacturing Company, Los Angeles, presented a complaint alleging that the rates on lumber from Los Angeles to San Diego were excessive.

At the present time the Commission is making an investigation with reference to all lumber rates within the State and will adjust the rates complained of when a decision and order is rendered in the case now being heard.

## FREIGHT—DEMURRAGE CHARGE.

I. C. 3890.

June 26, 1914.

San Diego and Southeastern Railway Company, San Diego, referred to the Commission an unpaid demurrage charge against the Standard Oil Company involving the detention of a car at San Diego. Proper shipping orders had not been forwarded by consignor of the shipment and the Commission ruled that demurrage as assessed should be paid.

## REPARATION REFUND.

I. C. 3896.

June 29, 1914.

*Henry Cowell Lime and Cement Company vs. Southern Pacific Company.* Permission granted July 13, 1914, to make a reparation refund of \$22.56, account unreasonable rate applied on one carload of lime rock forwarded from Pittsburg to Santa Cruz on February 7, 1914.

## FREIGHT—ASTRAY.

I. C. 3902.

June 22, 1914.

G. Graham, San Francisco, advised the Commission that a shipment of plumber's supplies forwarded from San Francisco to Lagunitas on the Northwestern Pacific failed to reach its destination. After considerable correspondence the missing freight was located and delivered to consignee.

## FREIGHT—LOSS AND DAMAGE.

I. C. 3903.

June 20, 1914.

Miners Mercantile Company, Amador City, referred to the Commission papers involving loss and damage claims entered against the Amador Central Railway Company.

The Commission investigated the bills informally but was unable to secure any settlement; and in view of the fact that the Public Utilities Act does not delegate authority to this Commission to adjust damage claims, complainant was informed that the matter would have to be taken into the civil courts for action.



## FREIGHT—WHARFAGE CHARGES.

I. C. 3911.

June 29, 1914.

North Pacific Steamship Company, San Francisco, filed a complaint against the Southern Pacific Company alleging that wharfage charges had been wrongfully assessed at Santa Cruz.

Southern Pacific Company corrected its terminal tariff to conform with rates established by the city of Santa Cruz, and arranged to adjust the overcharges.

## FREIGHT—FORWARDED TO WRONG DESTINATION.

I. C. 3914.

June 30, 1914.

Southern Pacific Company requested authority to make reparation refund in connection with the carload of beer which by mistake was forwarded from Sacramento to Chico instead of to San Francisco.

The company was notified that if rates were properly published and reparation claim presented in conformity with Rule 102 of Tariff Circular same would be given careful consideration.

## REPARATION REFUND.

I. C. 3914a.

September 1, 1914.

*Ruhstaller Brewery vs. Southern Pacific Company.* Permission granted September 10, 1914, to make a reparation refund of \$18.68, account unreasonable rate applied on one carload of beer, in wood, forwarded from Sacramento to Chico to San Francisco on June 9, 1914.

## INFORMAL SERVICE COMPLAINTS.

## I. C. No. 1445.

*M. G. Clark vs. Southern Pacific Company.*

Complainant asked that Southern Pacific Company be requested to install a telephone in their depot at Soledad, and also for the safety of the public to move the depot on the opposite side of the Southern Pacific main track.

Matter taken up with the Southern Pacific Company, and a telephone immediately arranged for; after considerable negotiation with the Southern Pacific Company the depot was moved to the town side of the track, repaired and repainted. The Southern Pacific further promised, as soon as financial conditions would permit, to use this depot either as a freight depot or as the freight end of a combined freight and passenger station to be established at this point.

## I. C. No. 1682.

*Lorenzo Fish vs. Pacific Electric Railway.*

Complaint, service at Lawndale.

Matter taken up with Pacific Electric Railway but could not be settled informally. Parties may prefer a formal hearing.

## I. C. No. 1832.

*John Hubert Mee vs. Northwestern Pacific Railroad.*

1. With reference to general failure to maintain schedules.  
 2. Desire that company reinstall suburban service via Tiburon.  
 3. Objection to use of wooden equipment in suburban service.  
 4. That Northwestern Pacific be required to double track its entire suburban territory.

5. Inadequate terminal facilities at Sausalito.

6. Inadequate terminal facilities at San Rafael.

7. Dangerous road crossings.

8. Failure of Northwestern Pacific to check baggage off its lines.

9. General complaint that this company is non-progressive.

Schedules on Northwestern Pacific have been greatly improved. Terminal facilities at Sausalito have been increased at a cost of \$100,000.00. Road crossings have been protected. Double tracking has been completed on most of the suburban service. Baggage checking and interchange has been put into operation. The complaint is practically settled up in all its features and has been dropped by Mr. Mee.

## I. C. No. 2141.

*Mr. J. E. Breitwiser vs. Southern Pacific Company.*

Complaint, not making stops with all trains at Fruitvale station and not checking baggage on all trains.

This matter was adjusted informally, as Mr. Breitwiser saw that such a request could not be granted and dropped complaint.

## I. C. No. 2314.

*J. C. Bateman vs. Nevada-California-Oregon Railway.*

Complaint, that shipments of freight, principally perishable dairy products, were not moving to destination on first train after billing was delivered to agent at Made-line station.

Matter brought to the attention of the management of the Nevada-California-Oregon Railway, who arranged to have all shipments of this nature immediately forwarded to destination on first train after billing instructions were given to agent at point of shipment.

## I. C. No. 2432.

*L. T. Hatfield vs. Southern Pacific Company.*

Complaint, delay to train No. 5 at Benicia to give train No. 11, the "Shasta Limited," preference on crossing on car ferry steamer "Solano" ahead of No. 11, causing a bad delay to train No. 5 at Benicia.

Matter could not be handled by this Commission as it was an interstate case, both trains being on interstate runs. Party was so advised and matter was dropped.

I. C. No. 2438.

*"Safety First" vs. Peninsular Railway.*

Complaint, that only one man was used in the operation of a car between Saratoga and Congress Springs.

Complaint investigated by inspector on the basis of whether safety required an additional man on car complained of. Investigation resulted in finding conditions of operation did not require an additional man for the safety of the public or employees.

I. C. No. 2508.

*Festus C. Lewis vs. Atchison, Topeka and Santa Fe Railway.*

Complaint, backing up of trains from Lac Jac to Reedley.

This matter was settled informally with the Santa Fe to the satisfaction of Mr. Lewis.

I. C. No. 2586.

*Sam Harris vs. Southern Pacific Company.*

Complaint, alleged inadequate passenger train service between San Francisco, Oakland and Los Gatos.

Complaint was directed against the difficulty of commuters to live in Los Gatos and do business in Oakland, especially during the winter months when the train schedules of the Southern Pacific Company were reduced. Matter brought to the attention of the Southern Pacific Company, who declined to make any informal adjustment of train schedules on the basis that the patronage to be developed would not meet the expense of operating the desired trains. Complainant advised that a formal complaint and subsequent hearing would be necessary. No formal complaint was received.

I. C. No. 2619.

*J. M. Murphy vs. World's Fair Committee.*

Complaint, no fireman or helper switchmen on locomotive in use at World's Fair Grounds.

Matter settled informally with director of fair. It was agreed to full crew this engine, which satisfied Mr. Murphy entirely.

I. C. No. 2620.

*H. A. Barber vs. Pacific Electric Railway.*

Complaint, poor service on Venice Short Line of the Pacific Electric Railway.

It was shown Mr. Barber that the business of this line was so small that it could not be made to pay, and he was then willing to drop complaint.

I. C. No. 2625.

*Railroad Commission vs. Oakland, Antioch and Eastern Railway.*

Complaint, alleged violation of full crew bill. (Chapter 168, statutes of State of California, approved May 27, 1913.)

Matter investigated by service department, and after opinion had been rendered by the legal department of the Commission, was adjusted informally with the management of the Oakland, Antioch and Eastern Railway.

I. C. No. 2701.

*California State Board of Health vs. All Railroads.*

Complaint, regarding the practice of operating passenger trains using wooden and steel equipment and danger to occupants of wooden cars in case of collision.

Investigation made of the practice of carriers and information secured that the retirement of wooden equipment was being gradually made and that new purchases were of all-steel construction. The practice of carriers while steel and wooden cars were used in the same train was, as far as could possibly be done, to carry the wooden equipment at the rear of the train and not to carry wooden coaches between those of steel construction.

I. C. No. 2737.

*John J. Byrne vs. Southern Pacific Company.*

Complaint, regarding station facilities at Watsonville, with especial reference to alleged lack of shelter during stormy and inclement weather when transferring between trains.

Matter investigated, and due to the location of tracks at Watsonville, a junction

point, it would be difficult and require a heavy expenditure to provide the requested facilities, which would only be necessary during the winter months. Complainant advised that it would be necessary to file a formal complaint and hold a hearing before the Southern Pacific Company could be required to furnish the requested facilities. Formal complaint was not received.

I. C. No. 2742.

*M. N. Cosulich vs. Northwestern Pacific Railroad.*

Complaint, that Northwestern Pacific Railroad was not running their trains to San Quentin as advertised in papers.

It was shown that Mr. Cosulich was wrong, as he had read time table wrong. Matter was then dropped by him.

I. C. No. 2783.

*Harold French vs. Oakland, Antioch and Eastern Railway.*

Complaint, safety appliances on trains and lack of seating capacity on excursion trains.

This matter settled informally. Oakland, Antioch and Eastern Railway will place safety appliances on cars and will have cars enough to seat all passengers on excursion trains in future.

I. C. No. 2853.

*Graven-Inglis Baking Company vs. Western Pacific Railway Company.*

Complaint, that Western Pacific Railway Company had discontinued a local passenger train upon which complainant had been shipping a considerable amount of express matter and that by reason of the discontinuance of this train the business of the complainant would suffer.

Investigation resulted in the information that the discontinuance of the Western Pacific local trains was on account of lack of patronage and that they had been operated at a considerable loss. Complainant advised that formal complaint and hearing would be necessary before an order could be issued compelling the Western Pacific to restore the train complained of. No formal complaint was received.

I. C. No. 2854.

*Railroad Commission vs. Atchison, Topeka and Santa Fe Railway.*

Complaint, improper car clearance in yards of this company at Needles, Cal.

Matter settled informally. The Santa Fe agreed to move tracks to proper clearance at once.

I. C. No. 2869.

*Fred C. Pugh vs. Southern Pacific Company.*

Complaint, fencing in right-of-way near Los Molinos, which shut Mr. Pugh out of railroad crossing over his property.

Matter was taken up with the Southern Pacific and they again opened the fence, giving Mr. Pugh crossing as before.

I. C. No. 2874.

*Mrs. C. A. Hill of Belmont vs. Southern Pacific Company.*

Complaint, no trains stopping at Belmont between 12.37 p. m. and 5.03 p. m.

Southern Pacific Company will stop train No. 23 at 3.10 p. m. This was satisfactory to Mrs. Hill and complaint settled informally.

I. C. No. 2879.

*Residents of Hermosillo vs. Pacific Electric Railway.*

Complaint, abandonment of stop at Vermont avenue.

Pacific Electric restored the stop and matter was settled informally.

I. C. No. 2881.

*W. H. Engle vs. Pacific Electric Railway.*

Complaint, too frequent use of torpedoes in residence district to the annoyance of the residents.

Matter was settled informally. Pacific Electric Railway are getting out a small torpedo which will not make much noise and this will satisfy complainant.



## I. C. No. 2906.

*F. C. Beutel vs. Southern Pacific Company.*

Complaint, alleged improper location of grade crossing at Lancaster, and request for removal to a more convenient point.

Investigation developed that the Southern Pacific Company was willing to move the crossing provided the county authorities would agree to bear a portion of the expense. Complainant advised that favorable action by the board of supervisors would be necessary and the filing of a formal complaint after which hearing would be had and order of the Commission would be made. As no formal complaint was received, papers were filed.

## I. C. No. 2909.

*Herman Amsler vs. Ocean Shore Railroad Company.*

Complaint, inadequate service on Ocean Shore Railroad.

Investigation of the complaint disclosed the cause to be due to the conditions resulting from a period of stormy weather, and that slides and washouts had interfered with the operation of the company's schedule. Repair work was found to be actively in progress with a view to restoring normal conditions as soon as possible.

## I. C. No. 2937.

*Timothy Kitty vs. Pacific Electric Railway Company.*

Complaint, regarding the condition of a road to a gravel pit owned by complainant, caused by the building of a new line of the Pacific Electric Railway Company, complainant alleging that it is impossible to haul a capacity load from the gravel pit.

Matter referred to the management of the Pacific Electric Railway Company, who advised that the road and crossing of their tracks were in good condition and on an easy grade. Conditions also investigated by an inspector and found to be as represented by the engineers of the Railway Company. Complainant advised of the results of investigation and inspection and of his right to file formal complaint. No formal complaint being entered, papers were filed.

## I. C. No. 2939.

*Egon Tropfowitz vs. Northwestern Pacific Railroad.*

Complaint, charge for drinking cups on trains.

Satisfactorily adjusted informally. This railroad will furnish cups in the future, thus satisfying Mr. Tropfowitz.

## I. C. No. 3049.

*G. Pro vs. Pacific Electric Railway Company.*

Complaint, Pacific Electric Railway refusing to honor commutation tickets via Lincoln Park during time bridge across Arroyo Seco is out of commission.

Pacific Electric Railway agreed temporarily to honor these tickets until such time as they could get bridge restored. This was perfectly satisfactory to Mr. Pro and matter was settled informally.

## I. C. No. 3058.

*Francis J. Roberts, M. D. vs. Ocean Shore Railroad Company.*

Complaint, improper service on the Ocean Shore Railroad during the period of washout trouble, no arrangements made for the convenience and transfer of passengers, etc.

Complaint made the subject of investigation with the Ocean Shore Railroad and it was found that as the repair work to restore conditions caused by washouts was nearing completion, conditions were materially improved, and delays and inconvenience to passengers were being reduced to a minimum.

## I. C. No. 3091.

*Chas. F. Leonard vs. Northern Electric Railway Company.*

Complaint, request that the Northern Electric Railway Company be required to establish a flag station to be known as "Riverside" at a point between its stations of Hazelbusch and Rio Bonito.

Matter made the subject of investigation with the management of the Northern Electric Railway Company, who refused to grant the proposed stop for the reason that the adjacent stations were so close to the proposed stop that it was not necessary, and that the parties represented by the complainants should be required to construct a road to give access to the site of the requested station. Complainant advised as to the attitude of the carrier and that formal complaint would be neces-

sary to enable the Commission to hold a hearing and issue its order on the findings at such hearing. Formal complaint was not filed.

I. C. No. 3129.

*Robert J. Butty vs. Southern Pacific Company.*

Complaint, regarding the frequent blocking of the highway crossing at Moorpark avenue, Moorpark, by Southern Pacific Company trains for long periods.

Matter was brought to the attention of the management of the Southern Pacific Company, who advised arrangements had been made to keep the crossing open for users of the highway and that cause for complaint would not be in evidence in future.

I. C. No. 3142.

*F. H. Clark vs. Southern Pacific Company.*

Complaint, improper facilities at Elmira station for the handling of carload business by reason of necessity for frequently moving cars in process of loading to perform switching work.

Inspection made of conditions and a suggested rearrangement of tracks brought to the attention of the Southern Pacific Company, who agreed to make the changes suggested thereby, satisfactorily adjusting the conditions complained of by shippers.

I. C. No. 3166.

*Marion W. Hefton vs. Southern Pacific Company.*

Complaint, improper handling of freight at Southern Pacific station at Exeter.

Matter was taken up with Southern Pacific Company and settled informally. Southern Pacific Company agreed to put on help enough to handle all freight.

I. C. No. 3188.

*J. A. Kraut vs. Western Pacific Railway Company.*

Complaint, unsatisfactory and inefficient cattle guards at "Rainbow Crossing."

Matter brought to the attention of the management of the Western Pacific Railway Company, who arranged to immediately install and maintain proper cattle guards at the crossing complained of.

I. C. No. 3194.

*Railroad Commission vs. Southern Pacific Company.*

Complaint, delays to trains Nos. 46 and 48 of Coast Line.

Matter taken up with Southern Pacific and settled informally. They agreed to correct this service at once.

I. C. No. 3195.

*Railroad Commission vs. Peninsular Railway Company.*

Complaint, overcrowded condition of cars of Peninsular Railway.

Matter taken up with General Manager Chapin and adjusted informally. Mr. Chapin agreed to put on more cars and prevent overcrowding in future.

I. C. No. 3199.

*L. H. Roberts vs. Different Railroads.*

Complaint, inefficient handling of air brakes and failure of railroads to properly adjust same.

Settled informally and party referred to Interstate Commerce Commission.

I. C. No. 3208.

*Railroad Commission vs. San Francisco-Oakland Terminal Railways.*

Complaint, trains of this system not making connection with Southern Pacific trains at Melrose.

Trains were doing as well as possible under the street-car time table they are working on. No further cause for complaint and matter dropped.

I. C. No. 3209.

*Railroad Commission vs. Southern Pacific Company.*

Complaint, that oil used for the sprinkling of station platform at South San Francisco had not been sanded and that passengers were objecting to having wearing apparel ruined by contact with crude oil.

Southern Pacific Company immediately corrected condition complained of, and promised in future to arrange the work of oiling station platforms so that same would be done when no trains were due to arrive or depart from a station.

I. C. No. 3258.

*South Coast Improvement Association vs. Pacific Electric Company.*

Complaint, regarding character of service offered between Huntington Beach and Balboa.

Adjusted informally by Commissioner Edgerton, at meeting with complainants and Mr. Shoup, president of the Pacific Electric Railway Company, at which time Mr. Shoup made promise as to improved schedule, which was agreed to by complainants as being satisfactory.

I. C. No. 3307.

*Citizens of Fresno vs. Atchison, Topeka and Santa Fe Railway.*

Complaint, that the Santa Fe lower grade of their tracks on White, Thomas and Harvey streets in the city of Fresno.

Matter was adjusted informally. The Santa Fe agrees to lower grade when street work is completed.

I. C. No. 3321.

*Chas. J. Kuchel vs. Southern Pacific Electric Lines.*

Complaint, irregular service and trains running late at Encinal Avenue station, Alameda.

Matter taken up with Southern Pacific electric lines and settled informally. Southern Pacific agreeing to handle their trains as near on time as possible at this station.

I. C. No. 3321.

*Monterey Chamber of Commerce vs. Southern Pacific Company.*

Complaint, inadequate depot facilities at Monterey.

Matter brought to the attention of the Southern Pacific Company, who claim to have plans for better facilities but are obliged to defer same on account of financial condition. This information communicated to complainant.

I. C. No. 3352.

*Residents of Gardena Valley vs. Pacific Electric Railway Company.*

Complaint, inadequate service furnished residents of West Athens and Strawberry Park by reason of insufficient trains operated and at inconvenient times for the accommodation of the public.

Adjusted informally by the Pacific Electric Railway Company formulating and establishing a schedule which satisfactorily served its patrons.

I. C. No. 3500.

*Mrs. J. Campbell vs. Northwestern Pacific Railroad Company.*

Complaint, improper platform facilities at Ross station, consisting of narrow wooden platform some fourteen inches in height which causes a high step from the track.

Adjusted informally by Northwestern Pacific Railroad Company agreeing to remove the middle platform and replace the wooden structure now existing with permanent construction, and also the erection of a center fence and protective covering for the third rail, the work to be undertaken and completed during the present summer season.

I. C. No. 3706.

*Pismo Chamber of Commerce vs. Southern Pacific Company.*

Complaint, refusal of Southern Pacific Company to furnish adequate passenger service to and from Pismo by reason of not permitting trains to stop at that point.

Adjusted informally by Southern Pacific Company agreeing to stop their trains 21 and 22 on flag at Pismo to receive and discharge passengers.

I. C. No. 3830.

*Percy Neyman vs. Ocean Shore Railroad Company.*

Complaint, misleading data for the information of the public contained in advertising literature and time table.

Matter brought to the attention of the Ocean Shore Railroad Company and arrangements made for proper information to appear in connection with next issue of time tables for public distribution.

I. C. No. 4423.

*John C. Bewley vs. Southern Pacific Company.*

Complaint, poor crossings over the Southern Pacific tracks around Lodi and Acampo.

Matter was settled informally. The Southern Pacific Company fixed up their tracks, making it satisfactory to Mr. Bewley.



## INFORMAL COMPLAINTS, EXPRESS RATES.

### GRAPES.

I. C. 522.

October 5, 1912.

Walter Snooks, Maricopa, complained of express charge of 62 cents on shipment of grapes from Colfax.

Upon investigation it was found that the correct charge was 43 cents, and the overcharge of 19 cents was refunded complainant on October 18.

### CHARGES.

I. C. 5403.

October 10, 1912.

James E. Reynolds, Ventura, alleged that the express charge of \$46.20 for collecting \$27,732.10 of the State Treasurer, Sacramento, and transmitting it to Ventura, was exorbitant.

Investigation developed that the charge was in conformity with schedules lawfully on file with the Commission and claimant so advised; further that the subject would be considered during the Commission's investigation now in progress of express rates and charges generally in California.

### GOATS IN CRATES.

I. C. 554.

October 14, 1912.

S. H. Bowman, Paso Robles, complained of the express rates, generally, throughout California, on goats in crates, also on charges for return of empty crates.

Complainant advised that as all express rates, rules and practice are being investigated by the Commission, this complaint, as well as many others of similar character, would be given the attention it requires during hearing in Case No. 122.

### PENNIES.

I. C. 529.

October 7, 1912.

L. Gundelfinger, Fresno, received two shipments of pennies via express, value in both instances being the same. As the express charges were at variance, information was sought as to the correct charge.

Complainant was advised that the express charge, according to tariffs lawfully on file with the Commission, was \$1.50 per shipment.

### GOATS IN CRATES.

I. C. 5633.

June 2, 1911.

Winthrop Howland, Redlands, alleged that the express rates on goats in crates, to various California points are unjust and unreasonable, likewise the rates on empty crates returning.

Complainant was informed that as the Commission called into question the reasonableness of express rates, generally, this matter would be given careful consideration during hearing in Case No. 122.

### BEER.

I. C. 572.

October 18, 1912.

San Pedro Wholesale Company, San Pedro, complained of express charge of 72 cents on shipment of beer to Wilmington.

After investigation by the Commission, it was found that carrier assessed an incorrect rate of 40 cents per 100 pounds, correct rate being 25 cents per 100 pounds; refund of overcharge was promptly made.

### BABY CHICKS.

I. C. 598.

September 23, 1912.

The Pioneer Hatchery Company, Los Angeles, filed claim with the express company for loss of shipment of baby chicks from Gardena to Butte, Montana. Failing to get response to their many inquiries as to non-settlement, matter was referred to the Commission.

Complainant was informed that in order to hasten settlement, the Commission would communicate with carrier, though, if matter was not adjusted at an early date, to refer the subject to the Interstate Commerce Commission, Washington, D. C., as it has jurisdiction over interstate traffic.



## RATES.

I. C. 757 $\frac{1}{2}$ .

December 9, 1912.

S. D. England, Reedley, desired to know if the express rates on sweet cream and ice cream were lower to and from Fresno than to and from other points and asked for the present rates to Reedley.

The rates desired were furnished and claimant further advised that any inconsistencies would be taken care of in the Express Rate Case, No. 122, now being investigated by the Commission.

## CHARGES.

I. C. 610.

October 31, 1912.

Hocker-Cannon Company, Santa Maria, complained of the express charge of \$6.35 on two packages from New York.

Complainant was advised that according to our calculation the correct charge would be \$5.40 and if brought to carrier's attention, it would, without doubt, refund the overcharge; further that this being an interstate movement it should be referred to the Interstate Commerce Commission, Washington, D. C., should the matter not be satisfactorily adjusted.

## GOATS CRATED.

I. C. 621.

November 1, 1912.

H. Warren Shepard of National City complained of the express rates, generally, on goats, crated, and the return of empty crates.

Complainant, not being specific, was informed that this subject would be considered by the Commission in its investigation of all express rates (Case No. 122) in California, now in progress.

## GOATS IN CRATES.

I. C. 628.

November 1, 1912.

Miss Jane White, Pasadena, complained of the express rate on goats from Redlands to Pasadena; also the charge for the return of empty carriers.

As the express rate investigation was then in progress, complainant was advised that the matter would be carefully considered.

## GOATS.

I. C. 629.

November 2, 1912.

John Stewart, Mentone, complained of a charge of \$5.00 on a goat crated, from Foster to Mentone, and asked that this subject be considered by the Commission in its investigation of the express rates then in progress.

Complainant was informed that this matter, as well as all others of a similar nature, would be carefully looked into.

## LIVE POULTRY (IN COOPS).

I. C. 633.

November 6, 1912.

H. A. George, Petaluma, complained of express charge of \$1.12 $\frac{1}{2}$  per 100 pounds on pullets to Fruitvale.

Complainant advised that the lawful rate on live poultry (common) between the points is 50 cents per 100 pounds, and that if charges were paid, based upon the former rate, difference in rate would, without doubt, be refunded by carriers upon bringing the matter to their attention.

## FLOWERS.

I. C. 652.

November 9, 1912.

F. J. McCoy, Betteravia, complained of an express charge of \$1.75 on a package of flowers from Guadalupe to Santa Maria.

The subject was referred to the express company by the Commission and the rate reduced from \$1.00 to 50 cents per 100 pounds, and complainant so notified.

## GOATS.

I. C. 671.

November 15, 1912.

Albert Mason, Mentone, alleged excessive express charges on goats, but failed to give specific data.

Complainant was informed that express rates in California were being investigated by the Commission and his complaint would be given careful consideration in Case No. 122.

## CHARGES.

I. C. 675.

November 16, 1912.

C. Y. Hamilton, Indio, complained of the express charge of 55 cents on a spade from Los Angeles.

Complainant failing to give the weight of the article, the charge could not be

verified; however, he was informed that as the express rates throughout California were being investigated by the Commission as to their reasonableness, this particular feature would be carefully looked into in Case No. 122.

#### WILD GAME.

I. C. 678.

November 16, 1912.

C. P. Thomas, Los Angeles, complained of the express rate of \$4.00 per 100 pounds on dead geese in sacks from Willows.

Complainant was informed that the subject would be carefully considered by the Commission in its investigation of express rates, generally, in Case No. 122, now in progress.

#### EXTRA DELIVERY CHARGE.

I. C. 681.

November 18, 1912.

H. A. Cooper, Stanford University, complained of the express company's practice of charging for the delivery of packages to the University.

Matter was taken up with carrier informally and future shipments for this point will be delivered free. Complainant was so notified February 17, 1913.

#### CREAM.

I. C. 684.

November 18, 1912.

E. J. Foster, Secretary of Cottonwood Creamery Company, Inc., Cottonwood, complained that the express company declined to reduce the rate on cream from Ager to Montague.

The Commission after careful investigation of all express rates in California, ordered in a new set of rates on March 16, 1914. Since this date, the rate on cream and milk between points mentioned has been reduced about sixty-five per cent.

Complainant was advised accordingly.

#### EXTRA DELIVERY CHARGES.

I. C. 689.

November 21, 1912.

Miss Helen B. Sutliff, Palo Alto, complained of an extra delivery charge on two express shipments, one from San Francisco, the other from Gilroy, both addressed to Stanford University.

Investigation developed that extra delivery charges were in accordance with tariffs lawfully on file with the Commission, but as the shipment from San Francisco had been prepaid extra delivery charge was refunded consignee and the amount collected of shipper. Future shipments to the University will be delivered free as this point will be included in Palo Alto free delivery limits and complainant so notified.

#### RATES.

I. C. 694.

November 19, 1912.

Wm. Y. Weir, Lone Pine, complained of express rate from Sacramento and alleged that carrier's representative at shipping point was rating shipment to Mt. Whitney plus a stage rate to Lone Pine.

Complainant was informed that this was irregular as the express company had direct express rates to Lone Pine via rail; also advised that all express rates were being investigated by the Commission and this subject would be considered in the express rate Case No. 122.

#### CHARGES.

I. C. 702.

November 25, 1912.

Geo. E. Seyholt of Taft complained of an express charge of \$1.40 on a gun, weighing seven pounds, from San Jose, but neglected to say how it was packed.

In the absence of this information we could not verify the charge but informed complainant that all express rates in California were being investigated by the Commission and that his complaint would be carefully considered in Case No. 122.

#### RATES.

I. C. 713.

November 27, 1912.

Floriston Commercial Company, San Francisco, complained of the express rates between Floriston and other points in California.

Complainant advised that express rates generally throughout the State were being investigated by the Commission and that the above complaint would be carefully considered in Case No. 122.

#### CHARGES.

I. C. 716.

November 28, 1912.

F. E. Colley, San Jose, complained of paying an additional charge of 10 cents on an express package from San Francisco as shipper had prepaid the shipment.

Complainant notified that the shipment should have been delivered free of expense and any undercharge, if such existed, collected of shipper.

CHARGES.

I. C. 724.

November 21, 1913.

Mrs. T. G. McCreary, Santa Cruz, complained of express charge of 30 cents on a three-pound package of seed from San Francisco.

Investigation developed that shipment was erroneously billed at four pounds, which accounted for the additional charge of five cents. Carrier upon verifying shipper's weight of three pounds, delivered shipment at charge prepaid by shipper, namely, 25 cents.

CHARGES FOR RETURN OF C. O. D. MONEY COLLECTED.

I. C. 765.

December 7, 1912.

A. A. Mills, Anaheim, complained of the express charge of 20 cents for the return of "C. O. D." money collected on an express package from Pomona; also the express charges on this package and one from Los Angeles.

Complainant was advised that these matters would be carefully considered during the Commission's investigation of the express rates and charges now in progress.

TRUNK.

I. C. 766.

December 9, 1912.

E. M. Coates, Pasadena, complained of express company's charge of 75 cents on a trunk from Los Angeles.

Complainant was asked for additional data. Our communication was returned by postal department as unclaimed, therefore the Commission was unable to make an intelligent investigation.

EMPTY CANDY BOXES.

I. C. 767.

December 7, 1912.

Silas W. Mack, Monterey, complained of the express rate on a package of empty candy boxes from San Francisco.

Complainant was advised that the express rates and charges were now being investigated by the Commission and that the graduation charge on shipments weighing less than 100 pounds would be given particular attention.

LIVE PLANTS.

I. C. 783.

December 10, 1912.

Abe Clemo, Grass Valley, complained of \$5.00 expressage on two boxes of plants from Colma.

Investigation by the Commission developed that shipment moved from San Francisco and that it was overcharged 64 cents. Said amount was refunded consignee on January 14th.

EGGS.

I. C. 876.

January 8, 1913.

P. T. Nye, Denair, complained of the express rates on eggs, in cases, to Fresno and San Francisco.

Investigation developed that the rates charged were incorrect; which should have been 70 cents and 50 cents instead of 80 cents and 60 cents, respectively.

The matter being called to the express company's attention, refund of overcharges followed.

DOUBLE COLLECTION.

I. C. 893.

January 1, 1913.

J. Baalmann, San Francisco, shipped a trunk to San Rafael via express, prepaying the charge of 50 cents. Consignee at destination, it is alleged, was called upon to pay 55 cents when the trunk was delivered.

Our investigation developed that inadvertently carriers collected expressage at both points and that the amount paid by consignee was refunded on January 20th.

TRUNKS.

I. C. 934.

January 20, 1913.

Mrs. M. Kendall, San Francisco, complained of express charge of \$2.10 on trunk weighing 150 pounds from Raymond.

Complainant advised that charges assessed were in accordance with carrier's tariff lawfully on file with the Commission.

## EMPTIES RETURNED.

I. C. 1136.

March 3, 1913.

Porter N. Ferguson, Holtville, complained regarding the discriminatory practice of returning empty cream and milk cans free and making a charge for the return of other empty carriers returned.

Complainant was advised that the express company's rates, rules and regulations were now being investigated by the Commission and that this particular feature would receive careful consideration.

## SAMPLE BRICKS.

I. C. 11364.

March 14, 1913.

The Standard Brick and Tile Company, Colton, complained of the express company's charge of 80 cents on two sample bricks forwarded collect from Sacramento, California, whereas, had shipment been prepaid, the charge would have been 35 cents.

Investigation developed that the charge of 35 cents was predicated upon shipment being prepaid, and when not so prepaid, regular classification rate of 80 cents governed. This is contrary to the spirit of the law, namely, one rate when prepaid, another rate when collect, particularly so when shipper is a responsible party or goods are worth the transportation charge; consequently carrier made refund of overcharge.

## HOG.

I. C. 1235.

April 11, 1913.

Geo. M. Shaw, Hollister, complained of express charges of \$8.45 on a crated hog from Hanford weighing 250 pounds.

After investigation it was found that the weight was 375 pounds, and at the rate in force at time of shipment, no overcharge resulted according to tariffs lawfully on file with the Commission.

## CREAM AND MILK.

I. C. 1321.

May 1, 1913.

H. W. Low, San Francisco, complained of the express rate on cream and milk from Hughson to Fresno.

By order of the Commission in Case No. 122, the express rate on these commodities was reduced practically forty-five per cent.

Complainant was so informed.

## MAGAZINES.

I. C. 1341.

May 5, 1913.

Riverside News Dealers' Association, Riverside, advised the Commission that the express company declined to accept shipments of magazines from one consignor to one consignee when said package contained individual bundles for various parties at destination.

As this was contrary to law, the Commission brought the matter to carrier's attention, who immediately instructed its agent to, in the future, accept all such shipments.

## PALMS IN BOXES.

I. C. 1364.

May 10, 1913.

Mrs. H. M. Johns, San Francisco, referred to the Commission alleged overcharge on two palms from Alameda to Larkspur.

Investigation developed that receiving agent incorrectly quoted a rate of 75 cents per 100 pounds, the correct rate being \$1.50 according to tariff lawfully on file with the Commission and that an overcharge of five cents existed, said overcharge being refunded July 12, 1913.

## GREEN FRUIT.

I. C. 1502.

June 10, 1913.

T. J. Hammond, Fresno, complained of the express rate of 80 cents per 100 pounds on green fruit in lots of 500 pounds and over, between Fresno and Stockton.

After corresponding with the express company a rate of 65 cents per 100 pounds was published.

## EGGS.

I. C. 1523.

June 12, 1913.

E. W. Wilson, Santa Rosa, complained of the express rate on eggs, for hatching, in cases from Hopland.

Complainant was advised that the Commission's decision and order in Case No. 122, would shortly be promulgated, and that the rates therein shown would take care of this complaint.



LIVE POULTRY.

I. C. 1526.

June 6, 1913.

H. A. George, Petaluma, complained to the Commission of the express service to Oakland.

The matter being brought to carrier's attention, an immediate improvement resulted, which was satisfactory to complainant.

CHARGES FOR RETURN OF C. O. D. MONEY.

I. C. 1575.

June 21, 1914.

G. H. Fuller, president of the Farmers and Merchants Bank, Lancaster, filed an informal complaint against the express company's charge for the return of C. O. D. money collected.

The charge assessed was in accordance with the carrier's tariffs lawfully on file with the Commission, and as the express company considered the amount charged just and reasonable, in view of the service performed, it declined to make any adjustment. Complainant was so advised and further instructed that if he desired to pursue the matter further the Commission would entertain a formal complaint.

EXPRESS—RETURNED CARRIERS.

I. C. 1645.

July 4, 1913.

H. B. Watson, Bradley, complained of the express company making a charge for the return of empty carriers while other empties were returned free.

Complainant was advised that the decision and order of the Commission in Case No. 122, promulgated on August 1, 1913, would take care of this matter.

EXPRESS RATES.

I. C. 1730.

July 26, 1913.

The Chico Business Men's Association wrote the Commission and alleged that the charges assessed by Wells Fargo Express Company for the transportation of butter between Chico and points in the Sacramento Valley were excessive and unreasonable.

Complainants were advised that the Commission was investigating all rates of the express company in the State of California and when its decision was rendered the rates in question would be taken care of.

EXPRESS—FRESH MEATS.

I. C. 1785.

July 31, 1913.

Moore & Towne, Santa Cruz, allege unreasonableness of the express rate on fresh meat from Gilroy when compared with the fresh meat rates from other points.

Complainants were advised that the new express rates promulgated by the Commission in its decision and order in Case No. 122, would reduce the rate complained of.

TRUNKS.

I. C. 1813.

August 2, 1913.

W. H. Wiegelman, Monrovia, complained of express charge on a trunk from Los Angeles to Pasadena.

Investigation developed that the express rate, as charged was in accordance with tariffs lawfully on file with the Commission; further, that the charge for transferring the trunk from the railroad baggage room to the express office could have been saved had the baggage checks been turned over to the express company instead of a transfer company, as the express company would have performed this pick-up service free, in order to secure the business.

GUN.

I. C. 1817.

August 5, 1913.

T. J. Silsbee, Marysville, complained of the express rate on a gun in canvas case from Oakland. Complainant was advised that the express rates ordered in by the Commission on August 1st, in Case No. 122, would bring about a material reduction in charge.

EXPRESS RATES.

I. C. 1825.

August 7, 1913.

Pacific Mill and Mine Supply Company, San Francisco, alleged it forwarded two packages weighing less than twenty pounds by express and complained about the carrier charging for forty pounds because the packages were not tied together.

Complainant was informed that this was permissible under carrier's schedules lawfully on file with the Commission as it would bring about a lower charge than graduating each shipment. However, the new schedules ordered in by the Commission in Case No. 122, would materially reduce the charge.

## DRESSED MEAT.

I. C. 1990.

September 8, 1913.

William Taaffe & Company, San Francisco, complained to the Commission of express service to San Rafael and San Anselmo.

The matter being referred to carrier, the service was immediately improved, which was satisfactory to complainants.

## CHARGES.

I. C. 1999.

September 8, 1913.

Joseph Prochaska, San Diego, alleged that he forwarded a package via express to Arizona for 38 cents prepaid, that the same package returned, not prepaid, cost 80 cents and asked why the charge differed.

The shipment being interstate and moved at rates prescribed in interstate tariffs, so advised complainant, referring him to Interstate Commerce Commission.

## RATES.

I. C. 2010.

September 5, 1913.

Edw. F. O'Brien, Los Angeles, complained to the Commission of the Pacific Navigation Company charging express rates on freight shipments.

Complainant was informed that jurisdiction of the Commission over the rates of water carriers is the subject of litigation in the United States Supreme Court and when a decision is handed down the Commission will know what action to take.

## CHARGES.

I. C. 2034.

September 14, 1913.

C. B. Stroman, Galt, received two shipments via express; one from Philadelphia, Pennsylvania, seven pounds, charges \$1.85, the other from Boston, Massachusetts, weight ten pounds, charges 75 cents, and complained of inconsistency in charges.

After preliminary investigation the matter was referred to the Interstate Commerce Commission.

## RETURNED C. O. D.

I. C. 2065.

September 20, 1913.

I. Meyer, Vallejo, complained to the Commission that a C. O. D. package forwarded by express to Los Angeles had been returned without instructions to carrier to do so, thus necessitating his paying expressage both ways on the shipment.

After investigation, it was found that the goods had remained at the receiving office for sixty days, and at the expiration of that time, were returned to shipper in accordance with carrier's schedule lawfully on file with the Commission, which precludes C. O. D. packages being held for delivery beyond that period.

## RETURNED EMPTIES.

I. C. 2088.

August 9, 1913.

Henry Dowden, Jr., complained of the express rates on empty fish boxes, returned, between certain points.

Complainant was advised that these rates as well as all others, were covered by the Commission's decision and order in Case No. 122, dated the first instant.

## SERVICE.

I. C. 2150.

October 3, 1913.

F. S. Ingram, Mountain View, complained about the express service on several shipments of ice cream from San Jose, and asked that he be reimbursed for his expenses while awaiting other shipments.

Complainant was advised that while we were without jurisdiction over loss and damage claims, we would refer the matter to the carrier, the result being that the carrier appreciating the justness thereof, made settlement.

## BONDS.

I. C. 2193.

October 10, 1913.

Bank of Commerce and Trust Company, San Diego, California, forwarded two bonds, par value \$2,000.00, to Los Angeles. Through mistake of shippers, the value was shown as \$10,000.00. The above named bank desired this Commission's authority to adjust charge on basis of actual value.

Complainant was advised that if carrier made application to the Commission for permission to refund down to actual value, the matter would be given the attention it required.

COMMISSION.

I. C. 2223.

October 1, 1913.

F. Wilson, Maricopa, referred to the Commission the matter of the express company making several charges for one transaction. As the information was without detail, we communicated with the carrier and it developed that this particular transaction was a "Commission" for which the express company, under its tariffs lawfully on file, is permitted to charge for, and complainant was so informed.

BUTTER.

I. C. 2247.

October 19, 1913.

Stockton Creamery Company, Stockton, alleged that the express rate on butter from Willows is excessive when compared with butter rates between other points.

Complainant was advised that as all the express rates throughout California were under investigation, by the Commission, this subject would be given the attention it required.

GUNS.

I. C. 2251.

October 19, 1913.

A. L. Bruce, Stevensen, complained of the express charge of \$4.00 on two guns, weighing fourteen pounds, from Yosemite to Newman, alleging that carrier's agent at point of shipment quoted a charge of \$2.00.

Matter was taken up with the express company, and investigation developed that a disinterested party attended to the forwarding, and had he tied the two guns together and "trussed" them, the charge would have been approximately \$2.00, but being shipped separately and not so packed, the increased charges resulted, which is in accordance with tariffs lawfully on file with the Commission.

FRUIT AND VEGETABLES.

I. C. 2261.

October 18, 1913.

Varney Bros. & Company, El Centro, informally complained of the express rates on fresh fruit and vegetables from El Centro to Los Angeles.

Complainants were advised that as the Commission upon its own motion had investigated the reasonableness of all express rates in California, this subject would be considered in its decision and order in Case No. 122, which would likely be rendered in the near future.

PERNS.

I. C. 2382.

November 16, 1913.

R. A. Casad, Santa Cruz, alleged unreasonable express charge on shipments of ferns weighing less than 100 pounds from South Ferk to Eureka.

Complainant was advised that this, as well as numerous others of a similar purport, had been carefully considered by the Commission in its investigation of express rates and charges generally throughout California, and that the subject would be fully covered in the Commission's decision or order in Case No. 122.

EXTRA DELIVERY CHARGE.

I. C. 2404.

November 20, 1913.

S. S. Meservey, Los Angeles, complains of extra delivery charge on a prepaid shipment from Boston, Massachusetts, via express.

The gentleman was informed that, the shipment being prepaid, was evidence to the express company that the shipment was to be delivered him free of expense, and the extra charge for delivery, to a point outside free delivery zone collected of shipper. The shipment being interstate, the matter was referred to the Interstate Commerce Commission, Washington, D. C., for adjustment.

CHARGES.

I. C. 2407.

November 20, 1913.

Roy Wilson, Healdsburg, alleges unreasonable express charges of 35 cents and 45 cents, on two express packages from San Francisco, weighing five and ten pounds, respectively.

Complainant was advised that the charges assessed were lawful and in accordance with carrier's tariff on file with the Commission, but that the subject would be given consideration in the express rate investigation now in progress, which was instituted by the Commission upon its own motion.

EXTRA DELIVERY LIMITS.

I. C. 2415.

November 23, 1913.

James Smith, 1542 Eleventh ave., San Francisco, complained to the Commission about paying an extra delivery charge on shipments via express when addressed to his street and number.



Complainant was informed that free "pick up" and "delivery" was maintained by the express company within certain defined limits; this address, being outside the free zone, is subject to an extra delivery charge according to schedules lawfully on file with the Commission. Carrier contended that the volume of business to points beyond free limits does not warrant an extension of the free delivery limits. Complainant notified that he must file formal complaint should he desire to pursue the matter further.

## CLOSING OFFICE.

I. C. 2419.

November 25, 1913.

San Juan Chamber of Commerce, San Juan, protested to the Commission of the discontinuance of the express office at that point.

Upon inquiry, of the express company, we were advised that its agency is still maintained.

## BUTTER.

I. C. 2445.

December 1, 1913.

The Montague Creamery, Montague, complained of the express rate of \$1.75 per 100 pounds on butter to San Francisco.

Complainant was advised that the subject would be given careful consideration during express rate investigation instituted by the Commission upon its own motion.

## CREAM.

I. C. 2466.

December 26, 1913.

Sherry-Freitas Company, Inc., complained of the express rate of 66 cents per 100 pounds on cream from Modesto to Fresno.

The subject was taken up informally with interested carrier and the rate was reduced to 51 cents per 100 pounds, pending the Commission's decision in Case No. 122, which further reduced the rate to 27 cents per 100 pounds.

## ELECTRIC MACHINERY.

I. C. 2484.

December 9, 1913.

C. H. Taylor, Grass Valley, complained of express rate to Nevada City and alleged that the shipment was overcharged.

The rate charged was in accordance with carrier's tariffs lawfully on file with the Commission and complainant was so advised.

## MILK.

I. C. 2520.

December 13, 1913.

Charles F. Evans, Woodland, informally complained of the rate of 43½ cents per 100 pounds on milk from Woodland to Oakland and Berkeley.

Under recent decision of the Commission, the rate was reduced approximately 40 per cent and complainant was so notified.

## EXPRESS—CREAM AND MILK.

I. C. 2549.

December 17, 1913.

The Yolo County Board of Trade, Woodland, complained of the express rate of 43½ cents per 100 pounds on cream and milk to San Francisco.

The rate was reduced on March 16, 1914, by the Commission to 27 cents and complainants so advised.

## BUTTER.

I. C. 2579.

December 20, 1913.

The Montague Creamery, Montague, complained of express rate on butter to Portland and made inquiry as to the proper regulating body having jurisdiction.

The writer was directed to communicate with the Interstate Commerce Commission, Washington, D. C.

## RATES.

I. C. 3599.

May 19, 1914.

Crescent Creamery Company, Los Angeles, complained of the recent adjustment of the express rates directing the Commission's attention to the fact that the new express rates between certain points were lower than between certain other points, while the distance is practically the same in both instances.

It was explained to the complainant that the Commission in its decision and order in Case No. 122, prescribed rates but directed that in no instance were the commodity rates, then in force, to be raised; further, that this situation could not be disturbed until such time as the Commission makes a check of the new rates with the old commodity rates for various distances.



EXTRA DELIVERY CHARGE.

I. C. 2610.

December 26, 1913.

A. S. Lillie of San Francisco, complained of an extra delivery charge on express matter to his address.

Beyond certain defined limits, the express company collects an additional charge for delivery, such charge being shown in schedules lawfully on file with the Commission, is legitimate and complainant was so notified.

EXTRA DELIVERY CHARGE.

I. C. 2614.

December 25, 1913.

Robert Clark, San Francisco, registered a complaint against the express company's charge for delivery of packages to points beyond the free delivery limits.

Investigation developed that the extra delivery charge was in accord with carrier's tariffs lawfully on file with the Commission, but as the shipment had been prepaid, the package should have been delivered to consignee free of expense and the amount collected of shipper. Carrier was instructed to refund Mr. Clark, but before this was accomplished, the Commission was asked to drop the matter as Mr. Clark preferred paying the charge rather than have it collected of shipper.

AUTOMOBILE NUMBER PLATES.

I. C. 2640.

December 27, 1913.

E. L. Conger, Pasadena, complained of the express charge on a three-pound package containing automobile number plates and inquired if the State is not required to deliver the plates free of expense to party paying the automobile license.

It was found that the express charge was correct and in accordance with tariffs lawfully on file. As regards the State making free delivery, complainant was directed to communicate with the attorney-general.

EXTRA DELIVERY CHARGE.

I. C. 2659.

December 31, 1913.

Burt Edwards, Los Angeles, declined to pay 25 cents extra delivery charge on a book forwarded by express, prepaid, from New York, and in consequence, package was returned to the express company and later called for by consignee.

Complainant was advised that the Commission was without jurisdiction, due to its being an interstate movement, and directed to communicate with the Interstate Commerce Commission, Washington, D. C.; he was also advised that if the shipment weighed but two pounds, the extra delivery charge is 10 cents instead of 25 cents, but as package was prepaid, it should have been delivered him free of expense and the amount collected of shipper.

EXPRESS SHIPMENTS.

I. C. 2662.

January 2, 1914.

Gravem Inglis Baking Company, Stockton, entered a complaint against the practice of the Southern Pacific Company in refusing to carry shipments of bread by express on train No. 79 from Stockton to Tracy, Livermore and Pleasanton.

Investigation developed that passenger train No. 79 was operated on a fast schedule and handled no express; it was also developed that business offered was so small that the express company would not be justified in placing a messenger on this particular train.

The situation being fully explained, complaint was withdrawn.

AUTOMOBILE NUMBER PLATES.

I. C. 2676.

December 30, 1913.

H. E. Thomas, Alhambra, complained of the express charge of 45 cents on a package of automobile number plates weighing three pounds, from Sacramento.

Complainant advised that the charge assessed is in accordance with carrier's tariffs lawfully on file with the Commission but that under the Commission's decision and order in Case No. 122, the rate was materially reduced.

PRESERVES.

I. C. 2681.

December 27, 1913.

Mrs. C. A. Sessions, Oakland, complained of the express rate on preserves to Los Angeles.

The complainant was advised that the rate collected by the express company at time of shipment was lawful and in accord with carrier's schedules on file with the Commission, therefore, pending an adjustment of the express generally throughout California, no relief could be afforded. On March 16, 1914, rate was substantially reduced by the decision of the Commission in Case No. 122.

## AUTOMOBILE NUMBER PLATES.

I. C. 2757.

January 14, 1914.

Baker Bros., Inc., Los Angeles, received by express twenty-one automobile number plates from Sacramento, paying therefor an express charge of 45 cents per package, and asked if in view of a rate of 25 cents per package, effective January 6, 1914, it was entitled to a refund.

Complainant was advised that if the shipments moved prior to January 6, 1914, and each package weighed three pounds, the lawful charge was 45 cents per package but if forwarded subsequent thereto, they were entitled to a refund of 20 cents per package.

## EXPRESS CHARGES.

I. C. 2775.

January 15, 1914.

G. W. Hopping, Kaweah, requested the Commission to investigate an expense bill covering shipment of oranges forwarded from Lindsay to Lemon Cove, stating that the charges appeared to be excessive.

Check of the bill revealed a slight overcharge which the express company refunded.

## AUTOMOBILE NUMBER PLATES.

I. C. 2813.

January 20, 1914.

The Associated Jobbers, Los Angeles, referred to the Commission the matter of aggregating weight on eleven packages of automobile number plates shipped by express from Sacramento, and thus obtain a lower express charge than that paid, namely, \$4.95.

The Commission advised complainant that it is not permissible under tariffs lawfully on file, to aggregate weight of shipments unless all the packages were shipped at one time by one shipper to one consignee and covered by one bill of lading, but the Commission would entertain an application from the express company, for permission to make reparation based on rate of 25 cents per package, which rate became effective subsequent to the movement.

## CHARGES.

I. C. 2872.

January 24, 1914.

Prior to January 6, 1914, Cass-Smurr-Damerel Company, Los Angeles, received several shipments of automobile number plates from Sacramento, paying an express charge of 45 cents each and complained to the Commission that the charge was excessive in view of the commodity rate of 25 cents each, effective on that date voluntarily published by the express company, and asking reparation.

The Commission informed claimants that the charge assessed was lawful, and could render no assistance unless express company made application to the Commission for permission to make refund down to rate subsequently in effect.

## EXTRA DELIVERY CHARGE.

I. C. 2938.

February 6, 1914.

E. A. Carpenter, Los Angeles, complained to the Commission about paying extra delivery charge on two express shipments which were prepaid by shipper.

Complainant was informed that prepaid express matter must be delivered free of expense to addresses when beyond the free delivery zone. The subject being referred to the express company, consignee was refunded the extra delivery charges.

## CREAM.

I. C. 3008.

February 19, 1914.

T. K. Temple, vice-president of the Farmers and Merchants Bank, Lancaster, complained of the express rate on cream to Los Angeles.

The Commission in its decision in Case No. 122, reduced the rate 66 per cent on March 16, 1914, and the complainant was so informed.

## VIOLIN.

I. C. 3021.

February 19, 1914.

W. J. Connell, Gridley, shipped a violin in its own case to Livermore, paying an express charge of \$1.05, which was alleged to be excessive.

The charge found to be in accordance with tariffs lawfully on file and complainant so advised; also that a similar shipment under the express rates ordered in by the Commission in Case No. 122 would be approximately 30 per cent less.

## EXPRESS—BOOKS.

I. C. 3084.

March 4, 1914.

H. L. Colestock, Pasadena, complained of the express charge of 75 cents on six pounds of merchandise between San Francisco and Pasadena.

The charge assessed was lawful and in accordance with tariffs on file with the Commission.

On March 16th last, the Commission, in Case No. 122, ordered in an entire new set of rates and charges. Complainant was advised that a similar shipment on or after the date would cost but 34 cents.

MILK.

I. C. 3116.

February 19, 1914.

Dr. M. O. Wyatt, Esparto, complained of express rate on milk to Oakland.

The rate was reduced by the Commission on March 16, 1914, from 59 cents to 27 cents per 100 pounds. Complainant was so notified.

EXPRESS—SURVEYOR'S INSTRUMENT.

I. C. 3127.

March 12, 1914.

Charles L. Reynolds, San Francisco, complained of the express company accepting surveyor's instrument, only at the risk of the owner when shipped in its own case.

Complainant was notified that the new express classification, ordered in by the Commission on March 16th last, permits such shipments in cases or boxes, and at carrier's risk.

DELAY.

I. C. 3135.

March 13, 1914.

L. and E. Emanuel, Inc., San Francisco, forwarded a package via express addressed in care of a hotel and as there was some delay in effecting delivery they inquired if it was not the duty of the carrier's representative to inform patrons at time of shipment whether the address is within or without free delivery zone.

It developed that this hotel was not open when package reached destination; further, the package being addressed to a hotel instead of street and number, the forwarding agent had no means of determining the point. However, it is the duty of the carriers, when a package is addressed to street and number, to notify shipper if it is addressed to a point outside free delivery limits.

EXPRESS—PRUNES.

I. C. 3211.

March 23, 1914.

Robert H. Davis, Sr., Oakland, complained of failure to adjust claims for loss of a shipment of prunes from Santa Rosa to Albany, New York, November 24, 1913.

The movement being interstate, complainant was directed to address the Interstate Commerce Commission, Washington, D. C., as this Commission is without jurisdiction.

RATES.

I. C. 3212.

March 24, 1914.

A. D. Shaw, Hollister, complained of the express charge on a sixty-pound shipment from San Francisco.

Correct weight was assessed and complainant notified.

EXPRESS—EGGS.

I. C. 3348.

April 16, 1914.

H. W. L. Knoop, Berkeley, complained of the express rate on eggs from Live Oak to Berkeley.

The Commission, after investigation, found that an erroneous rate had been assessed, and the express company refunded consignee the overcharge upon its attention being called thereto.

EXPRESS—EXTRA DELIVERY CHARGE.

I. C. 3485.

May 7, 1914.

F. W. Sawyer, San Francisco, by letter complained of extra charge for delivery of express matter to his address which is outside the free delivery limits.

Extra delivery charge exacted by the express company was lawful and in accordance with tariffs on file with the Commission.

Complainant was so advised.

EXPRESS—LOSS CLAIM.

I. C. 3491.

May 6, 1914.

R. R. Pafford, Victorville, complained of nonadjustment of claim for loss of a gun shipped by express from Alpiria, Texas, to El Centro, California.

The Commission having no jurisdiction over interstate matters, complainant was directed to communicate with the Interstate Commerce Commission, Washington, D. C.

## REPARATION REFUND.

I. C. 3492.

May 6, 1914.

*Selby Smelting and Lead Company vs. Wells Fargo & Company.* Permission granted May 19, 1914, to make a reparation refund of \$31.51, account unreasonable rate applied on twenty-four shipments of gold and silver cyanides forwarded from San Francisco to Selby June 14 to November 8, 1913.

## Dogs.

I. C. 2587.

December 20, 1913.

F. Sutton of San Francisco complained of the express rate on dogs, not boxed or crated, between San Francisco and Sausalito or Point Reyes, due to such animals being accepted for forwarding at an estimated weight.

Investigation developed that the weight used was in accordance with carrier's tariffs lawfully on file with the Commission, and complainant was so advised; further, that while the actual weight of the animals was considerably less than the estimated weight used, said estimated weight is employed to compensate carrier for the space occupied by the dogs.

## RATES.

I. C. 3731.

June 10, 1914.

The Metropolitan Ice Cream Company, Los Angeles, complained of the recent adjustment of the express rates, directing the Commission's attention to the fact that the new express rates between certain points were lower than between certain other points, while the distance is practically the same in both instances.

It was explained to the complainant that the Commission in its decision and order in Case No. 122, prescribed rates but directed that in no instance were the commodity rates, then in force, to be raised; further, that this situation could not be disturbed until such time as the Commission makes a check of the new rates with the old commodity rates for various distances.



# INFORMAL TELEPHONE COMPLAINTS.

## DELAY IN SECURING SERVICE.

I. C. 1640.

*T. J. Wilson vs. The Pacific Telephone and Telegraph Company.* On July 1, 1913, T. J. Wilson, on behalf of certain parties in Eccles, made complaint of The Pacific Telephone and Telegraph Company regarding delayed installation of telephone service.

Investigation on the part of the Commission developed the fact that the cause of the delay was due partly to the lack of facilities; also as to certain difficulties of the telephone company in securing rights of way for the proposed lines. On the securing of same, telephone service for complainants was regularly installed.

## INABILITY TO SECURE SERVICE.

I. C. 1700.

*G. T. Morgan vs. The Pacific Telephone and Telegraph Company.* On July 14, 1913, G. T. Morgan, Sherman, made complaint of The Pacific Telephone and Telegraph Company relative to his inability to obtain telephone service.

Upon investigation by this Commission it was found that the delay was due to the lack of facilities, on completion of which service was regularly installed.

## INABILITY TO OBTAIN SERVICE.

I. C. 1703.

*Mrs. F. G. Kennedy vs. The Pacific Telephone and Telegraph Company.* On July 13, 1913, Mrs. F. G. Kennedy, Saratoga, complained of The Pacific Telephone and Telegraph Company regarding inability to obtain telephone service.

Investigation by the Commission disclosed the fact that the delay was due to negotiations on the part of the above company relative to the purchase of the plant of the Saratoga Telephone Company. On the completion of same, service was regularly installed.

## TELEPHONE SERVICE BETWEEN SAN DIEGO AND OCEAN BEACH.

I. C. 1711.

*Frank B. McElwee vs. The Pacific Telephone and Telegraph Company.* On July 15, 1913, Frank B. McElwee, Ocean Beach, made complaint of The Pacific Telephone and Telegraph Company relative to the poor telephone service between San Diego and Ocean Beach.

Investigation by this Commission disclosed the fact that the poor service was due to the placing of certain trunk lines between San Diego and Ocean Beach which were in course of construction at the time.

Complainant was assured by the telephone company that satisfactory service would be provided on completion of said trunk lines.

## INABILITY TO OBTAIN SERVICE.

I. C. 1713.

*C. E. Fosberg vs. Kingsburg Telephone Company.* On July 16, 1913, C. E. Fosberg, Kingsburg, made complaint of the Kingsburg Telephone Company relative to his inability to obtain telephone service.

Investigations by the Commission disclosed the fact that the complainant applied for farmer line service from the above company while located within the exchange radius of The Pacific Telephone and Telegraph Company. The latter company stated that they were ready, willing and able to supply service to complainant at regular exchange rates.

Complainant was advised that to allow the Kingsburg Telephone Company to connect additional stations to their circuit within the Pacific Company's exchange radius would be to allow the latter company to furnish service at rates which are not in accordance with rate schedules on file with the Commission.

## INDUCTIVE INTERFERENCE.

I. C. 1724.

*E. Poorman vs. Southwestern Home Telephone Company.* On July 7, 1913, Samuel Poorman, 1724 Santa Clara avenue, Alameda, called at this Commission on behalf of E. Poorman regarding inductive interference between the lines of the Southwestern Home Telephone Company and the Southern Sierras Power Company at Perris.

Investigation by the Commission developed the fact that permission was granted the Southwestern Home Telephone Company to purchase a line from the Pacific

Telephone and Telegraph Company which would enable them to metallicize their circuits thereby correcting the inductive interference.

Upon completion of the above work the complaint was satisfactorily adjusted.

#### INABILITY TO OBTAIN SERVICE.

I. C. 1727.

November 4, 1913.

*Mrs. Anna Morrison Reed vs. The Pacific Telephone and Telegraph Company.* During July, 1913, Mrs. Anna Morrison Reed, Petaluma, made complaint of The Pacific Telephone and Telegraph Company relative to the inability to obtain telephone service.

Investigation by the Commission developed the fact that the Telephone Company had refused to supply the complainant with service owing to the non-payment of bills. The complainant contended that the said bills were incurred by lessees of her business, which was denied by the Telephone Company.

Complainant was advised that further action on the part of the Commission was dependent upon the filing of a formal complaint.

#### DELIVERY OF TELEGRAM.

I. C. 1731.

October 15, 1913.

*James H. Pierce vs. The Pacific Telephone and Telegraph Company.* On July 19, 1913, James H. Pierce, Three Rivers, made complaint regarding the refusal of The Pacific Telephone and Telegraph Company to accept any message to be telephoned over the lines of the Three Rivers Home Telephone Company.

Investigation by the Commission developed the fact that the disagreement between the two companies was due to the Three Rivers Home Telephone Company having discontinued the connection some years before through a question of rates.

Complainant was advised that to require The Pacific Telephone and Telegraph Company to deliver messages to the station on the line referred to, would be to require them to furnish service which the owners of that line have voluntarily withdrawn.

#### INDUCTIVE INTERFERENCE.

I. C. 1736.

October 15, 1913.

*Mill Creek Telephone Company vs. California Telephone and Light Company.* On July 21, 1913, the Mill Creek Telephone Company complained of the California Telephone and Light Company regarding inductive interference caused by the proximity of certain transmission lines.

Upon investigation by the Commission, satisfactory arrangements were made between the companies through the transference of several spans, thereby giving proper clearances to the complainant's telephone lines.

#### DELAY IN INSTALLATION OF SERVICE.

I. C. 1746.

*E. C. Cunningham vs. The Pacific Telephone and Telegraph Company.* On July 24, 1913, E. C. Cunningham, Young Men's Christian Association, Stockton, complained of The Pacific Telephone and Telegraph Company regarding delay in the installation of telephone service.

Investigation by the Commission developed the fact that the delay was due to a lack of facilities in the vicinity of the complainant's residence. Service was regularly installed upon completion of the above.

#### ANSWERING OF TOLL CALLS.

I. C. 1752.

*Trustees of Redwood City vs. The Pacific Telephone and Telegraph Company.* On July 24, 1913, the board of trustees, Redwood City, made complaint of The Pacific Telephone and Telegraph Company regarding toll calls between Redwood City and various municipalities which were being answered by parties other than those desired.

Investigations by this Commission disclosed the fact that the service complained of was what is known as "Two-number Service."

Complainant was advised that in the above service the Telephone Company does not attempt to secure, and is not responsible for securing any particular person at the point called.

#### INTERFERENCE WITH LINES.

I. C. 1765.

*Honey Lake Valley Mutual Telephone Association vs. Certain Private Telephone Lines.* On July 24, 1913, the Honey Lake Valley Mutual Telephone Association, Susanville, complained of the interference with their lines caused by certain local private lines.

The complainant was advised by the Commission that if the local private lines referred to were operated as mutual lines this Commission would have no jurisdiction in the matter and recourse would be through civil proceedings. Full information bearing upon public utilities was forwarded complainant.

#### ALLEGED NON-DELIVERY OF TELEGRAM.

I. C. 1814.

*J. M. Eshleman vs. Western Union Telegraph Company.* On August 1, 1913, J. M. Eshleman, President of the California State Railroad Commission, made complaint of the Western Union Telegraph Company regarding an alleged non-delivery of a telegram.

Investigation by the Commission developed the fact that the complainant filed a telegram at Felton addressed to C. E. Duncomb, Berkeley. The said telegram was delayed partly in transmission, also to several unsuccessful attempts to deliver same. Mr. Duncomb stated that the telegram was not received owing to same being mislaid. The telegraph company was willing to refund the tolls to the complainant.

#### RECORD OF INCOMING CALLS.

I. C. 1842.

November 20, 1913.

*Associated Chambers of Commerce of Orange County vs. The Pacific Telephone and Telegraph Company.* During August, 1913, the Associated Chambers of Commerce of Orange County made complaint of The Pacific Telephone and Telegraph Company regarding the keeping of a record of incoming calls.

The telephone company, upon the request of the Commission, presented a detailed statement giving the reason why such a record is not maintained, also showing how the proposed plan would be detrimental to the service.

The complainant was advised as to the above facts and the complaint was adjusted on this basis.

#### INABILITY TO OBTAIN SERVICE.

I. C. 1847.

October 28, 1913.

*W. G. Magoon, et al., vs. The Pacific Telephone and Telegraph Company.* On August 11, 1913, W. G. Magoon, 4225 South Vermont avenue, Los Angeles, made complaint of The Pacific Telephone and Telegraph Company regarding inability to obtain telephone service.

Investigation by the Commission disclosed the fact that the delay was due to the lack of facilities in the vicinity of the complainant. Upon completion of the necessary construction this congestion was relieved and service was regularly installed.

#### CONSTRUCTION OF LINES.

I. C. 1865.

October 30, 1913.

*Dry Creek and Healdsburg Telephone Company vs. California Telephone and Light Company.* On August 14, 1913, the Dry Creek and Healdsburg Telephone Company made complaint of the California Telephone and Light Company relative to the construction of lines.

The complainant was advised by the Commission that if a mutually satisfactory adjustment of the difficulties with the defendant was impossible further recourse would be as provided in the Public Utilities Act.

#### EXTENSION ON FOUR-PARTY LINE.

I. C. 1867.

December 23, 1913.

*F. H. Eastey vs. The Pacific Telephone and Telegraph Company.* August 14, 1913, F. H. Eastey, Success Company's Branch Offices, San Jose, made complaint of The Pacific Telephone and Telegraph Company regarding an extension telephone on a four-party line.

The complainant stated that the telephone company had refused to comply with the above request although certain subscribers were receiving this service.

Investigation by the Commission disclosed the fact that it is the practice of the telephone company to restrict the connection of extension telephones on four-party lines to protect the service, and the complainant was advised of this fact.

#### INABILITY TO OBTAIN SERVICE.

I. C. 1873.

November 4, 1913.

*R. S. Matthews vs. The Pacific Telephone and Telegraph Company.* On August 15, 1913, R. S. Matthews, Sherman, made complaint of The Pacific Telephone and Telegraph Company relative to the inability to obtain telephone service.

Upon investigation by the Commission it was found that the delay in installation was due to the lack of facilities. Service was installed upon the furnishing of the necessary facilities.



## UNSATISFACTORY SERVICE.

I. C. 1882.

November 4, 1913.

*Mrs. Hazel Francis vs. The Pacific Telephone and Telegraph Company.* On August 14, 1913, Mrs. Hazel Francis, 1698 Green street, San Francisco, made complaint of The Pacific Telephone and Telegraph Company relative to unsatisfactory telephone service.

The telephone company, after an investigation through the request of the Commission, reported that the complainant's telephone service had been very carefully supervised and was unable to find any trouble.

A service test of the complainant's telephone was made by the Commission which satisfactorily adjusted the complaint.

## INCREASED HOURS OF SERVICE.

I. C. 1893.

October 15, 1913.

*Biggs Chamber of Commerce vs. The Pacific Telephone and Telegraph Company.* On August 18, 1913, the Biggs Chamber of Commerce complained of The Pacific Telephone and Telegraph Company in regard to increasing the hours of service.

Upon investigation by the Commission, the telephone company agreed to improve the present service, and arrangements were made by which service was furnished from 7 a. m. to 9 p. m., the complaint being satisfactorily adjusted on this basis.

## INABILITY TO OBTAIN INDIVIDUAL SERVICE.

I. C. 1897.

*R. S. Kitchener vs. The Pacific Telephone and Telegraph Company.* On August 19, 1913, R. S. Kitchener, 954 Clay street, Oakland, complained of The Pacific Telephone and Telegraph Company as to his inability in securing individual service.

Upon investigation by the Commission the desired change from two-party to individual service was made. The delay was due to congested facilities.

## INABILITY TO OBTAIN SERVICE.

I. C. 2001.

November 4, 1913.

*Leonard V. Walker vs. The Pacific Telephone and Telegraph Company.* On September 11, 1913, Leonard V. Walker, 6355 Dana street, Oakland, made complaint of The Pacific Telephone and Telegraph Company relative to the inability to obtain telephone service.

Upon investigation by the Commission it was disclosed that the delay was due to congested facilities. Service was installed upon the furnishing of the necessary facilities.

## INABILITY TO OBTAIN SERVICE.

I. C. 2027.

November 3, 1913.

*W. G. Eggleston vs. The Pacific Telephone and Telegraph Company.* During September, 1913, W. G. Eggleston, 5876 Ocean View drive, Oakland, made complaint of The Pacific Telephone and Telegraph Company relative to the inability to obtain telephone service.

Upon investigation by the Commission it was found that the delay in installation was due to congested facilities. The complainant later canceled his order for service, although the telephone company stated that they were ready, willing and able to supply same.

## INABILITY TO OBTAIN SERVICE.

I. C. 2046.

November 4, 1913.

*F. W. Kleinsmith vs. The Pacific Telephone and Telegraph Company.* During September, 1913, F. W. Kleinsmith, 292 Surrey street, San Francisco, made complaint of The Pacific Telephone and Telegraph Company relative to the inability to obtain telephone service.

Upon investigation by the Commission it was disclosed that the delay was due to congested facilities. Service was installed upon the furnishing of the necessary facilities to this district.

## MAINTENANCE OF LINE.

I. C. 2094.

March 31, 1914.

*W. O. Fassett vs. Eel River and Southern Telephone Company.* September 20, 1913, W. O. Fassett, Alton, made complaint of the Eel River and Southern Telephone Company regarding the maintenance of a line.

Through investigations by this Commission it developed that the complainant was situated about eight and one half miles from the Ferndale exchange of the above company, which company owned and maintained the line to within two miles of the complainant's residence: the maintenance of the balance of the line being disputed. It further developed that this line had been constructed several years previous by



private persons who had always maintained same. The complainant stated, upon being advised of this fact, that the matter had been satisfactorily adjusted.

INABILITY TO OBTAIN SERVICE.

I. C. 2122.

November 20, 1913.

*Clarence E. Engvick vs. The Pacific Telephone and Telegraph Company.* September 24, 1913, Clarence E. Engvick, 2212 Forty-first avenue, Oakland, made complaint of The Pacific Telephone and Telegraph Company regarding the inability to obtain telephone service.

Investigation by the Commission developed the fact that the delay in installation was due to the shortage of facilities. Service was installed October 4, 1913.

REQUIREMENT OF DEPOSIT.

I. C. 2126.

November 4, 1913.

*Bud Gaillbreath vs. The Pacific Telephone and Telegraph Company.* On September 28, 1913, Bud Gaillbreath, Coalinga, made complaint of The Pacific Telephone and Telegraph Company relative to the requirement of a deposit before the installation of service.

Complainant was advised that the requirement of a deposit by the above company was one of their regulations on file with this Commission in accordance with General Order No. 15, and the reasonableness of which the Commission had not as yet passed upon.

INABILITY TO OBTAIN SERVICE.

I. C. 2162.

March 7, 1914.

*D. O. Cantwell et al. vs. The Pacific Telephone and Telegraph Company.* September 24, 1913, D. O. Cantwell, Fifty-fourth street and Second avenue, Los Angeles, et al., made complaint of The Pacific Telephone and Telegraph Company regarding their inability to obtain telephone service.

Upon investigation by the Commission the telephone company filed a detailed statement setting forth the conditions with which it claimed to be confronted in the matter of providing necessary facilities in this locality, also stating that the above was being completed as rapidly as could be consistently done and that to furnish temporary service would result in an ultimate loss.

Complainant alleged that other parties had secured service, although his application had been made considerably in advance. It was disclosed by the Commission that the complainant had canceled his order prior to the time service was installed for the other parties.

TEMPORARY DISCONNECTION OF SERVICE.

I. C. 2190.

November 20, 1913.

*J. Micheli vs. The Pacific Telephone and Telegraph Company.* October 11, 1913, J. Micheli, 209 Twenty-ninth street, San Francisco, made complaint of The Pacific Telephone and Telegraph Company regarding the temporary disconnection of telephone service.

Investigation by the Commission developed the fact that the complainant's telephone was disconnected for non-payment of bills. A payment was tendered; the above company accepted same and restored service.

INABILITY TO OBTAIN SERVICE.

I. C. 2297.

January 8, 1914.

*S. M. Hanna vs. The Pacific Telephone and Telegraph Company.* October 25, 1913, S. M. Hanna, Fifty-fourth street and First avenue, Los Angeles, made complaint of The Pacific Telephone and Telegraph Company regarding his inability to obtain telephone service.

Upon investigation by the Commission it was disclosed that the telephone company was unable to supply service until relief could be provided due to the lack of facilities. The complainant was advised of this fact and also to the effect that any further action on the part of the Commission would be dependent upon the filing of a formal complaint.

PLACING BUSINESS AND RESIDENCE TELEPHONES ON SAME CIRCUIT.

I. C. 2302.

December 4, 1913.

*Building Trades Council of Santa Clara County vs. The Pacific Telephone and Telegraph Company.* October 28, 1913, Walter G. Mathewson, on behalf of the Building Trades Council of Santa Clara County, San Jose, made complaint of The Pacific Telephone and Telegraph Company regarding the placing of business and residence telephones on the same circuit.

Complainant was advised that there is nothing in the schedules of the telephone company which have been filed with this Commission prohibiting them from placing business and residence telephones on the same circuit.

#### INABILITY TO OBTAIN SERVICE.

I. C. 2366.

June 18, 1914.

*Wm. Semmel vs. California Telephone and Light Company.* January 15, 1914. Wm. Semmel, El Verano, made complaint of the California Telephone and Light Company regarding the inability to obtain telephone service.

The above company was not disposed to install service to the complainant owing to the amount of necessary construction and that the revenue derived from same would not insure a reasonable return on the investment. The Commission advised the telephone company that under the showing which was made there was no good reason why the installation of service should be delayed, and that the complainant could avail himself of the privilege of filing a formal complaint. The company upon being advised of the foregoing facts elected to furnish the desired service.

#### INABILITY TO OBTAIN SERVICE.

I. C. 2385.

December 23, 1913.

*Walter A. Rivers vs. The Pacific Telephone and Telegraph Company.* November 16, 1913. Walter A. Rivers, 182 Bartlett street, San Francisco, made complaint against The Pacific Telephone and Telegraph Company regarding the inability to obtain telephone service.

Upon investigation by the Commission, it was disclosed that the delay in installation was due to rain storms which caused the cable in the vicinity of his residence to be temporarily out of service. Service for complainant was installed November 25th.

#### INABILITY TO OBTAIN SERVICE.

I. C. 2406.

December 27, 1913.

*T. W. Decker vs. The Pacific Telephone and Telegraph Company.* November 20, 1913. T. W. Decker, Sanger, made complaint of The Pacific Telephone and Telegraph Company regarding the inability to obtain telephone service in Fresno.

Upon investigation by the Commission it was disclosed that the delay in installation was due to the lack of facilities. Service to complainant was furnished upon completion of the necessary facilities.

#### INABILITY TO OBTAIN SERVICE.

I. C. 2411.

January 20, 1914.

*Mrs. Susie A. Dalziel vs. The Pacific Telephone and Telegraph Company.* November 22, 1913. Mrs. Susie A. Dalziel, San Leandro, made complaint of The Pacific Telephone and Telegraph Company regarding the inability to obtain telephone service.

Upon investigation by the Commission it was disclosed that the delay was due to congested facilities. This condition was relieved by the furnishing of the necessary facilities and the telephone was installed on December 1st.

#### INABILITY TO OBTAIN SERVICE.

I. C. 2452.

December 23, 1913.

*R. Ray Wortz vs. The Pacific Telephone and Telegraph Company.* November 24, 1913. R. Ray Wortz, 2711 Tenth avenue, Oakland, made complaint of The Pacific Telephone and Telegraph Company regarding the inability to obtain telephone service.

Upon investigation it was disclosed that the delay in installation was due to right-of-way difficulties. The necessary arrangements were made and service was installed.

#### UNSATISFACTORY TWO-PARTY SERVICE.

I. C. 2467.

January 26, 1914.

*Dr. Eugenia Colvin vs. The Pacific Telephone and Telegraph Company.* December 4, 1913. Dr. Eugenia Colvin, Sonoma, made complaint of The Pacific Telephone and Telegraph Company regarding unsatisfactory two-party service.

Complainant advised that the above company had transferred the telephone to a line on which a business subscriber was connected, and in view of this, complainant refused to pay for service.

Upon investigation by the Commission, the telephone company admitted that the above was the case and restored service and adjusted the account to the satisfaction of the complainant.

## INABILITY TO OBTAIN SERVICE.

I. C. 2474.

February 13, 1914.

*J. D. Cart vs. The Pacific Telephone and Telegraph Company.* During December, 1913, J. D. Cart, 316 Glen place, Los Angeles, made complaint of The Pacific Telephone and Telegraph Company regarding the inability to obtain telephone service.

Investigation by the Commission disclosed the fact that the delay in installation was due to congested cable facilities. Upon completion of the necessary facilities the service was installed.

## INABILITY TO OBTAIN SERVICE.

I. C. 2475.

March 12, 1914.

*L. F. Linn vs. Monrovia Telephone and Telegraph Company.* During December, 1913, L. F. Linn, 807 South Mayflower avenue, Monrovia, made complaint regarding the inability to obtain telephone service.

Upon investigation by the Commission it was disclosed that the complainant lived in an isolated section which lacked facilities. However, a vacancy occurred in the vicinity and the complainant was furnished service.

## INABILITY TO OBTAIN SERVICE.

I. C. 2476.

February 6, 1914.

*Mrs. Louis Boesch vs. The Pacific Telephone and Telegraph Company.* December 10, 1913, Mrs. Louis Boesch, 109 North Pacific boulevard, Huntington Park, made complaint of The Pacific Telephone and Telegraph Company regarding the inability to obtain telephone service.

Through investigation by the Commission it was disclosed that the delay in installation was due to congested cable facilities. Upon completion of the necessary facilities the service was installed on December 26th.

## UNSATISFACTORY SUBURBAN SERVICE.

I. C. 2477.

January 29, 1914.

*Mrs. B. W. Hayward vs. The Pacific Telephone and Telegraph Company.* December 4, 1913, Mrs. B. W. Hayward, 115 West Ninetieth street, Los Angeles, made complaint of The Pacific Telephone and Telegraph Company regarding unsatisfactory suburban service.

Upon investigation by the Commission it was disclosed that the complainant had requested the telephone company to change the telephone from suburban to four-party service, but the above company stated that, owing to congested cable facilities, they were unable to do so. The condition was later relieved and the desired change was made on December 26th.

## INABILITY TO OBTAIN SERVICE.

I. C. 2500.

February 6, 1914.

*Mrs. F. W. Pelton vs. The Pacific Telephone and Telegraph Company.* December 10, 1913, Mrs. F. W. Pelton, 474 Rose street, Oakland, made complaint of The Pacific Telephone and Telegraph Company regarding the inability to obtain telephone service.

Upon investigation by the Commission it was disclosed that the delay in installation was due to congested cable facilities. A vacancy having occurred, the telephone was installed on December 18th.

## DELAY IN INSTALLATION OF SERVICE.

I. C. 2502.

February 6, 1914.

*J. O. Miller vs. The Pacific Telephone and Telegraph Company.* December 10, 1913, J. O. Miller, 111 North Pacific boulevard, Huntington Park, made complaint of The Pacific Telephone and Telegraph Company regarding the delay in installation of telephone service.

It was disclosed, through investigation by the Commission, that the delay was due to the lack of facilities; however, this condition was later relieved and service was installed on December 24th.

## INABILITY TO OBTAIN SERVICE.

I. C. 2524.

January 26, 1914.

*Dr. Otto Bames vs. The Pacific Telephone and Telegraph Company and The Home Telephone and Telegraph Company of Los Angeles.* December 11, 1913, Dr. Otto Bames, 217 North Pacific boulevard, Huntington Park, made complaint of The Pacific Telephone and Telegraph Company and The Home Telephone and Telegraph Company of Los Angeles regarding his inability to obtain telephone service.

Upon investigation by the Commission the fact was disclosed that the Home Com-



pany was delayed in the installation due to congested facilities. An early vacancy occurred and service was installed.

The Pacific Company had installed a two-party telephone in place of individual service which had been requested. Upon the relief of the congested cable facilities the desired change was made.

#### INABILITY TO OBTAIN SERVICE.

I. C. 2548.

January 27, 1914.

*Morse & Langdon vs. Colusa County Telephone Company and The Pacific Telephone and Telegraph Company.* December 16, 1913, Morse & Langdon, Colusa, made complaint of the Colusa County Telephone Company and The Pacific Telephone and Telegraph Company regarding the inability to obtain telephone service at Princeton.

Complainants stated that owing to the contractual relations between the above companies, the Colusa County Telephone Company operating in Colusa County and The Pacific Telephone and Telegraph Company operating in Glenn County, they were unable to obtain service between their ranch located in Glenn County and the exchange at Princeton, Colusa County.

Upon investigation by the Commission, the Pacific Company stated that they were willing that the Colusa Company furnish the desired service provided that the complainants discontinue their present connection with the Willows exchange of the Pacific Company. Complainants stated that they were perfectly satisfied with the arrangement.

#### INABILITY TO OBTAIN SERVICE.

I. C. 2555.

February 6, 1914.

*H. A. Barber vs. The Pacific Telephone and Telegraph Company.* During December, 1913, H. A. Barber, 1930 Twenty-second street, Santa Monica, made complaint of The Pacific Telephone and Telegraph Company regarding the inability to obtain telephone service.

Investigations by the Commission disclosed the fact that the delay in installation was due to the lack of facilities. Upon completion of the necessary facilities the service was installed.

#### DISCONNECTION OF SERVICE.

I. C. 2574.

June 4, 1914.

*W. P. McFaul vs. San Benito Vineyard and Hollister Water and Telephone Company.* During December, 1913, W. P. McFaul, 320 Chronicle Building, San Francisco, made complaint of the San Benito Vineyard and Hollister Water and Telephone Company regarding the disconnection of telephone service at Hollister.

Upon investigation by the Commission it was disclosed that the above company had connection with The Pacific Telephone and Telegraph Company at Hollister on the standard farmer line basis, and from the information furnished it was not clear as to whether the farmer line company was actually operating as a public utility. This company refused to allow further service to the complainant because of past difficulties in securing payment of accounts.

The Commission requested the complainant to furnish more complete information, but this was not complied with, therefore the complaint was closed on that basis.

#### DISCONNECTION OF SERVICE.

I. C. 2609.

February 9, 1914.

*Mrs. C. Lintrup vs. The Pacific Telephone and Telegraph Company.* December 26, 1913, Mrs. C. Lintrup, 3703 Thirty-fifth avenue, Fruitvale, made complaint of The Pacific Telephone and Telegraph Company regarding the disconnection of service.

Complainant stated that, on several occasions, she had requested the telephone company to send a collector for the monthly payments, but the company had not only refused, but had disconnected the telephone owing to non-payment of bills.

Upon investigation by the Commission the telephone company stated that their records did not indicate that requests to have a collector call were made at intervals prior to the disconnection of service. However, in view of the subscriber's claim that this was done, service was restored and an allowance made for the period of disconnection. Complainant stated that this was entirely satisfactory.

#### UNSATISFACTORY SERVICE.

I. C. 2624.

February 9, 1914.

*W. T. Somes et al. vs. San Fernando Valley Home Telephone Company.* November 14, 1913, W. T. Somes et al., La Canada, made complaint by petition of the San Fernando Valley Home Telephone Company regarding unsatisfactory service.



Complainant was advised that F. D. Lanterman, one of the signers of the petition, had previously filed a similar complaint relative to the service of the above company; also to the fact that the Commission, after informal investigations, had informed Mr. Lanterman that the merits of the case could not be determined without a formal hearing in accordance with the Public Utilities Act.

The Commission advised Mr. Somes that further action was dependent upon the filing of a formal complaint.

CONNECTION OF STATIONS TO FARMER LINES.

I. C. 2646.

March 6, 1914.

*Elmer Snyder vs. The Pacific Telephone and Telegraph Company.* December 29, 1913. Elmer Snyder, President Carneros Rural Telephone Company, Aromas, complained that The Pacific Telephone and Telegraph Company had denied his company the privilege of connecting additional stations to his farmer lines when such stations could be served by suburban lines of The Pacific Telephone and Telegraph Company and connecting with the Watsonville Exchange.

Upon investigation by the Commission it was disclosed that there was no reason why the above stations could not be connected to the lines of the complainant, and arrangements were made to make the connections.

INABILITY TO OBTAIN SERVICE.

I. C. 2648.

August 18, 1914.

*H. E. Keeney vs. Glenn County Telephone Company.* December 27, 1913. H. E. Keeney, U. S. Rancho, Willows, made complaint of the Glenn County Telephone Company regarding the inability to obtain telephone service.

The above company was not disposed to furnish service to the complainant owing to the amount of necessary construction and that the revenue derived from same would not insure a reasonable return on the investment, also that the cost of providing service would be prohibitive.

The complainant was advised that he could avail himself of the privilege of filing a formal complaint and that further action on the part of this Commission was dependent upon the filing of same.

INABILITY TO OBTAIN CONNECTION.

I. C. 2527.

*G. J. Anloff vs. The Pacific Telephone and Telegraph Company and W. T. Knox.* December 12, 1913. G. J. Anloff, Grafton, made complaint of The Pacific Telephone and Telegraph Company and W. T. Knox regarding the inability to obtain telephone connection at Knights Landing.

Complainant stated that he had been receiving telephone service on a farmer line out of Woodland but same had been discontinued for the reason that he was not a stockholder in the line and in order to obtain service a line running from Woodland to within a short distance from Knights Landing had been purchased.

Upon investigation by the Commission it was disclosed that the complainant had desired to extend his line into Knights Landing and to furnish service to various persons but the telephone company operating at that point had refused to allow the said connection.

The complainant was advised that the construction of the line into territory already served by another telephone company operating as a public utility can not be permitted without a certificate of public convenience and necessity as provided in the Public Utilities Act.

CONNECTING INSTRUMENTS ON RURAL LINES.

I. C. 2731.

February 19, 1914.

*Alex Graybiel vs. The Pacific Telephone and Telegraph Company.* January 9, 1914. Alex Graybiel, Chico, made complaint regarding the refusal of The Pacific Telephone and Telegraph Company to allow any but Bell instruments to be connected on rural lines.

It was disclosed, upon investigation by the Commission, that this matter was the result of a misunderstanding on the part of the representatives of the telephone company. Arrangements were made to connect the instruments as desired by the complainants which satisfactorily adjusted the complaint.

CONNECTION FOR PRIVATE LINES.

I. C. 2735.

*J. A. McPheeters vs. Telephone Company* (Name not given). January 4, 1914. J. A. McPheeters, Oakhurst, made complaint whether or not a public utility (tele-

phone company not named) may be required to allow connection for private telephone lines when payment for such connection is tendered.

The above complaint lacked the details of the matter and the complainant was advised that before the Commission could intelligently reply it was essential that specific information be furnished; this, however, was not done and the complaint was closed on that basis.

#### INABILITY TO OBTAIN SERVICE.

I. C. 2766.

*John W. Ward vs. The Pacific Telephone and Telegraph Company.* January 15, 1914. John W. Ward, 6108 Hillegass avenue, Oakland, made complaint of The Pacific Telephone and Telegraph Company regarding his inability to obtain telephone service.

It was disclosed upon investigation by the Commission that the delay in installation was due to the lack of facilities. This condition was later relieved and the service was installed on January 20th.

#### INABILITY TO OBTAIN SERVICE.

I. C. 2902.

*C. W. Currie vs. The Pacific Telephone and Telegraph Company.* January 14, 1914. C. W. Currie, Chico, made complaint of The Pacific Telephone and Telegraph Company regarding the inability to obtain telephone service.

Upon investigation by the Commission the telephone company stated that the complainant was situated in a section where there were no facilities but that the necessary work for the relief of the above district was being completed as rapidly as could be consistently done. The complainant, upon being advised of this fact, considered the matter closed.

#### INABILITY TO OBTAIN EXTENSION SERVICE.

I. C. 2920.

*Andrew Y. Wood vs. The Pacific Telephone and Telegraph Company.* February 4, 1914. Andrew Y. Wood, 28 Montgomery street, San Francisco, made complaint regarding the inability to obtain extension service.

Upon investigation by the Commission the above was installed on February 6th.

#### SERVICE.

I. C. 3018.

*F. de Journal vs. The Pacific Telephone and Telegraph Company.* February 21, 1914. F. de Journal, Burlingame, made complaint relative to the telephone service furnished by The Pacific Telephone and Telegraph Company.

Upon investigation by the Commission the telephone company stated that the complainant's telephone was out of order for a few days due to trouble experienced from storms. The line was placed in a first class condition and the complainant advised that he considered the matter as closed.

#### RESTRICTING TOLL SERVICE.

I. C. 3033.

May 12, 1914.

*W. H. Hackenberger vs. The Pacific Telephone and Telegraph Company.* February 23, 1914. W. H. Hackenberger, 122 East Main street, Visalia, made complaint of The Pacific Telephone and Telegraph Company, stating that he had been billed for certain toll calls originating at his telephone although same had been placed by another party and that, in view of his refusal to pay same, further toll service had been denied.

Upon investigation by the Commission, it was disclosed that the above were the facts of the case, and upon payment of the toll charges by the complainant, toll service was restored.

#### INSTALLATION OF SERVICE.

I. C. 3050.

April 2, 1914.

*L. R. Meak vs. The Pacific Telephone and Telegraph Company.* February 26, 1914. L. R. Meak, president of the Byron Hot Springs, Inc., made complaint of The Pacific Telephone and Telegraph Company regarding the installation of telephone service at his hotel.

Upon investigation by the Commission, the telephone company agreed to furnish service on the basis of a toll agency agreement which satisfactorily adjusted the complaint.

## RIGHT TO REQUIRE PATRONS TO SIGN CONTRACTS FOR SERVICE.

I. C. 3062.

June 18, 1914.

*L. A. Mervay vs. The Pacific Telephone and Telegraph Company.* March 2, 1914. L. A. Mervay, 675 Eleventh street, Oakland, made complaint regarding the right of The Pacific Telephone and Telegraph Company to require its patrons to sign contracts for service.

Complainant was advised that, in compliance with General Order No. 15 of this Commission, the above company filed its schedule of rates and the rules and regulations affecting same, among which was the provision for the signing of contracts; also, that this provision is lawful until changed by order of the Commission or voluntarily discontinued by the company.

This Commission, upon being requested to authorize the cancellation of the contract, forwarded the necessary instructions covering the filing of a formal complaint in accordance with the Public Utilities Act, and the complainant was advised that further action was dependent upon the filing of same.

## SERVICE.

I. C. 3068.

*Frank A. Greene vs. Happy Valley Telephone Company.* March 2, 1914, Frank A. Greene, Inc., made complaint of the Happy Valley Telephone Company regarding the service; also requested information relative to the construction and operation of another telephone line in this locality.

Complainant was advised that it was the duty of the above company, as a public utility, to furnish reasonable service, and that the Commission would entertain any statements of fact which might be presented.

The Commission forwarded a copy of the Public Utilities Act which covered the information requested regarding the construction of telephone lines.

## DELAY IN RESTORING TOLL SERVICE.

I. C. 3070.

*C. S. Thompson vs. United States Long Distance Telephone and Telegraph Company and Consolidated Utilities Company.* March 2, 1914, C. S. Thompson, Hynes, made complaint of the United States Long Distance Telephone and Telegraph Company and Consolidated Utilities Company regarding the delay in restoring toll service.

Upon investigation by the Commission it was disclosed that the lines of the above companies were completely destroyed, due to floods, and owing to the condition of the roads it was impossible to immediately repair same.

Service was restored on March 7th which satisfactorily adjusted the matter.

## TWO-NUMBER TOLL SERVICE BETWEEN SAN FRANCISCO AND SAN MATEO.

I. C. 3089.

*H. M. Brace vs. The Pacific Telephone and Telegraph Company.* March 7, 1914, H. M. Brace, 519 California street, San Francisco, made complaint of The Pacific Telephone and Telegraph Company regarding the two-number toll service between San Francisco and San Mateo.

Upon investigation by the Commission the telephone company stated that exclusive two-number service between the above points has been in effect for several years and has met with approval generally. The further statement was made that this facilitated service was very desirable for various reasons and it would be a distinct step backward to re-establish optional particular party service where the volume of traffic has warranted the establishment of exclusive two-number service.

The complainant was advised of the above facts and no reply being made thereto, the Commission considered the matter as closed.

## REFUSAL TO PURCHASE LINE.

I. C. 3104.

*W. L. Beacock vs. Campbell Telephone Company.* March 9, 1914, W. L. Beacock, Campbell, made complaint of the Campbell Telephone Company relative to the refusal of that company to purchase his telephone line.

Upon investigation by this Commission it was disclosed that no unusual conditions existed and that the telephone company was within its rights in refusing to purchase the complainant's lines. The complainant was receiving service under the same conditions as other subscribers.



## INABILITY TO OBTAIN SERVICE IN SOUTHERN PACIFIC DEPOT.

I. C. 3105.

August 31, 1914.

*N. B. Clarke et al. vs. Western Union Telegraph Company.* March 10, 1914. N. B. Clarke et al., Thalheim, made complaint of the Western Union Telegraph Company regarding the inability to obtain telegraph service in the Southern Pacific depot.

Upon investigation by this Commission the telegraph company stated that the cost of rendering this service in their own office or upon a joint agency basis would be prohibitive in comparison with the revenue to be derived from that source. The Southern Pacific Company advised that they do not require telegraph facilities at Thalheim, and that the installation of a telegraph office would impose an expense which would be unwarranted by the size of the community to be served. The complainants were advised that this Commission is not empowered by law to direct the establishment of such facilities, except after a formal hearing it is apparent from the evidence introduced that such facilities are justified and required; also that further action on the part of this Commission was dependent upon the filing of a formal complaint.

## INABILITY TO OBTAIN SERVICE.

I. C. 3111.

May 25, 1914.

*George Manz vs. The Pacific Telephone and Telegraph Company.* March 11, 1914. George Manz, Woodland, made complaint of The Pacific Telephone and Telegraph Company regarding the inability to obtain telephone service.

Upon investigation by the Commission it was disclosed that the delay in installation was due to the lack of facilities. The telephone was installed as soon as this condition was relieved.

## DELAY IN INSTALLING SERVICE.

I. C. 3122.

*Mrs. A. C. Lehmann vs. The Pacific Telephone and Telegraph Company.* March 11, 1914. Mrs. A. C. Lehmann, 61 East Santa Clara street, San Jose, made complaint of The Pacific Telephone and Telegraph Company regarding the delay in installing telephone service.

Upon investigation by this Commission it was disclosed that the completion of the necessary construction work was delayed owing to the severe storms in the vicinity. However, the telephone was installed on March 16, which satisfactorily adjusted the matter.

## INABILITY TO OBTAIN LONG DISTANCE CONNECTION.

I. C. 3134.

*L. E. Phipps vs. The Pacific Telephone and Telegraph Company.* March 11, 1914. L. E. Phipps, Three Rivers, made complaint of The Pacific Telephone and Telegraph Company regarding the inability to obtain long distance connection.

Upon investigation by the Commission it was disclosed that the telephone company refused to grant the complainant the above service due to the fact that by means of a switching device he could transfer calls to other lines which did not have connection with the Pacific Company's exchange.

The complainant was advised that if the parties on the other lines were unwilling to pay the standard rates for the class of service which they receive they are not entitled to connection with the Pacific Company either over his line or otherwise. The complainant advised that he considered the matter as closed.

## INABILITY TO OBTAIN SERVICE.

I. C. 3164.

May 25, 1914.

*John C. Barr vs. The Pacific Telephone and Telegraph Company.* March 14, 1914. John C. Barr, San Gabriel, made complaint of The Pacific Telephone and Telegraph Company regarding the inability to obtain telephone service.

Upon investigation by the Commission it was disclosed that the complainant was located in a section which lacked facilities. Telephone service was furnished as soon as the necessary construction was completed.

## INABILITY TO OBTAIN SERVICE.

I. C. 3186.

July 31, 1914.

*John Berryman vs. The Pacific Telephone and Telegraph Company.* March 17, 1914. John Berryman, R. F. D. No. 3, Box No. 27, Sanger, made complaint regarding his inability to obtain telephone service from the Fresno exchange of The Pacific Telephone and Telegraph Company.

The complainant stated that after the contract for service was signed the above



company refused to install the telephone owing to the fact that the only available circuit would not permit of additional stations.

Upon investigation by this Commission The Pacific Telephone and Telegraph Company made the necessary arrangements for the furnishing of service and the telephone was installed.

#### HOURS OF SERVICE.

##### I. C. 3215.

*R. J. Batty vs. The Pacific Telephone and Telegraph Company.* March 23, 1914, R. J. Batty, Moorpark, made complaint of The Pacific Telephone and Telegraph Company regarding the hours of service.

Upon investigation by the Commission it was disclosed that it had been the practice of the complainant, and also that of several other patrons connected with the Moorpark exchange, to make voluntary contributions to the agent of the above company for the purpose of securing longer hours of service. At the time the complaint was filed twelve hour service was furnished.

The practice of receiving contributions was discontinued and the necessary arrangements were made to supply sixteen hour service each week day and four hour service on Sunday, which was satisfactory to the complainant.

#### REFUSAL TO FURNISH SERVICE DUE TO NON-PAYMENT OF BACK BILL.

##### I. C. 3218.

*T. M. Howell vs. The Pacific Telephone and Telegraph Company.* March 14, 1914, T. M. Howell, 4615 Greenwood avenue, Oakland, made complaint of The Pacific Telephone and Telegraph Company regarding the refusal to furnish service due to a non-payment of a back bill.

The complainant disputed the claim of the telephone company as to the amount of the alleged outstanding account, and the Commission was unable, after investigation, to effect an adjustment upon an informal basis. The complainant was therefore advised that further action on the part of the Commission was dependent upon the filing of a formal complaint in accordance with the Public Utilities Act.

#### TEMPORARY DISCONNECTION OF SERVICE.

##### I. C. 3219.

June 10, 1914.

*Mrs. M. Wilson vs. The Pacific Telephone and Telegraph Company.* During March, 1914, Mrs. M. Wilson, 1005 Market street, Oakland, made complaint of The Pacific Telephone and Telegraph Company regarding a temporary disconnection of service.

Complainant stated that the telephone company had discontinued service owing to an alleged non-payment of bills although she held a receipt for the disputed account. This account was later paid, however, and a bill of \$1.00 was presented covering the cost of reconnection of service.

Upon investigation by the Commission it was disclosed that the complainant's account had been in arrears for a certain month and in accordance with the statement of the telephone company. The reconnection charge was waived. The complainant was advised of the findings of the Commission, which satisfactorily adjusted the complaint.

#### REFUSAL TO FURNISH TELEPHONE SERVICE.

##### I. C. 3220.

May 25, 1914.

*G. Dieckmann vs. The Pacific Telephone and Telegraph Company.* March 25, 1914, G. Dieckmann, 2118 California street, San Francisco, made complaint of The Pacific Telephone and Telegraph Company regarding the refusal to furnish telephone service due to an alleged outstanding account.

Upon investigation by the Commission the telephone company adjusted the outstanding account to the satisfaction of the complainant and service was furnished.

#### DELAY IN INSTALLING TELEPHONE SERVICE.

##### I. C. 3229.

May 29, 1914.

*Mrs. J. H. Kelley vs. The Pacific Telephone and Telegraph Company.* March 27, 1914, Mrs. J. H. Kelley, Fruitvale avenue, San Jose, made complaint of The Pacific Telephone and Telegraph Company regarding the delay in installing telephone service.

Upon investigation by the Commission it was disclosed that the delay was due to the lack of facilities in the vicinity of complainant. The telephone was installed upon completion of the necessary construction work.

## INABILITY TO OBTAIN SERVICE.

I. C. 3232.

*Mrs. J. J. Payne vs. The Pacific Telephone and Telegraph Company.* During March, 1914, Mrs. J. J. Payne, 212 Fruitvale avenue, San Jose, made complaint of The Pacific Telephone and Telegraph Company regarding the inability to obtain telephone service.

Upon investigation by this Commission it was disclosed that the delay in installation was due to the lack of facilities. The necessary facilities were provided and the telephone was installed, which settled the matter to the complainant's satisfaction.

## DISCONTINUANCE OF NIGHT SERVICE.

I. C. 3244.

June 16, 1914.

*Robert A. Mack vs. The Western Union Telegraph Company.* March 30, 1914, Robert A. Mack, Porterville, made complaint of The Western Union Telegraph Company regarding the discontinuance of night service.

Upon investigation by the Commission it was disclosed that it was the custom of the above company to furnish temporary night service in small towns as the occasion demanded and as soon as the general public interest ceased to discontinue the service. The Commission authorized the defendant in those cases where service has been provided for emergency purposes only to discontinue such service, provided same is no longer required. The defendant was advised that their statements indicated that the conditions at Porterville are not such as would justify the discontinuance of service without first referring the matter to the Commission for permission for its discontinuance, and the telegraph company was accordingly ordered to continue night service.

## INABILITY TO OBTAIN INDIVIDUAL TELEPHONE SERVICE.

I. C. 3350.

*J. W. White vs. The Pacific Telephone and Telegraph Company.* April 14, 1914, J. W. White, Hampshire Arms Apartments, 1030 Post street, San Francisco, made complaint of The Pacific Telephone and Telegraph Company regarding the inability to obtain individual telephone service.

Upon investigation by the Commission it was disclosed that the telephone company had refused to install the desired service owing to the fact that the complainant had been receiving service over the apartment house system. The proprietor of the above apartments was willing that the installation be made and same was completed on April 16th.

## DELAY IN ESTABLISHING TOLL STATION.

I. C. 3351.

May 25, 1914.

*Percy T. Hannigan vs. The Pacific Telephone and Telegraph Company.* April 14, 1914, Percy T. Hannigan, 407 Phelan Building, San Francisco, made complaint of The Pacific Telephone and Telegraph Company regarding the delay in establishing a toll station at Brighton Beach, California.

After investigation by the Commission the telephone company filed an application for the establishment of a toll station at the above point and the permission to open same was granted.

The complaint was satisfactorily adjusted upon the furnishing of toll service.

## OMISSION OF TELEPHONE LISTING FROM DIRECTORY.

I. C. 3373.

May 25, 1914.

*Mrs. Margaret Davis vs. The Pacific Telephone and Telegraph Company.* April 21, 1914, Mrs. Margaret Davis, 20 East Acacia street, Stockton, made complaint of The Pacific Telephone and Telegraph Company regarding the omission of telephone listing from the directory.

Complainant was advised that the exchange contracts of the above company which its subscribers are required to sign contain a clause to the effect that the company will not be responsible for errors in its directory or any failure to comply with requests for listing. The complainant was also advised to the effect that the Commission was without control over such matters because no charge was exacted for listings and that the above clause appeared in the rate schedules which were on file with this Commission.

## INABILITY TO OBTAIN CONNECTION.

I. C. 3386.

June 1, 1914.

*Associated Oil Company vs. The Pacific Telephone and Telegraph Company.* April 22, 1914, Associated Oil Company, San Francisco, made complaint regarding the inability to obtain connection with The Pacific Telephone and Telegraph Company's toll system at Avon, California.

After an investigation was made by the Commission the complainant advised that negotiations had been entered upon between the two companies with the prospect of reaching a satisfactory solution of the difficulty and, therefore, begged to withdraw the complaint. The matter was closed on that basis.

#### TOLL SERVICE BETWEEN LOS ANGELES AND PASADENA.

I. C. 3416.

August 3, 1914.

*John E. Murray vs. The Pacific Telephone and Telegraph Company.* April 25, 1914. John E. Murray, 349 Pacific Electric Building, Los Angeles, made complaint of The Pacific Telephone and Telegraph Company regarding the toll service between Los Angeles and Pasadena.

Upon investigation by the Commission it was disclosed that the schedules of rates, which were filed by the above company prior to March 21, 1914, showed that both "Two-Number" and "Particular Person" service were in effect between Los Angeles and Pasadena; however, the telephone company advised the Commission that same was in error, that "Two-Number" service only was in effect between these points at the time the tariffs were filed and had been in effect continuously since May 1, 1908. The complainant was advised as to the above, and the difference between the two classes of service was thoroughly explained.

#### DURATION OF CONVERSATIONS.

I. C. 3422.

June 1, 1914.

*San Francisco Chamber of Commerce vs. The Pacific Telephone and Telegraph Company.* April 29, 1914. San Francisco Chamber of Commerce made complaint of The Pacific Telephone and Telegraph Company regarding the duration of conversations by users of party telephone lines.

Complainant was advised that the regulation of telephone rates and service within the City and County of San Francisco is vested in the board of supervisors.

#### INSUFFICIENT TRUNKING FACILITIES.

I. C. 3442.

June 30, 1914.

*H. J. Benedict vs. San Fernando Valley Home Telephone Company.* On May 4, 1914, the Commission received a complaint from H. J. Benedict, 338 H. W. Hellman Building, Los Angeles, regarding the insufficient trunking facilities of the San Fernando Valley Home Telephone Company between Los Angeles and Glendale.

Complainant was advised that the Commission had recently received other complaints of a similar nature with reference to telephone service between these two cities and, after an investigation, it was disclosed that the above company has for several years leased trunk lines between Los Angeles and Glendale from the Home Telephone Company of Los Angeles and that, due to the growth of business, the facilities have become inadequate.

The Commission was advised that construction, which would provide additional trunking facilities for the handling of the traffic, had about been completed and the complainant was so advised.

#### INSUFFICIENT TRUNKING FACILITIES AND INABILITY TO OBTAIN SERVICE.

I. C. 3445.

August 11, 1914.

*R. Frederick Grover vs. Home Telephone and Telegraph Company of Los Angeles and The Pacific Telephone and Telegraph Company.* May 2, 1914. R. Frederick Grover, 1512 Patterson street, Glendale, made complaint of the Home Telephone and Telegraph Company of Los Angeles regarding the insufficient trunking facilities between Los Angeles and Glendale and of The Pacific Telephone and Telegraph Company relative to the inability to obtain telephone service.

Upon investigation by this Commission it was disclosed that the San Fernando Valley Home Telephone Company has for several years leased trunk lines between the above points from the Home Telephone and Telegraph Company of Los Angeles and that, due to the growth of business, the facilities have become inadequate. The Commission was advised that construction which would provide additional trunking facilities for the handling of the traffic had about been completed and the complainant was so advised.

The complainant advised the Commission that the service at this point had been greatly improved and, therefore, did not desire service from The Pacific Telephone and Telegraph Company.

#### DISCRIMINATION AS TO SERVICE.

I. C. 3452.

*W. M. Bryant et al. vs. Honey Lake Valley Mutual Telephone Association.* May 1, 1914. W. M. Bryant et al., Susanville, made complaint of the Honey Lake Valley



Mutual Telephone Association, by petition, alleging discrimination as to the telephone service furnished within the incorporated town limits of Susanville.

Complainant stated that he was unable to obtain telephone service for the alleged reason that under the terms of a contract between the above company and the Nevada, California and Oregon Telephone and Telegraph Company the former company is not permitted to install the service as desired although other persons were receiving same.

After informal investigation by this Commission the complainant was advised that under the circumstances the Commission does not feel warranted in taking further action except by formal proceedings. A formal complaint was later filed and subsequently withdrawn by complainant.

#### INSUFFICIENT TRUNKING FACILITIES.

I. C. 3495.

June 30, 1914.

*J. E. Brown vs. San Fernando Valley Home Telephone Company.* May 8, 1914. J. E. Brown, 315 I. N. Van Nuys Building, Los Angeles, made complaint of the San Fernando Valley Home Telephone Company regarding the insufficient trunking facilities between Los Angeles and Glendale.

Complainant was advised that the Commission had recently received other complaints of a similar nature with reference to telephone service between these two cities and, after an investigation, it was disclosed that the above company has for several years leased trunk lines between Los Angeles and Glendale from the Home Telephone Company of Los Angeles and that, due to the growth of business, the facilities have become inadequate.

The Commission was advised that construction, which would provide additional trunking facilities for the handling of the traffic, had about been completed and the complainant was so advised.

#### INABILITY TO OBTAIN SERVICE.

I. C. 3518.

August 31, 1914.

*L. A. Dutuor vs. San Fernando Valley Home Telephone Company.* During May, 1914, L. A. Dutuor, R. F. D. No. 13, Box 268, Los Angeles, made complaint of the San Fernando Valley Home Telephone Company regarding his inability to obtain telephone service at his residence in La Canada.

The telephone company was not disposed to furnish service to the complainant owing to the amount of necessary construction. After investigation by this Commission it was disclosed that there were two sources by which the telephone company could furnish the desired service, one of which would yield 45 per cent of the original cost per annum, while a return of approximately 100 per cent could be obtained by the other source. The company was therefore advised that it was the opinion of this Commission that arrangements should be made to furnish the complainant with service without delay, which was complied with.

#### UNSATISFACTORY SERVICE.

I. C. 3538.

*H. W. Dionysius vs. San Fernando Valley Home Telephone Company.* May 15, 1914, H. W. Dionysius, 355 Gardena avenue, Tropic, made complaint of the San Fernando Valley Home Telephone Company regarding the unsatisfactory telephone service between Los Angeles and Glendale.

Complainant was advised that the Commission had recently received other complaints of a similar nature with reference to telephone service between these two cities and after investigation it was disclosed that the above company has for several years leased trunk lines between Los Angeles and Glendale from the Home Telephone Company of Los Angeles and that due to the growth of business the facilities became inadequate. The Commission was advised that construction which would provide additional trunking facilities for the handling of the traffic had about been completed and the complainant was so advised.

#### NOISY LINES AND NIGHT SERVICE AT HALF MOON BAY.

I. C. 3589.

August 31, 1914.

*Herbert M. Bruce vs. The Pacific Telephone and Telegraph Company.* May 19, 1914, Herbert M. Bruce, Clunie Building, San Francisco, made complaint of The Pacific Telephone and Telegraph Company regarding the noise on the toll lines between Half Moon Bay and San Francisco and also as to the night service furnished at Half Moon Bay.

Upon investigation the Commission was informed by the telephone company that a series of tests made over their lines between San Francisco and Half Moon Bay



during a period of seven days indicates that satisfactory transmission is afforded on the long distance lines between these points, and the complainant was so advised. It was also disclosed that the Mosconi Hotel at Half Moon Bay is furnished a connection with the toll circuits of the telephone company during the hours the exchange is closed. The complainant stated that he had not made a personal investigation and was not in a position to state definitely whether the service is not all that it should be under the circumstances, therefore the complaint was closed on that basis.

#### INSUFFICIENT TRUNKING FACILITIES.

I. C. 3598.

June 30, 1914.

*H. B. Fletcher vs. San Fernando Valley Home Telephone Company.* May 23, 1914, H. B. Fletcher, 1476 Milford street, Glendale, made complaint of the San Fernando Valley Home Telephone Company regarding the insufficient trunking facilities between Los Angeles and Glendale.

Complainant was advised that the Commission had recently received other complaints of a similar nature with reference to telephone service between these two cities and, after an investigation, it was disclosed that the above company has for several years leased trunk lines between Los Angeles and Glendale from the Home Telephone Company of Los Angeles and that, due to the growth of business, the facilities have become inadequate.

The Commission was advised that construction, which would provide additional trunking facilities for the handling of the traffic, had about been completed and the complainant was so advised.

#### UNSATISFACTORY TOLL SERVICE.

I. C. 3606.

*Bell-Mulhern Company vs. The Pacific Telephone and Telegraph Company.* May 23, 1914, Bell-Mulhern Company, Fourth and B streets, Marysville, made complaint of The Pacific Telephone and Telegraph Company regarding the unsatisfactory toll service between Marysville and various points in Plumas County.

Upon investigation by this Commission the telephone company repaired the toll lines between the above points and commercial transmission was afforded which satisfactorily adjusted the complaint.

#### PROPOSED PARALLELING OF TELEPHONE LINE.

I. C. 3621.

August 11, 1914.

*Antelope Valley Telephone Company vs. Pacific Light and Power Company.* During May, 1914, Antelope Valley Telephone Company made complaint of the Pacific Light and Power Company regarding the proposed paralleling of a telephone line at Lancaster.

It was suggested to the complainant that an interview be had with the officials of the power company with a view to ascertaining definitely whether it was their intention to so parallel the lines, and if such were their intention to arrange, if possible, for some amicable adjustment of the matter; also that, unless satisfactory arrangements could not be made, the Commission would not feel warranted in taking the matter up with the power company.

#### REMOVAL OF POLES.

I. C. 3633.

*R. J. Batty vs. Fairview Mutual Telephone Company.* May 28, 1914, R. J. Batty, Moorpark, made complaint of the Fairview Mutual Telephone Company regarding the removal of certain poles which interfered with the construction of certain sidewalks.

After investigation by this Commission the poles in question were removed as desired by complainant.

#### EXTENSION OF LINES.

I. C. 3646.

July 31, 1914.

*San Diego Home Telephone Company vs. The Pacific Telephone and Telegraph Company.* May 28, 1914, San Diego Home Telephone Company, 1027 Sixth street, San Diego, made complaint of The Pacific Telephone and Telegraph Company regarding the proposed extension of lines into El Cajon, Alpine and vicinity, said territory being already served by the complainants.

Upon investigation by the Commission the defendant stated that they provided service in the El Cajon Valley by means of suburban lines which extend from their La Mesa exchange; also that they had had no requests for an extension of the lines.

## HOURS OF SERVICE.

I. C. 3655.

July 29, 1914.

*C. F. McHarvy vs. The Pacific Telephone and Telegraph Company.* May 25, 1914. C. F. McHarvy, Delano, made complaint against The Pacific Telephone and Telegraph Company regarding the hours of service.

Complainant stated that the telephone company furnished service only between the hours of 8 a. m. and 7:30 p. m. and which was very unsatisfactory.

After investigation by this Commission the telephone company made the necessary arrangements to furnish service from 7 a. m. until 7:30 p. m., which was satisfactory to the complainant.

## INABILITY TO OBTAIN SERVICE.

I. C. 3656.

August 18, 1914.

*Mrs. S. Unfried vs. The Pacific Telephone and Telegraph Company.* June 1, 1914. Mrs. S. Unfried, 1921 Twentieth street, Santa Monica, made complaint of The Pacific Telephone and Telegraph Company regarding the inability to obtain telephone service.

It was disclosed, upon investigation by the Commission, that the delay in installation was due to the lack of facilities in the vicinity of the complainant; however, the necessary arrangements were made to supply service and the telephone was installed.

## INABILITY TO OBTAIN PUBLIC PAY STATION.

I. C. 3688.

July 16, 1914.

*Willis M. Baum vs. Home Telephone Company of Los Angeles.* June 4, 1914. Willis M. Baum, Surrey, made complaint in reference to the desire of citizens of Saugus that a public telephone be installed by the Home Telephone Company of Los Angeles.

Complainant was advised that the Commission had on June 6th authorized the United States Long Distance Telephone and Telegraph Company to install a toll station at Saugus.

## TOLL SERVICE BETWEEN LOS ANGELES AND SAN PEDRO.

I. C. 3699.

*R. G. Dupuy vs. The Pacific Telephone and Telegraph Company.* June 6, 1914. R. G. Dupuy, San Pedro, made complaint regarding the toll service between Los Angeles and San Pedro.

Complainant was advised that this Commission had recently rendered a decision and order authorizing the above company to place in effect a uniform schedule of rates for long distance telephone toll service between all points at which it operates within California, this order becoming effective March 21, 1914. The manner in which the revised rates were determined and the difference between "Two-number" and "Particular Party" service were thoroughly explained.

## INABILITY TO OBTAIN CONNECTION.

I. C. 3700.

August 11, 1914.

*C. W. Gray vs. The Raymond Telephone Company.* June 8, 1914. C. W. Gray, Oakhurst, made complaint of The Raymond Telephone Company regarding the inability to obtain telephone connection at Coarse Gold.

The telephone company advised the Commission that they had received no request from the complainant regarding the connection; also, that they were ready and willing to furnish service provided that the rules of the telephone company were complied with and upon payment of the established rates. The complainant was so advised.

## INABILITY TO OBTAIN SERVICE.

I. C. 3721.

*O. S. Devoe vs. The Pacific Telephone and Telegraph Company.* May 20, 1914. O. S. Devoe, Long Beach, made complaint of The Pacific Telephone and Telegraph Company regarding the inability to obtain telephone service.

Complainant stated that the telephone company had advised him that they would be willing to spend the amount of revenue which they would derive from the two years' rental towards the installation and if the complainant cared to pay the difference it would be credited to his account and charged off each month to cover his regular rental.

After investigation by this Commission the telephone was installed without the necessity of the complainant having to pay any advance rental.

INABILITY TO OBTAIN SERVICE.

I. C. 3726.

September 3, 1914.

*Eureka Oil Company vs. The Pacific Telephone and Telegraph Company.* February 9, 1914, Eureka Oil Company, Faith street and Santa Fe avenue, Vernon, made complaint of The Pacific Telephone and Telegraph Company regarding the inability to obtain telephone service.

After investigation by this Commission, the telephone was installed on February 12, 1914.

CHANGING OF TELEPHONE NUMBER.

I. C. 3746.

September 3, 1914.

*Peter Hanson vs. Consolidated Utilities Company.* February 23, 1914, Peter Hanson, Compton, made complaint of the Consolidated Utilities Company regarding the changing of his telephone number.

After investigation by this Commission, the number of the complainant's telephone was changed again as desired, which satisfactorily adjusted the matter.

REFUSAL TO INSTALL TELEPHONE.

I. C. 3761.

September 3, 1914.

*S. A. Thompson Oil Company vs. Home Telephone and Telegraph Company of Los Angeles.* February 4, 1914, S. A. Thompson Oil Company, Faith street and Santa Fe avenue, Vernon, made complaint of the Home Telephone and Telegraph Company of Los Angeles regarding the inability to obtain service because of the refusal to install telephone.

After investigation by this Commission, the telephone company stated that the cost of installation would approximate \$115.00 with a rental return of \$69.00 per annum. The Commission considered this to be a very good return on the investment and advised the telephone company that it was not the policy to impose unreasonable or burdensome conditions upon any utility, but suggested that the complainant be supplied with service if it could be consistently done. The installation was made which satisfactorily adjusted the matter.

REFUSAL TO RECEIVE OR TRANSMIT TELEGRAMS.

I. C. 3767.

September 3, 1914.

*Gardena Chamber of Commerce vs. Consolidated Utilities Company.* March 6, 1914, Gardena Chamber of Commerce made complaint of the Consolidated Utilities Company regarding the refusal to receive or transmit telegrams from or to the Western Union Telegraph Company.

Upon investigation by this Commission, the telephone company resumed the transmitting of telegrams.

INABILITY TO OBTAIN SERVICE.

I. C. 3769.

September 3, 1914.

*J. L. Lisk et al. vs. The Pacific Telephone and Telegraph Company.* January 30, 1914, J. L. Lisk et al., Hillandale drive, Los Angeles, made complaint, by petition, of The Pacific Telephone and Telegraph Company regarding the inability to obtain telephone service.

Upon investigation by this Commission, telephones were installed for all the applicants in this locality.

INABILITY TO OBTAIN SERVICE.

I. C. 3770.

September 3, 1914.

*C. N. Rosenthal vs. The Pacific Telephone and Telegraph Company.* February 18, 1914, C. N. Rosenthal, Madison avenue, Washington Park, Los Angeles County, made complaint of The Pacific Telephone and Telegraph Company regarding the difficulty in securing installation of telephone after contract was signed and required deposit made.

Upon investigation by this Commission, the telephone company stated that the installation of this telephone would involve plant additions to the extent of \$1,100. However, other contracts for service in this locality were secured and upon completion of the necessary construction service was furnished.

INABILITY TO OBTAIN SERVICE.

I. C. 3779.

September 3, 1914.

*C. J. Rihn vs. The Pacific Telephone and Telegraph Company.* April 9, 1914, C. J. Rihn, Madison avenue, Washington Park, Los Angeles County, made complaint of The Pacific Telephone and Telegraph Company regarding the difficulty in securing installation of telephone after contract was signed and required deposit made.



Upon investigation by this Commission, the telephone company stated that the installation of this telephone would involve plant additions to the extent of \$1,100. However, other contracts for service in this locality were secured and upon completion of the necessary construction service was furnished.

#### RATES FOR TELEPHONE SERVICE.

I. C. 3797.

August 31, 1914.

*S. H. Percy vs. The Pacific Telephone and Telegraph Company.* June 16, 1914. S. H. Percy, Ventura, made complaint of The Pacific Telephone and Telegraph Company regarding the rates charged for telephone service.

Complainant was advised that, according to his statements, the rate which he is paying is in accordance with the tariffs of the above company on file with this Commission. Complainant stated that another patron was receiving the same class of service under the same conditions at a lower rate, and the Commission requested more complete information relative to this matter but same was not furnished.

#### INABILITY TO OBTAIN SERVICE.

I. C. 3813.

*W. C. Buchman et al. vs. The Pacific Telephone and Telegraph Co.* June 15, 1914. W. C. Buchanan et al., Eagle Rock, made complaint, by petition, of The Pacific Telephone and Telegraph Company regarding the inability to obtain telephone service.

This Commission issued its Decision No. 1201 in Application No. 904 on January 15, 1914, authorizing the above company to quote Los Angeles rates for subscribers of Eagle Rock. The alleged delay in installation was investigated by the Commission and it was disclosed that same was due to the lack of facilities; however, early relief was provided and the telephones were installed. The complainants expressed their satisfaction.

#### INABILITY TO OBTAIN SERVICE.

I. C. 3851.

August 31, 1914.

*Mrs. E. A. Shultis vs. The Pacific Telephone and Telegraph Company.* June 23, 1914. Mrs. E. A. Shultis, 613 Bank street, San Francisco, made complaint of The Pacific Telephone and Telegraph Company regarding the inability to obtain telephone service.

Upon investigation by this Commission, the telephone company advised that the delay in installing telephone service was due to the lack of facilities; however, the necessary construction to provide service was completed and the complainant was supplied with telephone service.

#### INABILITY TO OBTAIN SERVICE.

I. C. 3899.

September 2, 1914.

*G. Knapp vs. The Pacific Telephone and Telegraph Company.* June 29, 1914. G. Knapp, 4107 Lyon street, Oakland, made complaint of The Pacific Telephone and Telegraph Company regarding the inability to obtain telephone service.

It was disclosed, upon investigation by this Commission, that the delay in installation was due to the lack of facilities; however, the necessary relief was provided and the desired service was furnished.

#### UNSATISFACTORY SERVICE AND TOLL LINE CONNECTION AT NIGHT.

I. C. 3909.

August 31, 1914.

*Penryn Fruit Growers' Association vs. The Pacific Telephone and Telegraph Company.* June 29, 1914. M. R. Struble, Manager Penryn Fruit Growers' Association, Penryn, made complaint of The Pacific Telephone and Telegraph Company regarding the unsatisfactory service and the inability to obtain toll line connection at night.

After investigation by this Commission, the service was greatly improved and the necessary arrangements were made to provide the complainant with a connection to the toll lines during the hours that the central office is closed. The complainant advised the Commission that the results were entirely satisfactory.

#### EXCESSIVE TOLL RATES.

I. C. 1660.

October 15, 1913.

*H. D. and L. D. Porter vs. Telephone Company Operating a Line from Skidoo, California, to Rhyolite, Nevada.* On July 7, 1913, H. D. and L. D. Porter, Rhyolite, Nevada, complained of a telephone company operating a line from Skidoo, California, to Rhyolite, Nevada.



Through lack of information, the Commission was unable to determine whether or not the business was between points entirely within the State of California which would subject the above company to the jurisdiction of this Commission.

ALLEGED INCREASE IN RATE.

I. C. 1666.

*E. M. Rider vs. The Pacific Telephone and Telegraph Company.* On July 9, 1913, E. M. Rider, 1030 Oak street, Alameda, complained that The Pacific Telephone and Telegraph Company had increased his monthly rate from \$1.80 to \$3.00.

Upon investigation by the Commission, it developed that the rate formerly paid by the complainant was a rate allowed him by reason of his connection with the Oakland Traction Company, which company is under contract with The Pacific Telephone and Telegraph Company for a certain discount from regular rates. The increase to \$3.00 was the result of the complainant's connection with the traction company having been severed which no longer entitled him to the concession rate.

ALLEGED DISCRIMINATION IN TELEPHONE TOLL RATES AND TELEGRAPH RATES AND SERVICE.

I. C. 1747.

*D. D. Demarest Company vs. The Pacific Telephone and Telegraph Company; The Western Union Telegraph Company.* On July 25, 1913, D. D. Demarest Company, San Francisco, made complaint against The Pacific Telephone and Telegraph Company and The Western Union Telegraph Company regarding an alleged discrimination in telephone toll rates and telegraph rates and service between Angels Camp and other cities.

Complainant was informed that this Commission had been for a considerable time engaged in an exhaustive investigation into the toll rates throughout the state which would automatically dispose of all discriminatory toll rates.

An investigation by this Commission developed the fact that the Western Union Telegraph Company had endeavored to place an operator at Angels Camp but conditions at the time would not permit the maintenance of a separate office.

It further developed that the complaint was not a matter of telegraph rates but of service and The Western Union Telegraph Company assured the Commission that efficient service would be rendered which was entirely satisfactory to the complainant.

REQUIREMENT OF \$5.00 DEPOSIT.

I. C. 1767.

*School Board, Jefferson District, Inglewood Rancho vs. The Pacific Telephone and Telegraph Company.* On July 24, 1913, the School Board, Jefferson District, Inglewood Rancho, complained of the requirement by the Pacific Telephone and Telegraph Company of a \$5.00 deposit prior to the installation of telephone service.

After investigation by the Commission, the deposit was waived, which satisfactorily adjusted the complaint.

MOVING CHARGE.

I. C. 1866.

*George R. Harmer vs. Ontario and Upland Telephone Company.* On August 12, 1913, George R. Harmer, Ontario, made complaint of the Ontario and Upland Telephone Company regarding a \$3.50 moving charge.

The Commission advised the complainant that the above charge was included in the rules and regulations of the telephone company filed with this Commission with their schedules of rates in accordance with General Order No. 15; and the reasonableness of which the Commission has not as yet passed upon.

CANCELLATION CHARGE.

I. C. 1875.

*J. C. Christensen vs. The Pacific Telephone and Telegraph Company.* On August 15, 1913, J. C. Christensen, Gaviota, complained of The Pacific Telephone and Telegraph Company regarding a \$5.00 cancellation charge at his former residence, 912 Kingston avenue, Piedmont.

Complainant was advised by the Commission that one of the present rules of The Pacific Company provides for billing subscribers for any amount due and unpaid for service discontinued prior to the expiration of any contract which may have been signed by the subscriber. The Commission has not yet ruled with reference to the reasonableness of these rules and regulations of the telephone company.

## ALLEGED INCREASE IN TELEPHONE RATES.

I. C. 1888.

November 4, 1913.

*Paul J. Hoyt vs. The Pacific Telephone and Telegraph Company.* On August 17, 1913, Paul J. Hoyt, R. F. D. No. 10, Hollywood, made complaint of The Pacific Telephone and Telegraph Company relative to an alleged increase in telephone rates.

The complainant stated that upon ordering the telephone moved, the above company required that a contract be signed at an increase in rates covering service at his new residence; also to the fact that it would require considerable time to complete the change.

Investigation by the Commission developed the fact that the complainant was receiving service at an obsolete rate, which is not quoted in connection with new business nor in making changes in service for existing subscribers. The telephone company stated that, owing to the lack of facilities, the installation would be somewhat delayed.

The complainant signed for service at standard rates and the telephone was promptly installed which satisfactorily adjusted the complaint.

## TELEPHONE RATES AND SERVICE.

I. C. 1894.

*Union Local No. 60--Farmers Educational and Co-Operative Union of America vs. Los Gatos Telephone Company.* On August 19, 1913, Gertrude M. Battee, on behalf of Union Local No. 60, Farmers Educational and Co-operative Union of America, Los Gatos, complained of the Los Gatos Telephone Company relative to telephone rates and service.

The complainant requested information with reference to procedure to be followed in order to secure a rate for telephone service from the above company to correspond with rate charged for service in vicinity of Campbell, Santa Clara and Cupertino.

The Commission stated that such a charge would involve the filing of an application by the Los Gatos Telephone Company for permission to revise its rates or the filing of a complaint in accordance with the Public Utilities Act.

## REQUIREMENT OF DEPOSIT.

I. C. 1960.

December 4, 1913.

*Frank B. Simpson vs. The Pacific Telephone and Telegraph Company.* September 2, 1913, Frank B. Simpson, 180 Jefferson street, Watsonville, made complaint of The Pacific Telephone and Telegraph Company regarding the requirement of the \$5.00 deposit before the installation of telephone service.

Investigation by the Commission developed the fact that the complainant upon ordering service, made the above deposit and service was installed.

Complainant was advised, that in compliance with one of the general orders of this Commission, the telephone company filed its schedule of rates; also the rules and regulations affecting same, one of which provides for this deposit.

## ALLEGED EXCESS RATE EXACTED.

I. C. 1961.

*R. J. Coggeshall vs. New Freeport Telephone and Telegraph Company.* On June 26, 1913, R. J. Coggeshall, Courtland, complained of the New Freeport Telephone and Telegraph Company relative to an alleged excess rate exacted.

Investigations by the Commission disclosed the fact that the rates complained of were in accordance with the rates filed with the Commission.

Complainant was advised that further action on the part of the Commission was dependent upon receipt of a formal complaint.

## REQUIREMENT OF DEPOSIT.

I. C. 1962.

October 30, 1913.

*C. Edwin Oyster vs. The Pacific Telephone and Telegraph Company.* On September 3, 1913, C. Edwin Oyster, 933 K street, Fresno, made complaint of The Pacific Telephone and Telegraph Company relative to the requirement of a \$5.00 deposit.

Upon investigation by the Commission, it was found that the complainant had made the above deposit at the time service was requested and the telephone was promptly installed. Complainant was advised that the above requirement was one of the rules and regulations of the telephone company filed with the Commission in accordance with General Order No. 15, the reasonableness of which has not as yet been passed upon.

## INCREASE IN RATES.

I. C. 2040.

October 15, 1913.

*Masonic Hall of Vacaville vs. The Pacific Telephone and Telegraph Company.* During the month of April, 1913, F. H. Clark, Elmira, complained of The Pacific Telephone and Telegraph Company on behalf of the Masonic hall regarding an increase in the rates.

The complainant was advised by a representative of the above company to the effect that the increase was due to orders having been issued by this Commission.

Investigation on the part of the Commission disclosed the fact that the above statement was not the case: that concessions to this class of subscribers were discontinued by the telephone company in order to make the rates standard and under conditions applicable to all.

## VACATION RATES ON TEN-PARTY SERVICE.

I. C. 2055.

March 6, 1914.

*Miss Maud May vs. The Pacific Telephone and Telegraph Company.* September 18, 1913, Miss Maud May, Sonora, made complaint of The Pacific Telephone and Telegraph Company relative to the granting of vacation rates on ten-party service.

Complainant alleged that the telephone company had refused to grant a vacation rate to a patron having ten-party service although she had been receiving four-party service for several years until the company had forced her to accept ten-party service by reason of her refusal to accede to an increase in rate.

Upon investigation by the Commission, the telephone company claimed that the complainant had formerly received ten-party service, but upon further investigation it was disclosed that the above company was in error and arrangements were made to supply the complainant with four-party service which satisfactorily adjusted the matter.

## EXCESS TOLL RATES AND MESSENGER CHARGES.

I. C. 2116.

November 4, 1913.

*Henry McGuinness vs. The Pacific Telephone and Telegraph Company.* On September 26, 1913, Henry McGuinness, Sisson, made complaint of The Pacific Telephone and Telegraph Company relative to excess toll rates and messenger charges.

Complainant was advised that the Commission had just completed an investigation into the toll rates and charges of the above company and that a decision would shortly be reached covering same, the intention of which was to establish a uniform, basic toll rate schedule to eliminate all inconsistencies.

Complainant was also advised that the practice of the above company in charging certain messenger fees was one of their rules and regulations which are on file with this Commission in accordance with General Order No. 15, and the reasonableness of which the Commission had not as yet passed upon.

## CHARGE FOR MOVING TELEPHONES.

I. C. 2117.

November 4, 1913.

*Geo. R. Cornor vs. The Pacific Telephone and Telegraph Company.* On September 27, 1913, Geo. R. Cornor, Flood Building, San Francisco, made complaint of The Pacific Telephone and Telegraph Company relative to the charge for moving telephones.

Complainant was advised by the Commission that one of the rules and regulations of the above company, on file with this Commission, provides for a charge of \$3.50 for moving a telephone from one address to another in those cases where the subscriber's contract has not expired; also stating that the jurisdiction in the city of San Francisco vests in the municipal authorities.

On this basis the complainant requested that the complaint be dismissed.

## MOVING CHARGE.

I. C. 2195.

November 26, 1913.

*A. G. Thompson vs. The Pacific Telephone and Telegraph Company.* October 9, 1913, A. G. Thompson, 64 Bacon Building, Oakland, made complaint of The Pacific Telephone and Telegraph Company regarding the \$3.50 moving charge.

Complainant was advised that one of the published rates of the above company provided for a charge of \$3.50 for moving a telephone from one address to another in those cases where the subscribers' contracts have not expired; also that the matter of rates and charges within the city of Oakland is entirely within the authority of the City Council of Oakland and that this Commission has at present no jurisdiction over same.



## ADVANCED PAYMENT.

I. C. 2203.

October 28, 1913.

*Col. Barrett and Mr. Ross vs. The Pacific Telephone and Telegraph Company.* On September 25, 1913, Col. Barrett and Mr. Ross, 205 Underwood Building, San Francisco, called at this Commission complaining of The Pacific Telephone and Telegraph Company regarding an excess advanced payment demanded for telephone service.

Upon investigation by the Commission it was disclosed that this matter was the result of a misunderstanding and the complaint was satisfactorily adjusted. The telephone company was under the impression that complainant desired service for a period less than one year, and therefore demanded payment covering a short term contract.

## ALLEGED EXCESS TOLL RATE.

I. C. 2252.

November 20, 1913.

*L. D. Temple vs. The Pacific Telephone and Telegraph Company.* October 18, 1913, L. D. Temple, Upland, made complaint of The Pacific Telephone and Telegraph Company regarding an alleged excess toll rate between Long Beach and Lancaster.

Complainant was advised that the rate in question was one of the published rates of the above company filed with this Commission in accordance with General Order No. 15; also to the fact that the Commission had, for a considerable time, been engaged in an exhaustive investigation into the toll rates of The Pacific Telephone and Telegraph Company and that a decision would shortly be reached which would no doubt establish uniform rates throughout the State.

## EXCESS TELEGRAPH RATES.

I. C. 2272.

March 6, 1914.

*E. B. Quackenbush vs. The Western Union Telegraph Company, and The Pacific Telephone and Telegraph Company.* October 20, 1913, E. B. Quackenbush, Los Altos, made complaint of the Western Union Telegraph Company and The Pacific Telephone and Telegraph Company regarding excess telegraph rates from Los Altos.

Complainant stated he was charged twenty-five cents on telegrams from San Jose to Los Altos, while on telegrams from Los Altos to San Jose a charge of fifty cents was exacted.

Investigations by the Commission disclosed the fact that, through a misunderstanding on the part of employees in regard to the proper transfer point, telegrams from Los Altos were routed incorrectly. A refund of the twenty-five cent overcharge was made to the complainant which satisfactorily adjusted the matter.

## DEPOSIT.

I. C. 2280.

December 3, 1913.

*Robert T. Hale vs. Telephone and Telegraph Company (Company not named in Complaint).* October 23, 1913, Robert T. Hale, 512 North Pritchard street, Los Angeles, made complaint of the telephone company (name not given) regarding the \$5.00 deposit.

Complainant was advised that the rules and regulations of The Pacific Telephone and Telegraph Company and The Home Telephone and Telegraph Company, filed with this Commission in accordance with General Order No. 15, provide for the payment of a deposit as a condition of the installation of service; also to the fact that this Commission is without jurisdiction within the incorporated city limits of Los Angeles.

## RATE EXACTED FOR TELEGRAM.

I. C. 2283.

*Philip S. Ehrlich vs. Western Union Telegraph Company.* October 23, 1913, Philip S. Ehrlich, 1008 Claus Spreckels Building, San Francisco, made complaint of the Western Union Telegraph Company regarding an excess telegraph rate exacted.

Upon investigation by the Commission, the complainant was advised to the effect that he had been undercharged on a message and that in accordance with the Interstate Commerce Act it was the duty of the Western Union Telegraph Company to collect the difference lest they become liable for charging a rate other than the published rate. The company accordingly sent a bill, which was paid; however, this was sent in the form of a telegram with "charges collect," which the complainant construed as a telegraph rate between points within the city. The company admitted that this method of collecting was irregular and was not countenanced.



## SCOPE OF CASE NO. 387 AS TO DEPOSIT.

I. C. 2309.

December 4, 1913.

*Phillip Martin vs. The Pacific Telephone and Telegraph Company.* October 28, 1913. Phillip Martin, Redding, made complaint of The Pacific Telephone and Telegraph Company regarding the scope of Case No. 387 with reference to \$5.00 deposit.

Complainant was advised that the decision in the above case, being the city of San Jose vs. The Pacific Telephone and Telegraph Company, applies only to the points involved in the complaint; also to the fact that no general ruling with reference to the requirement of a deposit, which can be made applicable at all points, had as yet been made by this Commission.

## RATES.

I. C. 2322.

November 6, 1913.

*Miss Ida Hjerleid-Shelley vs. The Pacific Telephone and Telegraph Company.* On November 1, 1913, Miss Ida Hjerleid-Shelley, Studio 2-3 Union Block, Stockton, made complaint of The Pacific Telephone and Telegraph Company relative to telephone rates.

Complainant was advised that in so far as telephone service within the incorporated city limits of the city of Stockton is concerned, this Commission is without jurisdiction as the regulatory powers over public utilities in Stockton are vested in the city government.

## REQUIREMENT OF DEPOSIT.

I. C. 2329.

December 23, 1913.

*S. L. Ivers Company vs. The Pacific Telephone and Telegraph Company.* November 4, 1913. S. L. Ivers Company, Torrance, made complaint of The Pacific Telephone and Telegraph Company regarding the requirement of the \$5.00 deposit.

Complainant was advised that the above charge is one of the rules and regulations of the telephone company, filed with the Commission in accordance with General Order No. 15, and the reasonableness of which has not as yet been passed upon.

## LEGALITY OF DEPOSIT.

I. C. 2353.

December 4, 1913.

*J. C. C. Russell vs. The Pacific Telephone and Telegraph Company.* November 10, 1913. J. C. C. Russell, Hanford, made complaint of The Pacific Telephone and Telegraph Company regarding the legality of the \$5.00 deposit.

Complainant was advised that the requirement of the above deposit was one of the rules and regulations of the telephone company filed with this Commission in accordance with General Order No. 15, and the reasonableness of which has not as yet been decided upon.

## RATES.

I. C. 2392.

June 4, 1914.

*F. E. Peaslack vs. The Pacific Telephone and Telegraph Company.* November 17, 1913. F. E. Peaslack et al., Eureka, filed a petition complaining of the telephone rates of The Pacific Telephone and Telegraph Company.

Complainants were advised that the Commission was without jurisdiction as to the regulation of telephone rates which are wholly applicable within the corporate limits of Eureka, that power being vested in the municipal authorities.

Reference was made in the complaint to the long distance rates, and the Commission stated that the decision which had been recently rendered and which ordered a readjustment of the long distance rates of the above company throughout California would be equally applicable to Humboldt County.

## OMISSION OF NAME IN DIRECTORY.

I. C. 2414.

*Chas. R. Boatright vs. The Pacific Telephone and Telegraph Company.* November 24, 1913. Chas. R. Boatright, 2119 Thirteenth avenue, Oakland, made complaint of The Pacific Telephone and Telegraph Company regarding the omission of his name from the telephone directory.

Complainant stated that owing to the omission of his name he had requested the telephone company to discontinue service which was finally done but an exorbitant rate was exacted.

Upon investigation by the Commission it was disclosed that the complainant had contracted for service considerably after the directory listings had closed and the impression that his name would appear was the result of a misunderstanding. The final bill which was presented included the \$5.00 cancellation charge, and the complainant was advised that this charge was embodied in the schedule of rates filed

by the telephone company in accordance with one of the Commission's general orders.

## I. C. 2472.

## REQUIREMENT OF DEPOSIT.

January 8, 1914.

*L. Dolen vs. The Pacific Telephone and Telegraph Company.* December 7, 1913. L. Dolen, Burlingame, made complaint of The Pacific Telephone and Telegraph Company regarding the requirement of a \$5.00 deposit.

Complainant was advised that the above charge is embodied in the schedule of rates and rules and regulations affecting rates, filed with this Commission by the telephone company in accordance with one of its general orders, the reasonableness of which had not as yet been decided upon.

## REQUIREMENT OF DEPOSIT AND CANCELLATION CHARGE.

## I. C. 2480.

January 28, 1914.

*Charles A. Dreiss vs. The Pacific Telephone and Telegraph Company.* During December, 1913, Charles A. Dreiss, 724 K street, Sacramento, made complaint of The Pacific Telephone and Telegraph Company regarding the requirement of a \$5.00 deposit and the \$5.00 cancellation charge.

Complainant was advised that the above charges were embodied in the rules and regulations of the telephone company which were filed with this Commission in accordance with one of its general orders, and the reasonableness of which had not been decided upon. The complainant was further advised to the effect that the regulation of telephone companies in Sacramento is vested in the municipal authorities.

## UNREASONABLE RATES FOR PHYSICIANS.

## I. C. 2521.

December 29, 1913.

*Dr. A. P. Tarter vs. The Pacific Telephone and Telegraph Company.* December 15, 1913, Dr. A. P. Tarter, 1404 Park street, Alameda, made complaint of The Pacific Telephone and Telegraph Company regarding unreasonable rates for physicians.

Complainant was advised that this Commission is without jurisdiction in such matters when the service furnished is between points entirely within the city limits as that power is vested in the local authorities; also to the fact that the jurisdiction of this Commission applies only to service between points within the incorporated city limits and points without those limits.

## DIRECTORY LISTING.

## I. C. 2545.

January 5, 1914.

*L. R. Hicks vs. The Pacific Telephone and Telegraph Company.* During November, 1913, L. R. Hicks, Hearst Building, San Francisco, made complaint of The Pacific Telephone and Telegraph Company regarding the directory listing.

Upon investigation by the Commission it was disclosed that the complainant was formerly a joint user with Mr. W. H. Duane, both being listed under the same number. The above parties later severed connections and Mr. Duane ordered service retaining the old number, which arrangement necessitated that the telephone company assign the complainant a new number. Complainant advised that he was satisfied to consider the matter closed.

## RIGHT TO WITHHOLD A DEPOSIT.

## I. C. 2554.

May 7, 1914.

*W. C. Hizer vs. The Pacific Telephone and Telegraph Company.* On December 18, 1913, W. C. Hizer, 527 North Pilgrim street, Stockton, made complaint of The Pacific Telephone and Telegraph Company regarding the right to withhold a deposit.

Upon investigation by this Commission it was disclosed that, previous to the installation of service, the complainant had made the customary five dollar deposit, guaranteeing the fulfillment of the contract. About six months later, service was discontinued at the subscriber's request and a demand was made that the above deposit be returned. The telephone company refused to do this, stating that in accordance with the contract five dollars was due as a cancellation charge.

The complainant was advised by this Commission that the above practice was in accordance with the established rule of the telephone company, and also to the effect that this Commission was without jurisdiction as to the regulation of public utilities within the incorporated city limits of Stockton, this power being vested in the municipal authorities.

REQUIREMENT OF \$5.00 DEPOSIT.

I. C. 2588.

February 13, 1914.

*G. C. Bradford vs. The Pacific Telephone and Telegraph Company.* December 18, 1913. G. C. Bradford, Box 435, Fresno, made complaint of The Pacific Telephone and Telegraph Company regarding the requirement of the \$5.00 deposit.

Complainant was advised that this charge is embodied in the schedule of rates filed by the telephone company, in compliance with one of the Commission's general orders, and that same had been accepted for filing purposes only until their reasonableness should be passed upon.

REQUIREMENT OF DEPOSIT.

I. C. 2599.

February 25, 1914.

*C. F. Smith vs. Home Telephone and Telegraph Company of Los Angeles.* December 19, 1913. C. F. Smith, 428 Central Building, Los Angeles, made complaint of the Home Telephone and Telegraph Company regarding the requirement of a \$5.00 deposit.

Complainant stated that he had knowledge of cases where the above company had installed phones for new subscribers who would not put up the deposit.

The Commission requested that specific cases be cited relative to the above, but the complainant was unable to do so. Complainant was advised that this charge was embodied in the schedule of rates filed by the telephone company in accordance with one of the Commission's general orders and that the reasonableness of same had not been passed upon.

REQUIREMENT OF DEPOSIT.

I. C. 2617.

February 14, 1914.

*F. M. Dunlap vs. The Pacific Telephone and Telegraph Company.* December 22, 1913. F. M. Dunlap, 474 East Forty-seventh street, Los Angeles, made complaint of The Pacific Telephone and Telegraph Company regarding the requirement of the \$5.00 deposit.

Complainant also made inquiry as to a decision of this Commission in reference to the above requirement.

Complainant was advised that the decision to which he referred, namely, the City of San Jose vs. The Pacific Telephone and Telegraph Company, Case No. 387, regarding the practice of requiring deposits, applied only to the specific points involved in the complaint, and was not applicable throughout the state; also as to the fact that the above charge is embodied in the schedule of rates, filed by the telephone company in accordance with one of the Commission's general orders, and that their reasonableness had not been passed upon.

EXACTION OF MOVING CHARGE.

I. C. 2627.

February 6, 1914.

*T. O. Tracy vs. The Pacific Telephone and Telegraph Company.* December 26, 1913. T. O. Tracy, Santa Monica, made complaint of The Pacific Telephone and Telegraph Company regarding the exaction of the moving charge.

Complainant alleged that this charge was unjust and requested information as to whether or not this practice was countenanced by this Commission.

Complainant was advised that the telephone company had embodied this charge in its schedule of rates which were filed with this Commission in accordance with one of its general orders; and that said schedule had been accepted for filing purposes only, until such time as the Commission will have passed upon their reasonableness.

RATES FOR SERVICE.

I. C. 2660.

March 7, 1914.

*G. D. Hensell vs. Morgan Hill Telephone Company.* January 2, 1914. G. D. Hensell, Morgan Hill, made complaint of the Morgan Hill Telephone Company regarding the rates for telephone service.

After investigation, the complainant was advised that the rates which the above company had quoted were in accordance with the rates filed with this Commission, also to the effect that this Commission was without jurisdiction as to telephone rates within the incorporated limits of Morgan Hill, this power being vested in the Town Board.

EXCESS CALLS.

I. C. 2663.

February 20, 1914.

*E. P. Lewandowski vs. The Pacific Telephone and Telegraph Company.* January 2, 1914. E. P. Lewandowski, 1121 Crocker Building, San Francisco, made com-



plaint of The Pacific Telephone and Telegraph Company relative to a disputed claim for excess telephone calls.

Investigations by the Commission developed the fact that owing to the dispute over the amount of excess switching the telephone company had disconnected service. The complainant later called at the office of the telephone company and tendered payment of one-half the amount in dispute which was refused. After the matter had been referred to this Commission, the telephone company offered to accept the above payment which was satisfactory to the complainant.

#### RATE EXACTED FOR MOVING.

I. C. 2688.

March 9, 1914.

*E. J. Newcomer vs. The Pacific Telephone and Telegraph Company.* January 3, 1914. E. J. Newcomer, Palo Alto, made complaint of The Pacific Telephone and Telegraph Company regarding the rate exacted for moving a telephone.

Upon investigation by the Commission it was disclosed that within three months from the date of installation the complainant had requested the telephone company to discontinue service and a bill was rendered covering a cancellation charge and payment for three months' rental in accordance with the contract. In view of the fact that the complainant desired to continue service at a different address, the cancellation charge was waived which satisfactorily adjusted the matter.

#### CHARGE FOR MOVING.

I. C. 2696.

March 7, 1914.

*Clarence E. Todd vs. The Pacific Telephone and Telegraph Company.* January 7, 1914. Clarence E. Todd, 34 Ellis street, San Francisco, made complaint of The Pacific Telephone and Telegraph Company regarding the charge exacted for moving a telephone.

Complainant stated that he had desired to move to another office in same building which was being vacated by parties having the same service and equipment as he was receiving and had requested the telephone company to leave same.

Upon investigation by the Commission, it was disclosed that the telephone company had removed the old equipment which necessitated a new installation; however, in view of the above circumstances the moving charge was waived.

#### RATE FOR PORTABLE TELEPHONES.

I. C. 2698.

February 19, 1914.

*Mrs. Amos Smith vs. The Pacific Telephone and Telegraph Company.* January 5, 1914. Mrs. Amos Smith, San Jose, made complaint of The Pacific Telephone and Telegraph Company regarding the difference in rate between the wall and portable telephones.

Complainant was advised that the schedules on file with the Commission provide for an additional charge for portable sets when used in place of wall set equipment, and which is a practice the Commission has not ordered discontinued.

#### MOVING AND CANCELLATION CHARGES.

I. C. 2702.

February 19, 1914.

*Walter W. Witt vs. The Pacific Telephone and Telegraph Company.* January 7, 1914. Walter W. Witt, 814 Fifty-fourth street, Oakland, made complaint of The Pacific Telephone and Telegraph Company regarding the charges exacted for moving a telephone and upon the cancellation of service.

Complainant was advised that the above charges are embodied in the schedules of rates, which had been filed by the telephone company in accordance with one of the Commission's general orders, and had been accepted for filing purposes only until their reasonableness should be passed upon; also to the effect that the Commission was without jurisdiction within the city of Oakland.

#### VARIOUS PRACTICES OF TELEPHONE AND TELEGRAPH COMPANY AND RIGHT OF FOREST SERVICE.

I. C. 2708.

March 7, 1914.

*R. L. Swanson vs. The Pacific Telephone and Telegraph Company and the Forest Service.* January 7, 1914. R. L. Swanson, Red Bluff, made complaint regarding various practices of The Pacific Telephone and Telegraph Company, also as to the right of the Forest Service to discriminate.

Complainant was advised with reference to the practices of The Pacific Telephone and Telegraph Company that this Commission would entertain any complaint which is filed in accordance with the Public Utilities Act; also to the effect that



the United States Forest Service is a branch of the Federal Government over which this Commission has no control.

# RATES IN WATSONVILLE.

I. C. 2723.

February 20, 1914.

*George C. Cleveland vs. The Pacific Telephone and Telegraph Company.* January 10, 1914. George C. Cleveland, Watsonville, made complaint of The Pacific Telephone and Telegraph Company regarding the high telephone rates in Watsonville.

The Commission called the complainant's attention to the Public Utilities Act and forwarded the necessary instructions relative to the procedure to be followed in questioning the reasonableness of any rates.

# CANCELLATION CHARGE.

I. C. 2738.

March 7, 1914.

*J. N. Sims vs. The Pacific Telephone and Telegraph Company.* January 13, 1914. J. N. Sims, 24 California street, San Francisco, made complaint of The Pacific Telephone and Telegraph Company relative to the charge exacted for the cancellation of service.

Upon investigation by the Commission, it was disclosed that the telephone company had exacted the above charge owing to the fact that service had been installed less than one year; however, due to the fact that the telephone company was delayed in completing the original installation, the above charge was waived, which adjusted the matter to the satisfaction of the complainant.

# RATES IN SAN FRANCISCO.

I. C. 2747.

February 9, 1914.

*Frank O. Renstrom vs. The Pacific Telephone and Telegraph Company.* January 10, 1914. Frank O. Renstrom, Van Ness and Golden Gate avenues, San Francisco, made complaint of The Pacific Telephone and Telegraph Company regarding the telephone rates in San Francisco.

Complainant stated that he desired to join with the Postal Telegraph-Cable Company in protesting against the exorbitant rates charged by the Pacific company as compared with other cities of similar size.

Complainant was advised that this Commission is without jurisdiction as to the regulation of rates for telephone service in the city of San Francisco, this power being vested in the board of supervisors.

# CHARGE FOR DELIVERY OF TELEGRAM.

I. C. 2773.

*J. W. Eggleston vs. The Pacific Telephone and Telegraph Company.* January 14, 1914. J. W. Eggleston, Occidental College, Los Angeles, made complaint of The Pacific Telephone and Telegraph Company regarding the charge exacted for the delivery of a telegram.

Complainant stated that he had sent a telegram from La Jolla to Los Angeles and was informed that the total charge would be 25 cents, which was paid. However, an additional charge of 60 cents was later exacted covering the delivery of same.

Upon investigation by the Commission, it was disclosed that the point of destination was beyond the free delivery limits and that the charge of 60 cents was the actual amount disbursed for messenger service. The operators of the above company attempted to communicate with the sender to determine his wishes regarding the above charge but were unable to locate him. The complainant, upon being advised that the above procedure was the established rule of the telephone company and in accordance with the rules and regulations on file with this Commission, considered the matter as closed.

# OMISSION OF NAME FROM DIRECTORY.

I. C. 2780.

February 20, 1914.

*A. J. Hager vs. The Pacific Telephone and Telegraph Company.* During December, 1913, A. J. Hager, 6423 Colby street, Oakland, made complaint of The Pacific Telephone and Telegraph Company regarding the omission of his name from the telephone directory.

Upon investigation by the Commission, it was disclosed that the above listing was through error omitted from the directory. The telephone company stated that the complainant's name would appear in the daily supplement used by the operators until the new directory was issued, which was satisfactory to the complainant.

## RATE FOR PRIVATE EXTENSION.

I. C. 2784.

February 20, 1914.

*M. H. Miner vs. Fowler Independent Telephone Company.* January 19, 1914. M. H. Miner, Fowler, made complaint of the Fowler Independent Telephone Company regarding the rate for private extension telephone.

Complainant stated that he had connected a private extension to the telephone of the above company of whom he had contracted for service and desired to know if the company was within its rights in charging for same.

The complainant was advised that the schedule authorized by the Commission provides rates for extension telephone service.

## RATES FOR SERVICE.

I. C. 2787.

*Dr. B. T. Cockrill vs. The Pacific Telephone and Telegraph Company.* January 14, 1914. Dr. B. T. Cockrill, Bloomfield, made complaint of The Pacific Telephone and Telegraph Company regarding the rates for telephone service.

Upon investigation by the Commission it was disclosed that the complainant was receiving individual service at the standard rate effective at the Bloomfield exchange and in accordance with the rate schedule on file with this Commission. As the complainant desired cheaper service, the telephone company arranged to furnish same at the four-party rate of \$1.50, which was also included in the above schedule. This arrangement satisfactorily adjusted the matter.

## RATES AND CONNECTION OF A LINE.

I. C. 2808.

*E. K. Meador vs. Bigelow Telephone Company.* January 18, 1914. E. K. Meador, O'Neals, made a complaint regarding the rates of the Bigelow Telephone Company. The complainant also desired information whether or not the above company could be required by law to give connection to a line.

Complainant was advised that if it was the intention to organize a telephone company and build lines through the territory already served by another company it would be necessary that a certificate of public convenience and necessity be obtained from this Commission before the establishment of such service; also to the effect that if it was his purpose merely to secure service for himself through the above company's exchange it would, of course, be necessary to pay the established rates.

The complainant advised that this matter had been settled satisfactorily.

## COMMISSIONS ALLOWED ON TOLL BUSINESS.

I. C. 2812.

March 17, 1914.

*Turlock Home Telephone and Telegraph Company vs. The Pacific Telephone and Telegraph Company.* January 20, 1914, the Turlock Home Telephone and Telegraph Company made complaint of The Pacific Telephone and Telegraph Company regarding the commissions allowed on toll business.

Complainant alleged that their contract with the Pacific Company as regards the commissions allowed on toll business was very unsatisfactory; also that credit was given on only about eighty-five per cent of the bona fide calls.

Upon investigation by the Commission it was disclosed that through oversight no credit was allowed the complainant on certain calls. It was agreed that a change in the accounting methods would be made and the complainant advised that the complaint had been satisfactorily adjusted.

## INABILITY TO OBTAIN BUSINESS LISTING IN DIRECTORY.

I. C. 2831.

*Dr. LuElla Cool vs. The Pacific Telephone and Telegraph Company.* January 24, 1914, Dr. LuElla Cool, Cadillac Hotel, San Francisco, made complaint of The Pacific Telephone and Telegraph Company regarding the inability to obtain a business listing in telephone directory.

Upon investigation by the Commission the telephone company stated that at the time the request was made for a business listing, there was an outstanding account due for service previously furnished. The above account was paid and arrangements were made for the listing which satisfactorily adjusted the matter.

## INCONSISTENT TELEGRAPH RATES.

I. C. 2848.

September 3, 1914.

*Douglas S. Watson vs. Western Union Telegraph Company.* January 26, 1914. Douglas S. Watson, First National Bank Building, San Francisco, made complaint

of the Western Union Telegraph Company regarding the rates between Los Angeles and Redwood City as compared with the rates between Los Angeles and San Francisco or between Los Angeles and San Jose.

Upon investigation by this Commission, the above company filed a statement, outlining their method of computing rates, and frankly stated that owing to the necessity of using the zone system in the computation of rates, a few inconsistencies were bound to occur. The statement was also made that while they do not claim that under the zone system, it is possible to secure rates which would, in all cases agree with those obtained by a careful measurement of wire distance between offices, they did claim that as a rule they were fair and reasonable, and that to fix rates according to measured distances by wire would result in numerous increases.

The complainant was advised of the foregoing statements of the Western Union Telegraph Company, and also to the effect that to question these rates would involve a state-wide investigation, and that further action on the part of this Commission was dependent upon the filing of a formal complaint in accordance with the Public Utilities Act.

#### FULFILLMENT OF CONTRACT.

I. C. 2857.

May 7, 1914.

*F. Moulin vs. The Pacific Telephone and Telegraph Company.* January 27, 1914, F. Moulin, 147 Thirteenth avenue, San Mateo, made complaint of The Pacific Telephone and Telegraph Company relative to the fulfillment of contract.

Complainant stated that previous to the installation of his telephone he had made the customary five dollar deposit guaranteeing the fulfillment of the contract, and that several times later he was without service owing to line trouble and, in view of this, demanded the return of the above deposit, but was refused.

Upon investigation by this Commission it was disclosed that the service troubles were of a temporary nature and in each instance the line was placed in order in less than twenty-four hours after the same was reported. The complainant was advised of this fact and also to the effect that this Commission was without jurisdiction as to the regulation of public utilities within the incorporated city limits of San Mateo, this power being vested in the municipal authorities.

#### LEGALITY OF MOVING CHARGE.

I. C. 2867.

March 9, 1914.

*W. E. Rutherford vs. The Pacific Telephone and Telegraph Company.* January 28, 1914, W. E. Rutherford, 721 Spring street, Santa Rosa, made complaint of The Pacific Telephone and Telegraph Company regarding the legality of the \$3.50 charge exacted for moving a telephone.

Complainant was advised that the above charge is embodied in the schedules of rates filed by the telephone company in accordance with one of the Commission's general orders, and that same had been accepted for filing purposes only until their reasonableness should be passed upon.

#### ALLEGED DISCRIMINATION IN RATES.

I. C. 2903.

*Mrs. Heil et al. vs. The Pacific Telephone and Telegraph Company.* February 2, 1914, Mrs. Heil et al., Fruitridge District, Sacramento, filed a petition complaining of The Pacific Telephone and Telegraph Company regarding an alleged discrimination in rates.

The complainants stated that they were compelled to pay \$2.50 per month for suburban service, while subscribers in the Colonial Heights District were paying but \$1.75 per month for four-party service.

Upon investigation by this Commission it was disclosed that the complainants resided beyond the city limits of Sacramento and the majority were receiving suburban service at \$2.50 per month, which was in accordance with the standard rates. The complainants elected to receive four-party service which they were able to secure at the same or lower rates than they had been paying and the complaint was satisfactorily adjusted.

#### INCONSISTENT TOLL RATES.

I. C. 2917.

March 3, 1914.

*F. M. Byerly vs. The Pacific Telephone and Telegraph Company.* January 4, 1914, F. M. Byerly, San Martin, made complaint regarding the inconsistent toll rates of The Pacific Telephone and Telegraph Company.

Complainant was advised that this Commission had completed an exhaustive investigation of all toll rates of the above company throughout the State of Cali-



ifornia and the revised rates, which would become effective March 21, 1914, would eliminate all inconsistencies.

#### REQUIREMENT OF DEPOSIT.

I. C. 2952.

*J. L. Foley vs. The Pacific Telephone and Telegraph Company.* February 6, 1914. J. L. Foley, 725 North Lincoln street, Stockton, made complaint of The Pacific Telephone and Telegraph Company regarding the requirement of a \$5.00 deposit and also referred to this Commission's Decision No. 1008 as being applicable to the city of Stockton.

Upon investigation by the Commission the telephone company stated that the demand for the \$5.00 deposit was made without a clear understanding as to the complainant's request. Owing to the fact that only change in name was desired, the request for a deposit was withdrawn.

The complainant was advised that this Commission's Decision No. 1008, being the complaint of the City of San Jose vs. The Pacific Telephone and Telegraph Company, applied only to the points involved and was not applicable throughout the State.

#### RATES FOR SERVICE.

I. C. 2960.

*Harvey W. Strader vs. The Pacific Telephone and Telegraph Company.* February 10, 1914. Harvey W. Strader, Inverness Building, Sacramento, made complaint of The Pacific Telephone and Telegraph Company relative to the rates for telephone service, also to the effect that the rate which he was paying was in excess of the rental exacted from others under similar conditions.

Complainant was advised that according to statements made, the rate which he was paying was the rate quoted by the telephone company and in accordance with the schedules on file with this Commission. A request was made that specific cases be cited where discrimination existed, but this information was not furnished and the complaint was closed on that basis.

#### REFUSAL TO ACCEPT ANNUAL DUES.

I. C. 2964.

March 7, 1914.

*J. W. Breton vs. Morgan Hill Telephone Company.* February 9, 1914. J. W. Breton, Morgan Hill, made complaint regarding the refusal of the Morgan Hill Telephone Company to accept annual dues from farmer line subscribers, also relative to an increase in rates without due notice.

Complainant was advised that it was unlawful for any public utility to increase rates without the permission of this Commission, had upon formal application, and that no change in present rates would be allowed until such application had been acted upon.

#### FORWARDING OF BILLS.

I. C. 2965.

*Mrs. D. E. Aultman vs. The Pacific Telephone and Telegraph Company.* February 13, 1914. Mrs. Laura G. Jackson on behalf of Mrs. D. E. Aultman, 1631 Euclid avenue, Berkeley, made complaint of the Pacific Telephone and Telegraph Company regarding the forwarding of bills.

Upon investigation by this Commission it was disclosed that the telephone company had discontinued service at the subscriber's request, but through error had continued to forward the monthly bills. The telephone company advised that the account had been adjusted and the complaint was satisfactorily closed.

#### REQUIREMENT OF DEPOSIT.

I. C. 2983.

April 2, 1914.

*W. M. Gifford vs. The Pacific Telephone and Telegraph Company.* February 16, 1914. W. M. Gifford, 123 North Aurora street, Stockton, made complaint of The Pacific Telephone and Telegraph Company regarding the requirement of the \$5.00 deposit, also stating that he had knowledge of cases where the above company had waived deposits.

The Commission requested that specific cases be cited relative to the above, but same was not furnished. Reference was made to the decision of the Commission in the complaint of the City of San Jose vs. The Pacific Telephone and Telegraph Company as affecting the city of Stockton. Complainant was advised that the above decision applied only to the points involved in the complaint and was not applicable throughout the State.



DECISION NO. 1008 AS APPLIED TO FOUR-PARTY SERVICE.

I. C. 2991.

April 2, 1914.

*B. A. Lowell vs. The Pacific Telephone and Telegraph Company.* February 16, 1914, B. A. Lowell, 726 South Sixth street, San Jose, made complaint of the four-party residence rate of The Pacific Telephone and Telegraph Company in reference to the Commission's Decision No. 1008.

Complainant was advised that this Commission's Decision No. 1008, being the complaint of the City of San Jose vs. The Pacific Telephone and Telegraph Company, became effective January 1, 1914, and that the order did not change the rate previously charged for four-party residence service.

LONG DISTANCE RATES.

I. C. 3021.

*W. J. Connell vs. The Pacific Telephone and Telegraph Company.* February 19, 1914, W. J. Connell, Patterson, made complaint of The Pacific Telephone and Telegraph Company regarding the long distance rates.

Complainant was advised that the Commission had recently rendered a decision fixing the long distance rates of the above company throughout the State, to become effective March 21, 1914.

CANCELLATION AND MOVING CHARGES.

I. C. 3025.

*W. A. Swain vs. The Pacific Telephone and Telegraph Company.* February 20, 1914, W. A. Swain, Gridley, made complaint of The Pacific Telephone and Telegraph Company relative to the \$5.00 cancellation charge and also regarding the charge of \$3.50 exacted for moving a telephone.

Upon investigation by the Commission it was disclosed that shortly after service was installed the complainant had requested the telephone company to move the telephone to another location, but upon learning that a charge of \$3.50 would be exacted decided to do without service. He was therefore billed for \$5.00 covering the cancellation charge and also an additional amount equal to the balance of three month's rental.

The complainant was advised that the above practice was in accordance with the schedule of rates and the rules and regulations affecting rates, which had been filed by the above company with the Commission.

RATE CHARGED FOR NEWS SERVICE.

I. C. 3026.

*Oroville Register Publishing Company vs. Associated Press.* February 21, 1914, Oroville Register Publishing Company made complaint of the Associated Press regarding the rate charged for news service.

Complainant was advised that the rate charged was the rate of the Associated Press and that this Commission was without jurisdiction owing to the fact that the above was not a public utility.

REQUIREMENT OF DEPOSIT.

I. C. 3126.

*C. D. Deans vs. The Pacific Telephone and Telegraph Company.* March 11, 1914, C. D. Deans, Visalia, made complaint of The Pacific Telephone and Telegraph Company regarding the requirement of the \$5.00 deposit. Reference was also made as to the scope of the Commission's ruling in the San Jose case.

Complainant was advised that this Commission would no doubt, in the near future, institute an investigation upon its own initiative relative to the above charge which would cover the entire State; however, until same had been completed the telephone company could exact this charge due to the fact that same was embodied in its schedules of rates which had been filed in accordance with one of the Commission's General Orders.

Complainant was also advised that the Commission's decision in the case of the City of San Jose vs. The Pacific Telephone and Telegraph Company applied only to the points involved in the complaint and was not applicable throughout the State.

DISCRIMINATION IN DIRECTORY LISTINGS.

I. C. 3146.

*T. N. Harvey vs. The Pacific Telephone and Telegraph Company.* March 14, 1914, T. N. Harvey, Stoner Block, Bakersfield, made complaint of The Pacific Telephone and Telegraph Company regarding an alleged discrimination in directory listings.

Complainant alleged that the rate of \$1.50 for business listings in the directory for any person not a member of the firm is excessive and discriminatory as compared with other points within the State.

Complainant was advised that the rate of \$1.50 per month for joint user of unlimited business is a uniform rate charged at all exchanges in connection with unlimited business service and in accordance with the rates filed by the above company with this Commission.

#### MINIMUM RATE FOR FARMER LINE SERVICE.

I. C. 3155.

*G. P. Morse vs. The Pacific Telephone and Telegraph Company.* March 16, 1914. G. P. Morse, on behalf of A. C. Musselman, Coutolene, made complaint regarding the minimum rate for farmer line service.

Complainant was advised that the rate complained of was specified in his contract with the Pacific company and was also in accordance with the schedule of rates on file with this Commission. The Commission also stated that it would be necessary that any complaint in reference to the unreasonableness of the above rate be filed in accordance with the Public Utilities Act.

#### DELAY IN MOVING TELEPHONE AND CANCELLATION CHARGE.

I. C. 3158.

May 7, 1914.

*D. S. Childers vs. The Pacific Telephone and Telegraph Company.* March 14, 1914. D. S. Childers, 1817 Sixty-fourth avenue, Oakland, made complaint of The Pacific Telephone and Telegraph Company relative to the delay in moving a telephone and also regarding the exaction of a \$5.00 cancellation charge.

Upon investigation by this Commission it was disclosed that the delay was due to a shortage of facilities; however, this condition was later relieved and the telephone was installed on March 23d. The exaction of the \$5.00 as a cancellation charge was the result of a misunderstanding, the above move being mistaken for a new installation. The telephone company cancelled the charge upon learning of the mistake.

#### MOVING CHARGE.

I. C. 3167.

*Mrs. R. L. Morss vs. The Pacific Telephone and Telegraph Company.* March 17, 1914. Mrs. R. L. Morss, 650 Willis avenue, San Jose, made complaint of The Pacific Telephone and Telegraph Company regarding the charge of \$3.50 exacted for moving a telephone.

Complainant was advised that where a subscriber has had service less than one year the telephone company exacts a charge of \$3.50 for moving a telephone from one building to another or to an entirely different address, which is in accordance with the schedule of rates filed by the telephone company with this Commission; also to the effect that the above schedule had been accepted for filing purposes only until such time as Commission shall pass upon their reasonableness.

#### DEPOSIT REQUIREMENT AND CHARGE FOR MOVING.

I. C. 3172.

*Iva M. Fischer vs. The Pacific Telephone and Telegraph Company.* March 13, 1914. Iva M. Fischer, Hotel Stockton Annex, Stockton, made complaint of The Pacific Telephone and Telegraph Company regarding the deposit requirement, also as to the charge exacted for moving a telephone.

Upon investigation by the Commission it was disclosed that the complainant had signed the standard contract of the above company which required a deposit of \$5.00 previous to the installation of service. A few months later the complainant requested the telephone company to move the telephone and a charge of \$3.50 was exacted. The complainant was under the impression that the above deposit would be forfeited and therefore refused to pay the moving charge.

Upon being advised by the Commission that the deposit was returnable with interest after the expiration of one year, the complainant stated that this complaint had been satisfactorily adjusted.

#### EXCESSIVE AND UNREASONABLE RATES.

I. C. 3176.

May 15, 1914.

*Dr. H. F. Dessau vs. The Pacific Telephone and Telegraph Company.* On March 18, 1914. Dr. H. F. Dessau, Thayer Building, Oakland, complained that the rates charged its patrons by The Pacific Telephone and Telegraph Company in the city of Oakland are excessive, extortionate and unreasonable, and requested that the Commission investigate and fix reasonable charges for the service rendered.

The complainant was advised that an investigation of the matters involved would require the filing of a formal complaint with the Commission. Such formal complaint has not yet been filed and the correspondence in connection with this complaint has been closed on this basis.

#### MANNER OF COLLECTING TOLL CHARGES.

I. C. 3177.

May 25, 1914.

*Dry Creek and Healdsburg Telephone Company, Upper Dry Creek Telephone Company and Pine Ridge Telephone Company vs. California Telephone and Light Company.* March 18, 1914. Dry Creek and Healdsburg Telephone Company, Upper Dry Creek Telephone Company and Pine Ridge Telephone Company, all at Healdsburg, made complaint of the California Telephone and Light Company regarding the manner of collecting toll charges.

After an investigation by the Commission, the defendant devised a routine covering the collecting of toll charges, and the complainants advised the Commission that same was entirely satisfactory and the complaint was closed on that basis.

#### REFUNDING OF DEPOSIT.

I. C. 3185.

June 4, 1914.

*A. M. Davy vs. Union Home Telephone and Telegraph Company.* March 9, 1914. A. M. Davy, 409 Pine avenue, Long Beach, made complaint of the Union Home Telephone and Telegraph Company regarding the refunding of \$5.00 deposit.

Upon investigation by the Commission, it was disclosed that the complainant had, within one year from the date the telephone was installed, requested the telephone company to discontinue service and had demanded the return of the \$5.00 deposit.

Complainant was advised that the rules and regulations of the above company, which were filed in compliance with one of the General Orders of the Commission, provide that all new contracts are to be accepted for not less than one year, and in accepting same the telephone company requires a deposit of \$5.00 to guarantee fulfillment of the contract; also that this Commission was without jurisdiction as to the regulation of public utilities within the incorporated city limits of Long Beach.

#### REQUIREMENT OF DEPOSIT.

I. C. 3234.

May 29, 1914.

*Charles Golvin vs. The Pacific Telephone and Telegraph Company.* March 27, 1914. Charles Golvin, 600 Petaluma avenue, San Rafael, made complaint of The Pacific Telephone and Telegraph Company regarding the requirement of a \$5.00 deposit.

Upon investigation by the Commission, it was disclosed that the complainant was formerly a subscriber of the above company and, on applying again for service, a \$5.00 deposit was required previous to the installation.

The complainant was advised that the schedules of rates which were filed by the telephone company in compliance with one of the Commission's General Orders provide for the above deposit, and that this company can quote same until its reasonableness is passed upon; also to the effect that the Commission would, no doubt, within a short time institute an investigation concerning this deposit requirement.

#### TOLL CHARGE BETWEEN SAN MATEO AND BELMONT.

I. C. 3239.

*Beresford Improvement Club vs. The Pacific Telephone and Telegraph Company.* March 28, 1914. Beresford Improvement Club, Beresford, made complaint of The Pacific Telephone and Telegraph Company regarding the toll charge between San Mateo and Belmont.

Complainant was advised that this Commission had recently rendered its decision in Application No. 2 and Case No. 407, effective March 21, 1914, which fixes a schedule of rates for long distance telephone toll service to be charged by the above company between all points between which it operates in this State; also that the rates between San Mateo and Belmont had been considerably reduced by the above decision.

#### REQUIREMENT OF DEPOSIT.

I. C. 3241.

May 7, 1914.

*Davis & Gooch vs. The Pacific Telephone and Telegraph Company.* March 26, 1914. Davis & Gooch, 922 J street, Modesto, made complaint of The Pacific Telephone and Telegraph Company regarding the requirement of a deposit prior to the installation of telephone service.

Complainant was advised that the above company had filed its schedule of rates in compliance with one of the Commission's General Orders and that same had been



accepted for filing purposes only until their reasonableness would be passed upon. The Commission also stated that the above provided for a deposit of \$5.00 in certain cases prior to the installation of service.

#### REQUIREMENT OF DEPOSIT.

I. C. 3273.

*E. B. Gilbert vs. The Pacific Telephone and Telegraph Company.* April 1, 1914. E. B. Gilbert, 1931 Pine street, Bakersfield, made complaint of The Pacific Telephone and Telegraph Company regarding the requirement of a \$5.00 deposit.

The complainant stated that for several years telephone service had been furnished at his residence, although during a portion of this period the house was leased, the tenant retaining the same class of service. Upon again taking over his place application was made to the telephone company for the continuance of service, but the company had demanded a deposit of \$5.00.

After investigation by the Commission the telephone company waived the deposit owing to the length of previous service.

#### POOR SERVICE AND DISCRIMINATION IN RATES.

I. C. 3281.

June 30, 1914.

*Henry McGuinness vs. The Pacific Telephone and Telegraph Company.* April 2, 1914. Henry McGuinness, Sisson, made complaint of The Pacific Telephone and Telegraph Company on behalf of Ben Oliver regarding poor service, and also alleging discrimination in rates.

Investigation by the Commission disclosed the fact that, at the time complainant applied for four-party service, suburban service was furnished owing to the lack of facilities, and through a mistake the complainant was billed at the higher rate. The telephone company refunded the difference between the suburban and four-party rate for the time the telephone had been installed and same was transferred to a four-party line.

The poor service was caused by the heavy storms and the telephone company refunded 95 cents in consideration of the time the telephone was out of service.

#### TOLL RATE BETWEEN ROCKWOOD AND BRAWLEY.

I. C. 3311.

September 2, 1914.

*V. W. Croxton vs. Imperial Telephone Company.* April 11, 1914. V. W. Croxton, Brawley, made complaint of the Imperial Telephone Company regarding the reasonableness of the rate between Rockwood and Brawley.

After investigation by this Commission a substantial reduction was made in the rate between the above points.

#### RATES FOR EXTENSIONS ON SUBURBAN LINES.

I. C. 3326.

July 16, 1914.

*H. C. Cutting vs. The Pacific Telephone and Telegraph Company.* April 13, 1914. H. C. Cutting, 777 Monadnock Building, San Francisco, made complaint of The Pacific Telephone and Telegraph Company regarding the rates for extension telephones on suburban lines at his residence in Hayward.

Complainant was advised that it has been the practice of the above company in most cases to refuse to allow the use of extension telephones connected on suburban lines, and that the rates which were quoted for the additional telephones are the regular rates for suburban service which are in accordance with the schedules on file with this Commission; also that if it was his desire to question the reasonableness of the above rates, the matter could be considered by the Commission only by the filing of a formal complaint as provided for in the Public Utilities Act.

#### REQUIREMENT OF DEPOSIT.

I. C. 3339.

*Albert Peterson vs. The Pacific Telephone and Telegraph Company.* April 15, 1914. Albert Peterson, Oakdale, made complaint of The Pacific Telephone and Telegraph Company regarding the requirement of a \$5.00 deposit prior to the installation of service.

The complainant was advised that the schedule of rates of the above company, which were filed in compliance with a General Order of this Commission, provides for said deposit and that same is returnable after one year with interest; also to the effect that the Commission would in all probability institute an investigation calling into question the reasonableness of the deposit requirement which would affect all telephone utilities in the State.



REQUIREMENT OF DEPOSIT.

I. C. 3346.

May 25, 1914.

*Davis & Higgins vs. The Pacific Telephone and Telegraph Company.* April 17, 1914, Davis & Higgins, Anderson, made complaint of The Pacific Telephone and Telegraph Company regarding the requirement of a \$5.00 deposit.

Complainant was advised that the above charge, which is exacted prior to the installation of service, is provided for in the schedules of rates which have been filed with this Commission, and that the telephone company is authorized to quote same until their reasonableness is passed upon. The Commission also stated that a general investigation relative to the above charge would, no doubt, be made in the near future.

TELEPHONE CHARGES.

I. C. 3347.

*Marguerite Stabler vs. The Pacific Telephone and Telegraph Company.* April 15, 1914, Marguerite Stabler, Yuba City, filed a complaint regarding the failure of The Pacific Telephone and Telegraph Company to reduce the telephone charges as ordered by this Commission.

The complainant was advised that this Commission had recently issued its order, effective March 21, 1914, fixing a schedule of rates for long distance toll service to be charged its patrons by the above company at all points at which it operates toll lines in this state; and that said order does not affect any other classes of service.

DISCRIMINATION IN TOLL RATES.

I. C. 3385.

June 1, 1914.

*Percy T. Hannigan vs. The Pacific Telephone and Telegraph Company.* April 23, 1914, Percy T. Hannigan, 407 Phelan Building, San Francisco, made complaint of The Pacific Telephone and Telegraph Company regarding a discrimination in toll rates to San Francisco from Rockaway Beach and Salada Beach.

Complainant was advised that this Commission had recently issued its order requiring the above company to place in effect revised schedules for long distance toll service between all points within the State of California at which it operates; also that the revised rate from San Francisco to Rockaway Beach is the same as the revised rate from San Francisco to Salada Beach.

LOS ANGELES-ALHAMBRA AND LOS ANGELES-PASADENA TOLL RATES.

I. C. 3407.

July 17, 1914.

*American Olive Company vs. The Pacific Telephone and Telegraph Company.* April 25, 1914, American Olive Company, Adams street and Long Beach avenue, Los Angeles, made complaint stating that The Pacific Telephone and Telegraph Company refused to furnish "Particular Person" service between Los Angeles and Alhambra and between Los Angeles and Pasadena.

Upon investigation by the Commission, it was disclosed that both "Two-Number" and "Particular Person" service were furnished between Los Angeles and Alhambra and were in accordance with the schedules on file with this Commission. The schedule of rates filed by the telephone company prior to March 21, 1914, showed that both of the above classes of service were in effect between Los Angeles and Pasadena; however, the company advised the Commission that same was in error, that "Two-Number" service only was in effect between these points at the time the tariffs were filed and has been in effect continuously since May 1, 1908.

CANCELLATION CHARGE.

I. C. 3408.

August 3, 1914.

*M. G. Bradley vs. The Pacific Telephone and Telegraph Company.* April 25, 1914, M. G. Bradley, 858 Lydia street, Oakland, made complaint of The Pacific Telephone and Telegraph Company regarding a \$5.00 cancellation charge.

After investigation by this Commission, the telephone company waived the above charge, due to the length of time the complaint had received service, substituting therefor a moving charge of \$3.50. The difference was credited to the subscriber's account which satisfactorily adjusted the matter.

INCREASE IN RENTAL.

I. C. 3429.

June 16, 1914.

*G. P. Morgan vs. The Pacific Telephone and Telegraph Company.* Complaint was made by G. P. Morgan of Sonora vs. The Pacific Telephone and Telegraph Company on April 29, 1914, alleging that the telephone company has refused to move a telephone from his former address to another address except upon con-

dition that he sign a contract agreeing to pay a rate which is higher than the rate formerly paid at the former address.

Investigation has disclosed that the telephone company has filed with the Commission, in compliance with its General Order No. 15 and as required by the Public Utilities Act, its schedule of rates for Sonora which were the standard rates in effect since July 5, 1911, and which provides a rate for the class of service involved in this complaint which is the rate demanded for this class of service of all the company's patrons who have been furnished service since that rate became standard. The complainant has occupied premises since September, 1911, in which service installed for a former occupant when a lower rate was in effect was continued at the lower rate, and since he was actually paying the lower rate on October 10, 1911, under General Order No. 17 subsequently issued by the Commission, the telephone company was not permitted to increase that rate to the standard rate in effect on July 5, 1911, pending a further order of the Commission involving a complete investigation into the entire subject involved in rates which are not standard.

This complainant has by vacating the premises voluntarily surrendered the service at the lower rate, and since other patrons having service installed since the higher present standard rate became effective are required to pay the higher rate, the question in this case appears to be whether the complainant is justified in demanding that service at a preferential rate be re-installed at another address or whether the telephone company may deny it and demand the higher or standard rate which it has demanded. The circumstances appear to justify the company's position and the complainant was so advised.

#### TOLL RATES AND SERVICE BETWEEN LOS ANGELES AND VENICE.

I. C. 3474.

June 4, 1914.

*Second Street Cafeteria Company vs. The Pacific Telephone and Telegraph Company and Home Telephone and Telegraph Company.* May 5, 1914, Second Street Cafeteria Company, 211 West Second street, Los Angeles, made complaint of The Pacific Telephone and Telegraph Company and Home Telephone and Telegraph Company regarding the toll rates and service between Los Angeles and Venice.

Complainant was advised that The Pacific Telephone and Telegraph Company quotes two classes of service between the above points, namely, "Particular Party Service" and "Two-Number Service," and that this Commission had recently ordered that company to place in effect a schedule of rates for these classes of service to be uniformly applied throughout this State; also to the effect that the Commission had granted permission to the Home Telephone and Telegraph Company to place in effect rates similar to the rates ordered in effect by The Pacific Telephone and Telegraph Company.

#### REQUIREMENT OF DEPOSIT.

I. C. 3494.

June 18, 1914.

*A. Lundberg vs. The Pacific Telephone and Telegraph Company.* May 8, 1914, A. Lundberg, 1023 South Sutter street, Stockton, made complaint of The Pacific Telephone and Telegraph Company regarding the requirement of a \$5.00 deposit.

Complainant was advised that this Commission is without jurisdiction as to the regulation of public utilities within the incorporated city limits of Stockton, this power being vested in the municipal authorities; also that the clause relative to the above deposit is embodied in the schedule of rates which were filed by the telephone company with this Commission.

#### ALLEGED OVERCHARGE FOR TOLL CONVERSATIONS.

I. C. 3513.

July 16, 1914.

*M. L. Orcutt vs. The Pacific Telephone and Telegraph Company.* May 8, 1914, M. L. Orcutt, Long Beach, made complaint of The Pacific Telephone and Telegraph Company regarding an alleged overcharge for toll conversations between Long Beach and Los Angeles.

The complainant doubted the accuracy of the telephone company's time record and, after an investigation by this Commission, the amount of overcharge claimed was waived. Complainant advised the Commission that the complaint has been adjusted satisfactorily.

#### CANCELLATION CHARGE AND DEPOSIT REQUIREMENT.

I. C. 3527.

August 3, 1914.

*K. L. Salmon vs. The Pacific Telephone and Telegraph Company.* May 14, 1914, K. L. Salmon, Mill Valley, made complaint of The Pacific Telephone and Telegraph Company regarding the \$5.00 cancellation charge and the \$5.00 deposit requirement.

Upon investigation by this Commission, it was disclosed that the complainant had signed a contract covering service at his Berkeley residence and that, within one year from the date telephone was installed, he moved to Mill Valley and requested the discontinuance of service. The telephone company, therefore, rendered a bill covering a cancellation charge of \$5.00. Upon applying for service at Mill Valley a \$5.00 deposit was demanded previous to the installation.

The complainant was advised that the above charges were embodied in the tariffs which had been filed by the telephone company with this Commission and that same were the lawful charges until passed upon by this Commission.

REFUSAL TO RETURN DEPOSIT.

June 18, 1914.

I. C. 3528.

*MacGowen & Haas vs. The Pacific Telephone and Telegraph Company.* May 12, 1914, MacGowen & Haas, 410 Merchants Trust Building, Los Angeles, made complaint of The Pacific Telephone and Telegraph Company on behalf of M. M. Summerfield regarding the refusal to return a \$5.00 deposit.

Complainant was advised that the schedules of rates which were filed by the above company in compliance with one of the Commission's General Orders provide for a deposit of \$5.00 prior to the installation of service which is to guarantee the fulfillment of contract. If service is discontinued within one year, the said deposit is applied against the subscriber's account as a cancellation charge. Complainant was also advised that this Commission is without jurisdiction within the incorporated city limits of the city of Los Angeles, this power being vested in the municipal authorities.

REFUSAL TO PAY INTEREST ON DEPOSIT.

July 17, 1914.

I. C. 3530.

*Jack Barnett vs. San Diego Home Telephone Company.* May 12, 1914, Jack Barnett, 434 Thirteenth street, San Diego, made complaint regarding the refusal of the San Diego Home Telephone Company to pay interest on a certain deposit for the alleged reason that his rights were forfeited through the loss of the deposit receipt.

It was disclosed, after investigation by this Commission, that the refusal to pay the said interest was the result of a misunderstanding and same was immediately refunded to him.

LEGALITY OF DEPOSIT.

June 10, 1914.

I. C. 3545.

*W. C. Duffield vs. The Pacific Telephone and Telegraph Company.* May 15, 1914, W. C. Duffield, Escondido, made complaint of The Pacific Telephone and Telegraph Company regarding the legality of the \$5.00 deposit.

Complainant was advised that the schedules of rates, which were filed by the above company in compliance with one of the General Orders of this Commission, provide for a deposit of \$5.00 prior to the installation of service; also that the reasonableness of this requirement had not been passed upon, however, an investigation of same would probably be made in the near future.

RATES FOR SERVICE AND OWNERSHIP OF LINE.

I. C. 3557.

*Eli Munz vs. Antelope Valley Telephone Company.* May 19, 1914, Eli Munz, Roosevelt, made complaint of the Antelope Valley Telephone Company regarding the rates for telephone service and also as to the ownership of a line from Del Sur to Lancaster.

Complainant was advised after informal investigation that the Commission recently held a hearing in the matter of the application of the above company to increase its rates for telephone service, and that no objection was made at that time to the rates heretofore charged or to the rates which it desired to charge in the future and that the company is therefore within its rights in requiring payment of the rates in question; also that if the Antelope Telephone Company declines to furnish service under any other arrangement than is at present demanded, if, as a consequence, service is discontinued, he was at liberty to file a formal complaint with this Commission.

CANCELLATION CHARGE.

June 30, 1914.

I. C. 3563.

*Perry Hendricks vs. The Pacific Telephone and Telegraph Company.* May 19, 1914, Perry Hendricks, Chico, made complaint of The Pacific Telephone and Telegraph Company regarding the right to exact a \$5.00 cancellation charge.

Complainant was advised that the contract which he signed prior to the installation



of service contained a clause to the effect that the said contract may be cancelled by the subscriber at any time after three months from the date service commenced by payment of \$5.00 as a cancellation charge, provided all sums due thereunder have been paid; also that the above was embodied in the schedule of rates filed with this Commission and the company is within its rights in exacting the charge until its reasonableness will have been passed upon.

#### REQUIREMENT OF DEPOSIT.

I. C. 3567.

August 3, 1914.

*M. J. Rose vs. The Pacific Telephone and Telegraph Company.* May 18, 1914. M. J. Rose, 620 North Vine street, Stockton, made complaint of The Pacific Telephone and Telegraph Company regarding the requirement of a \$5.00 deposit previous to the installation of service.

Complainant was advised that, under the rules and regulations affecting rates filed by the above company, it now has this right; also that this Commission was without jurisdiction as to the regulation of rates which are wholly applicable within the corporate limits of the City of Stockton, this power being vested in the municipal authorities.

The complainant also stated that certain exchange rates had been increased by the telephone company. The Commission requested more specific information as to the increased rates, but same was not furnished.

#### COMPLAINT RE \$3.50 MOVING CHARGE.

I. C. 3574.

August 1, 1914.

*S. M. Askins, Jr., vs. The Pacific Telephone and Telegraph Company.* May 20, 1914. S. M. Askins, Jr., 5360 James avenue, Oakland, made complaint of The Pacific Telephone and Telegraph Company relative to the charge of \$3.50 exacted covering the moving of a telephone.

After investigation by this Commission, the above charge was waived due to the fact that the moving of the telephone did not necessitate extra expense.

#### REQUIREMENT OF DEPOSIT AND DISCRIMINATION IN RATES.

I. C. 3580.

August 31, 1914.

*A. B. Stickney vs. The Pacific Telephone and Telegraph Company.* May 19, 1914. A. B. Stickney, Inglewood, made complaint of The Pacific Telephone and Telegraph Company regarding the requirement of a \$5.00 deposit previous to installation of service and also alleging discrimination in rates.

Complainant was advised that this Commission had issued no order regarding the \$5.00 deposit which could be made applicable throughout California, and that so far as Inglewood was concerned there is nothing in the present tariffs of the telephone company or any order of this Commission prohibiting this practice.

After investigation by this Commission as to the alleged discrimination, it was disclosed that the complainant's telephone had been moved to a new location in the same residence and evidently through a misunderstanding the rate was increased from \$1.00 to \$1.25. The difference between the two rates from the date of change was refunded to the complainant which satisfactorily adjusted the matter.

#### DELIVERY CHARGES ON TELEGRAM.

I. C. 3586.

August 3, 1914.

*A. H. Gardner vs. The Western Union Telegraph Company.* May 18, 1914. A. H. Gardner, Tombstone, Arizona, made complaint of The Western Union Telegraph Company regarding the delivery charges on a telegram which was sent from the above point to San Diego.

After investigation by this Commission, the defendant advised that the amount of the disputed delivery charge was too high and brought about through error. The full amount collected was refunded to the complainant who advised the Commission that the matter had been satisfactorily adjusted.

#### RIGHT TO DEMAND RENTALS IN ADVANCE.

I. C. 3588.

June 30, 1914.

*M. M. Rosenberg vs. California Telephone and Light Company.* May 20, 1914. M. M. Rosenberg, Healdsburg, made complaint of the California Telephone and Light Company regarding the right to demand telephone rentals in advance.

Complainant was advised that the above company filed its schedule of rates in compliance with a general order of the Commission and that embodied in same was a clause to the effect that the rates are monthly and are payable monthly in advance.



except where otherwise specified; also that the above are the lawful rates until their reasonableness will have been passed upon by the Commission.

PAYMENT OF RENTAL IN ADVANCE.

I. C. 3590.

July 17, 1914.

*Schellville Dairy Company vs. The Pacific Telephone and Telegraph Company.* May 21, 1914. I. Wolfe, representing the Schellville Dairy Company, 1337 Webster street, San Francisco, made complaint of The Pacific Telephone and Telegraph Company regarding the payment of five months' rental in advance prior to the installation of telephone.

After investigation by this Commission, the telephone company waived the advance payment and the telephone was installed.

REQUIREMENT OF DEPOSIT AND DISCRIMINATION IN RATES.

I. C. 3634.

August 3, 1914.

*D. E. Cox vs. The Pacific Telephone and Telegraph Company.* May 25, 1914. D. E. Cox, Route No. 1, Box 31, Petaluma, made complaint of The Pacific Telephone and Telegraph Company regarding the requirement of the \$5.00 deposit previous to installation of telephone and also alleged discrimination in rates.

Complainant stated that he had contracted for two-party service and deposited at the time the customary \$5.00 deposit. Believing that other parties were receiving the same class of service at lower rates, he withdrew the above deposit upon the termination of the contract, and refused to pay the higher rates. Service was, therefore, discontinued.

Upon investigation by this Commission, it was disclosed that the complainant had been receiving four-party service at two-party rates, and the telephone company accordingly refunded the difference between the two and four-party rates for the period in question. The complainant expressed his entire satisfaction as to the adjustment.

MERCED-SAN FRANCISCO TOLL RATE.

I. C. 3660.

July 16, 1914.

*Dr. E. D. Painter vs. The Pacific Telephone and Telegraph Company.* June 2, 1914. Dr. E. D. Painter, Merced, made complaint of The Pacific Telephone and Telegraph Company regarding the Merced-San Francisco toll rate.

Complainant was advised that the decision of this Commission fixing a schedule of rates for long distance telephone toll service to be charged its patrons by the above company fixed the initial rate for a minimum period of two minutes, and that this was the result of a thorough investigation which was based upon the average time consumed in conversations over the company's territory in California as a whole.

RATES FOR SERVICE.

I. C. 3673.

August 31, 1914.

*J. B. Hart vs. The Pacific Telephone and Telegraph Company.* June 3, 1914. J. B. Hart, Merced, made complaint of The Pacific Telephone and Telegraph Company regarding the rates for telephone service at his mine at Clearinghouse.

Complainant was advised that according to the tariffs of the above company on file with this Commission it is apparent that the telephone referred to is a toll station connected with the toll lines of The Pacific Telephone and Telegraph Company, and that the rate usually required by this company for such service is a minimum rate of \$10.00 per month and if sufficient calls originate at the station, the charges for which would aggregate \$10.00, no charge to the patron is made except for the service actually rendered at regular rates.

REQUIREMENT OF DEPOSIT.

I. C. 3701.

July 17, 1914.

*Mrs. G. J. Harms vs. The Pacific Telephone and Telegraph Company.* June 8, 1914. Mrs. G. J. Harms, 645 West Flora street, Stockton, made complaint of The Pacific Telephone and Telegraph Company regarding the requirement of a \$5.00 deposit.

Complainant was advised that this Commission was without jurisdiction as to the regulation of telephone rates which are wholly applicable within the incorporated limits of the city of Stockton, this power being vested in the municipal authorities; also that the schedule of rates which was filed by the above company provides for a deposit of \$5.00 prior to the installation of service.

## SIGNING NEW CONTRACT UPON MOVING.

I. C. 3703.

August 5, 1914.

*J. H. Wentz vs. The Pacific Telephone and Telegraph Company.* June 8, 1914. J. H. Wentz, Folsom, made complaint of The Pacific Telephone and Telegraph Company regarding the necessity of signing a new contract upon the moving of the telephone.

After investigation by this Commission the telephone company, in view of the length of time that the complainant had received service, waived the above requirement and moved the telephone as requested.

## DISCRIMINATION IN RATES.

I. C. 3722.

July 31, 1914.

*J. E. Ledgerwood vs. The Pacific Telephone and Telegraph Company.* During May, 1914, J. E. Ledgerwood, Sherman, made complaint of The Pacific Telephone and Telegraph Company regarding an alleged discrimination in rates, in that he was charged a greater rate for the same class of service than that exacted from other patrons.

After investigation by the Commission, the complainant was advised that if it was a fact that his contract was signed on November 27, 1911, for a telephone formerly in use by another party, the telephone company could not, under its published schedules, allow him any rate other than the rate then allowed; and that, if the circumstances were as stated, the contracts covering subsequent changes were also written at the regular published rates on file with this Commission and the telephone company cannot without discriminating allow any other rate for the service involved, neither can the telephone company increase the rate which the other party, as cited, is paying for the reason that that rate was in effect on October 10, 1911, and under the provisions of the Public Utilities Act and General Order No. 17 of this Commission, the telephone company cannot increase any rate without a proper showing before the Commission justifying such increase.

## OVERCHARGE ON DELIVERY OF TELEGRAM.

I. C. 3732.

September 16, 1914.

*Knox Boude vs. Western Union Telegraph Company.* May 28, 1914, Knox Boude, Petaluma, made complaint of the Western Union Telegraph Company alleging an overcharge on the delivery of a telegram from Sacramento to Sebastopol.

Upon investigation by this Commission, the above company admitted that an overcharge of \$1.25 had been made and same was refunded which satisfactorily adjusted the matter.

## ALLEGED OVERCHARGE ON PAY STATION RENTAL.

I. C. 3733.

August 3, 1914.

*F. L. Matschek vs. The Pacific Telephone and Telegraph Company.* May 27, 1914, F. L. Matschek, 3321 Twentieth street, San Francisco, made complaint of The Pacific Telephone and Telegraph Company regarding an alleged overcharge on the pay station rental.

Investigation by this Commission disclosed the fact that an item of 25 cents, which was noted on the monthly statement, indicated the amount of the subscriber's guarantee and was not to be included in the rental charge. The matter was due to a misunderstanding and the complaint was satisfactorily adjusted.

## RATES ON EXTENSIONS.

I. C. 3739.

August 18, 1914.

*Chrisman Bros. vs. The Pacific Telephone and Telegraph Company.* June 13, 1914, Chrisman Bros., 495 East St. James street, San Jose, made complaint of The Pacific Telephone and Telegraph Company regarding the difference in rates on two extension telephones.

The Commission requested more complete information as to the distances between the extensions and the main set but same was not furnished, therefore, the complaint was closed on that basis.

## DISCRIMINATION IN RATES.

I. C. 3765.

September 3, 1914.

*W. E. Bucknell vs. The Pacific Telephone and Telegraph Company.* February 14, 1914, W. E. Bucknell, 206 Mercantile place, Los Angeles, made complaint of The Pacific Telephone and Telegraph Company claiming that discrimination existed between the rates charged on the north side of Florence avenue and those charged on the south side.

Upon investigation by this Commission, the telephone company stated that they were endeavoring to work out a satisfactory schedule and the complainant later advised that he was receiving satisfactory service and desired to drop the matter, therefore, the complaint was closed on that basis.

LEGALITY OF CANCELLATION CHARGE.

July 31, 1914.

I. C. 3806.

*Dr. Arthur C. Huntley vs. The Pacific Telephone and Telegraph Company.* June 15, 1914. Dr. Arthur C. Huntley, Elk, made complaint regarding the legality of the \$5.00 cancellation charge exacted by The Pacific Telephone and Telegraph Company.

Complainant was advised that one of the rules and regulations affecting rates, filed by the above company with this Commission, provides that a contract for regular exchange service may be cancelled by the subscriber upon notice to the telephone company at any time after three months' rental has been paid upon payment of a cancellation charge of \$5.00 in addition to the regular rental, no contracts to be taken for less than one year; also that this Commission has not as yet ordered or authorized any change in this regulation, therefore, the company is acting within its lawful rights in rendering a bill for this amount.

DEPOSIT AND CANCELLATION CHARGES.

July 31, 1914.

I. C. 3810.

*O. L. Sealf vs. The Pacific Telephone and Telegraph Company.* June 22, 1914. O. L. Sealf, Rotunda Baths, Chico, made complaint of The Pacific Telephone and Telegraph Company regarding the requirement of the \$5.00 deposit previous to the installation of service and also as to the right to exact \$5.00 as a cancellation charge if contract is terminated within one year from date service commenced.

Complainant was advised that the above charges were embodied in the tariffs which had been filed in compliance with one of the General Orders of this Commission, and that the telephone company was within its lawful rights in quoting same until their reasonableness is passed upon.

RATES FOR SERVICE.

I. C. 3826.

*Dr. C. P. Thomas vs. Santa Monica Bay Home Telephone Company.* June 20, 1914. Dr. C. P. Thomas, Consolidated Realty Building, Los Angeles, made complaint of the Santa Monica Bay Home Telephone Company regarding the rate exacted covering telephone service at his residence in Santa Monica.

Upon investigation by this Commission the telephone company stated that the rate charged the complainant is the same as that charged other subscribers in the same district and which is in accordance with the rate on file with the Commission.

The complainant, upon being advised as to the foregoing, considered the matter as satisfactorily adjusted.

RATES IN THE VICINITY OF SEBASTOPOL.

August 19, 1914.

I. C. 3828.

*Hattie E. Donley vs. California Telephone and Light Company.* June 17, 1914. Hattie E. Donley, R. F. D. No. 3, Sebastopol, made complaint of the California Telephone and Light Company regarding the rates within the exchange limits of Sebastopol and those of the surrounding territory.

Complainant was advised that the exchange within the city of Sebastopol is owned and operated by The Pacific Telephone and Telegraph Company and that the schedule of rates provides for an exchange radius of three quarters of a mile from the switch-board in a straight line; also that the California Telephone and Light Company is operating under a contract with the above company under the terms of which it provides telephone service to the rural districts surrounding Sebastopol.

RATES AND HOURS OF SERVICE AT DELANO.

September 16, 1914.

I. C. 3865.

*Shifflet & Son vs. The Pacific Telephone and Telegraph Company.* June 28, 1914. Shifflet & Son, Delano, made complaint of The Pacific Telephone and Telegraph Company, stating that in view of the unsatisfactory hours of service at Delano, they would from the date of the complaint, pay only \$1.50 per month for telephone service.

Upon investigation by this Commission, it was disclosed that just previous to the filing of the complaint, the hours of service had been extended, through the efforts of the Commission in another matter, and was satisfactory to the complainants.



In regard to the rates, the Commission advised the complainants that since the schedule of the telephone company does not provide for the rate which they intended to pay, the telephone company is within its lawful rights in requiring the higher rate or unless a change in its present schedule is ordered or authorized by this Commission; also that if it was the desire to make complaint as to the reasonableness of the present rates, same should be filed as required by the Public Utilities Act.

#### CANCELLATION CHARGE AND DEPOSIT REQUIREMENT.

I. C. 3877.

August 31, 1914.

*Byron E. James vs. The Pacific Telephone and Telegraph Company.* June 26, 1914, Byron E. James, Nevada City, made complaint of The Pacific Telephone and Telegraph Company regarding the charge of \$5.00 which is exacted covering the cancellation of contract, also as to the requirement of \$5.00 deposit previous to installation.

Complainant was advised that one of the present requirements of the telephone company as covered by rules and regulations affecting rates on file with this Commission provides for the payment of a deposit as a condition to the installation of service, and also for the cancellation of contract at any time after three months upon the payment of five dollars as a cancellation charge, provided all sums due from the subscriber have been paid.

#### DISCRIMINATION IN RATES.

I. C. 3887.

September 2, 1914.

*W. D. White vs. The Pacific Telephone and Telegraph Company.* June 25, 1914, W. D. White, Foster, made complaint of The Pacific Telegraph and Telephone Company alleging discrimination in the rates in effect at Ramona for San Diego service.

Complainant was advised that the low rate which he desired was not provided for in the schedule on file with the Commission, and was evidently not in effect on October 10, 1911; also that the Commission assumed that the rate in question was in effect prior to September 1, 1910, as this was the date of the schedule on file, and that for some reason or other the persons having that rate were allowed to continue it, and as a matter of fact they were paying this rate on October 10, 1911; also to the effect that if this were true, the telephone company could not, under the provisions of the Public Utilities Act discontinue without an order from the Commission authorizing the change.



## INFORMAL GAS AND ELECTRIC COMPLAINTS.

## OVERCHARGE ALLEGED.

I. C. 204.

*F. H. Griffin vs. H. G. Lacey Company.* Under date of November 7, 1912, the Commission received a letter from F. H. Griffin of Hanford, in which he complained of an overcharge for electricity by the H. G. Lacey Company.

After an investigation by the Commission complainant was advised that owing to lack of jurisdiction the Commission could be of no assistance in this matter.

## REDUCTION OF RATES.

I. C. 509.

February 9, 1914.

*Paul Jordan, Jr., vs. Downey Light and Power Company.* On August 8, 1913, Paul Jordan, Jr., of Downey, complained of the rates charged by the Downey Light and Power Company.

Investigation was made by the Commission resulting in a reduction of their rates, which adjustment was satisfactory to the complainant.

## RATE INCREASE ADJUSTED.

I. C. 573.

*H. W. Hawkinson vs. Southern Sierras Power Company.* On September 3, 1912, the Commission received a letter from H. W. Hawkinson of Perris, complaining that the Southern California Power Company had increased his rate for electric energy for power purposes. After an investigation by the Commission the matter was automatically adjusted by the Commission's decision in Application No. 343.

## RATE INCREASE ADJUSTED.

I. C. 738.

*E. C. Stewart vs. Western States Gas and Electric Company.* On December 6, 1912, E. C. Stewart of Stockton, complained that the Western States Gas and Electric Company had charged him 8 cents for electric lighting service while other patrons were receiving a rate of 7 cents for same class of service. Complaint was automatically adjusted by Commission's order and decision in Application No. 347 making a general reduction in electric rates at Stockton.

## REBATE SECURED.

I. C. 923.

*R. D. Forest vs. Northern California Power Company, Consolidated.* On January 20, 1913, the Commission received a letter from R. D. Forest stating that the company had subjected him to an overcharge. After an investigation by the Commission a rebate was made, which adjustment was satisfactory to the complainant.

## METER COMPLAINT.

I. C. 1049.

*J. H. Ward vs. Northern California Power Company, Consolidated.* On February 25, 1913, the Commission received a petition signed by several consumers of the Northern California Power Company, Consolidated, at Ingot, Shasta County, complaining that the above company refused to install meters. The company in defending their action in the matter stated that, due to the small number of consumers at Ingot, it would not pay to install meter service. The consumers were informed of this and we presume they have dropped the matter inasmuch as we have heard nothing further from them.

## COMPLAINT FROM HUGHSON.

I. C. 1073.

*E. F. Sawdy vs. Yosemite Light and Power Company.* On December 11, 1912, the Commission received a letter from E. F. Sawdy, Secretary of the Hughson Board of Trade, complaining of the practice of the Yosemite Light and Power Company of requesting consumers to furnish transformers. After a careful investigation by the Commission the matter was presented formally to the Commission under Case No. 456.

## OVERCHARGE ADJUSTED.

I. C. 1117.

*Brown & Sons vs. Northern California Power Company, Consolidated.* On March 10, 1913, the Commission received a letter from Brown & Sons, Cottonwood, complaining of an overcharge on the part of the Northern California Power Company, Consolidated. After an investigation of the matter a rebate was made, which adjustment was satisfactory to the complainant.

## DISCRIMINATORY PRACTICES.

I. C. 1129.

*E. B. Stowe vs. Western States Gas and Electric Company.* On March 13, 1913, E. B. Stowe of 815 East Weber avenue, Stockton, complained of discriminatory practices on the part of the Western States Gas and Electric Company.

Investigation was made, and the matter automatically adjusted by the Commission's order in Application No. 347 reducing the rates of defendant utility in Stockton.

## CASH GUARANTEE COMPLAINT.

I. C. 1147.

*Clement H. Arnold vs. Pacific Gas and Electric Company.* On March 19, 1913, Clement H. Arnold, 709 Flood Building, San Francisco, complained to the Commission of the practices of the utility in requiring a \$5.00 cash guarantee for gas service.

The complainant was advised that the charge in question was a general one on the part of the utility; that it had not been approved by the Commission, but merely accepted for filing. Nothing further has been heard from the complainant on the subject, and it is presumed that the matter has been dropped.

## LACK OF JURISDICTION.

I. C. 1149.

*Rosenburg Brothers & Company vs. San Joaquin Light and Power Corporation.* Under date of March 20, 1913, the Commission received a communication from Rosenberg Brothers & Company questioning the practice of the San Joaquin Light and Power Corporation at Fresno.

Complainant was advised Commission could be of no assistance, due to lack of jurisdiction.

## LACK OF JURISDICTION.

I. C. 1161.

October 18, 1913.

*T. H. Benton vs. Northern California Power Company, Consolidated.* In a letter to the Commission under date of March 26, 1913, T. H. Benton of Redding, complained of unreasonable rates for the sale of electric energy by the Northern California Power Company, Consolidated. The complainant was advised that the Commission could be of no assistance in this matter, due to lack of jurisdiction. However, a careful investigation was made in the hope of arriving at some adjustment, but the lack of jurisdiction prevented the Commission from taking any action in this case.

## AGRICULTURAL SERVICE RATES.

I. C. 1164.

October 17, 1913.

*Wm. Jeffries vs. Coast Counties Gas and Electric Company.* On March 29, 1913, the Commission received a letter from Wm. Jeffries of Hollister, complaining of the rates of the Coast Counties Gas and Electric Company for agricultural service. After an investigation by the Commission the complainant was advised that it would be necessary that a formal complaint be filed before an adjustment could be made in this matter.

## SERVICE REFUSED.

I. C. 1187.

*Vla Stubbs vs. Western States Gas and Electric Company.* On April 3, 1913, the Commission received a letter from Miss Ada Stubbs of French Camp, complaining that the Western States Gas and Electric Company had refused her electric service, notwithstanding the fact that she had a contract with the company in which they had agreed to serve her. An investigation was made of the matter by the Commission and complainant's service was installed, which adjustment was satisfactory.

ELECTRIC SERVICE EXTENSION.

I. C. 1212.

February 9, 1914.

*C. B. Kemble vs. Pacific Gas and Electric Company.* During March, 1913, C. B. Kemble, R. D. 13, Cupertino, complained that the Pacific Gas and Electric Company had refused to extend its lines to serve his house for lighting.

Upon investigation it was found that the cost of making this extension would amount to about \$280.00. As there were only two lighting consumers to be served the investment necessary was not considered justifiable and Mr. Kemble was advised that the company could not be requested to make the extension at their own expense. No answer being received the complaint was considered closed.

EXCESSIVE RATES CHARGED.

I. C. 1245.

December 29, 1913.

*A. D. Shaw et al. vs Coast Counties Gas and Electric Company.* On April 16, 1913, Commission received a petition signed by consumers of the Coast Counties Gas and Electric Company, complaining of excessive rates for electric service outside of incorporated towns.

Investigation was made and complainant advised that in order to reach an adjustment it would be necessary to file formal complaint.

MINIMUM CHARGE AT HOLLISTER.

I. C. 1245a.

*Dallas Bache vs. Coast Counties Gas and Electric Company.* On April 14, 1913, the Commission received a letter from Dallas Bache of Hollister, complaining of the high minimum charge per horsepower of the Coast Counties Gas and Electric Company for agricultural purposes and also requesting copy of certain rates, as filed by the defendant company. The rates requested were forwarded and after an investigation of the matter the complainant was advised that no adjustment could be reached in an informal way.

ELECTRIC RATES AT HOLLISTER.

I. C. 1245b.

*Hollister Chamber of Commerce vs. Coast Counties Gas and Electric Company.* On April 14, 1913, the Commission received a letter from the Hollister Chamber of Commerce stating that their organization had contemplated reviewing the service rates of the Coast Counties Gas and Electric Company, and requesting certain information and data, that they may deal fairly and justly with the subject.

The information requested was forwarded, and nothing further having been heard, it is presumed that the matter has been dropped.

DIFFERENT RATES CHARGED.

I. C. 1269.

*Sherry Freitas Company, Incorporated, vs. Sierra and San Francisco Power Company.* On April 22, 1913, the Commission received a letter from the Sherry Freitas Company questioning the right of the Sierra and San Francisco Power Company to charge different rates for the same class of service at different points along the line. The complainant was requested to give more detailed information on the subject. As nothing further has been heard from them, it is presumed that the matter has been dropped.

ELECTRIC SERVICE NEAR BAKERSFIELD.

I. C. 1293.

December 27, 1913.

*C. H. Barlow vs. San Joaquin Light and Power Corporation.* On April 25, 1913, the Commission received a letter from Kemper B. Campbell in behalf of C. H. Barlow who resides near Bakersfield, Kern County, complaining that the San Joaquin Light and Power Corporation had refused to extend its electrical distribution lines in order to give him service at his pumping plant, unless he signed a contract for five years. Complainant stated that this requirement was unreasonable, inasmuch as he would not require services for so long a period of time.

After an investigation by the Commission, complainant was advised that as the utility maintained that it could not reasonably serve the consumer at a profit, it



would be necessary for him to file a formal complaint. Complainant was furnished with a copy of the Commission's Rules of Procedure.

Inasmuch as nothing further has been heard from complainant in this connection, it is presumed that the matter has been dropped.

#### RATES ADJUSTED.

I. C. 1295.

*S. F. Carlile vs. Western States Gas and Electric Company.* On April 26, 1913, the Commission received a letter from S. F. Carlile of Stockton, complaining of unreasonable rates of the Western States Gas and Electric Company for the sale of electric energy. This matter was automatically adjusted by the Commission's order in Application No. 347 in which a general reduction was made in the rates at Stockton.

#### RATES AND PRACTICES QUESTIONED.

I. C. 1301.

*L. A. Enos vs. San Joaquin Light and Power Corporation.* On April 28, 1913, the Commission received a letter from L. A. Enos of Fresno, in which he questioned the rates and practices of the San Joaquin Light and Power Corporation for agricultural purposes. The complainant was advised that in the event of an investigation of the matter it would be necessary that he furnish the Commission with certain detailed information. As nothing further has been heard from him on the subject it is presumed that the matter has been dropped.

#### COMPLAINT OF EXTENSION LINE PAYMENT.

I. C. 1319.

October 18, 1913.

*W. F. Sperry vs. Pacific Gas and Electric Company.* On March 21, 1913, W. F. Sperry, 503 Peoples Bank Bldg., Sacramento, complained of Pacific Gas and Electric Company requiring pay for a line extension to his pumping plant at Marysville. Company considered extension asked for unreasonable, but agreed to stand expense for first 300 feet.

Complainant was advised of company's offer, but as nothing was heard from him the matter was dropped.

#### LINE EXTENSION AT ISLETON.

I. C. 1324.

*G. H. Hughes et al. vs. Great Western Power Company.* On May 5, 1913, the Commission received a letter from George H. Hughes of Isleton, complaining that the Great Western Power Company refused to extend their service for electric power to his place notwithstanding the fact that he had signed an agreement that they would do so.

A careful investigation of the matter was made by the Commission, before the completion of which Mr. Hughes informed the Commission that he wished the matter dropped, which was done.

#### DISCRIMINATORY PRACTICES.

I. C. 1331.

*J. M. Shoults vs. Ben Lomond Light Company.* On May 2, 1913, the Commission received a letter from J. M. Shoults of Ben Lomond, complaining of discriminatory practices on the part of the Ben Lomond Light Company. An investigation was made of the matter and an adjustment reached satisfactory to the complainant.

#### EXCESSIVE CHARGE AT RIVERA.

I. C. 1338.

*J. Allen Osman vs. Downey Light and Power Company.* On May 5, 1913, the Commission received a communication from J. Allen Osman of Rivera, complaining of excessive charge for electric energy by the Downey Light and Power Company.

After some investigation had been made by the Commission, they received a letter from complainant stating that he had changed his residence and was no longer interested in the matter. Consequently no further action was taken.



RATES AT STOCKTON.

I. C. 1344.

*Studebaker Brothers Company vs. Western States Gas and Electric Company.* On May 9, 1913, the Commission received a letter from Studebaker Brothers Company in which they complain of the rates of the Western States Gas and Electric Company at Stockton. An investigation was made of the matter and the rate brought into question by the complainant was found to be in accordance with those on file with this Commission by the defendant company.

OVERCHARGE ALLEGED.

I. C. 1346.

*The Perkins Brothers Company vs. San Joaquin Light and Power Company.* On May 7, 1913, Perkins Brothers Company complained to the Commission that the San Joaquin Light and Power Company were subjecting them to an overcharge. A demand test was made of the plants of the complainant in the presence of engineers representing the Commission and the rating found to be correct, whereupon the matter was dropped.

SERVICE EXTENSION.

I. C. 1357.

*M. J. Lyon vs. Pacific Gas and Electric Company.* On May 12, 1913, a verbal complaint was received from M. J. Lyon to the effect that the Pacific Gas and Electric Company had refused to give lighting service to his property near Los Gatos.

Upon investigation it developed that the distribution line passing the Lyon property was not the property of the electric company. Later this line was taken over by the electric company. During the summer the complaint was apparently dropped. In January Mr. Lyon again requested service and offered to extend the line from his house to the property line, thus leaving approximately 350 feet extension to be made by the company.

Upon the suggestion of the Commission, the company has obtained the necessary right of way across the railroad and is to construct the line, which adjustment is satisfactory to the complainant.

MINIMUM CHARGE AT CHICO.

I. C. 1359.

*L. D. Breslauer vs. Northern California Power Company, Consolidated and Pacific Gas and Electric Company.* On May 12, 1913, the Commission received a letter from Mr. L. D. Breslauer of Chico, complaining of the practice of the electric companies at Chico in charging \$1.00 per month meter charge. The complainant was advised that the charge referred to was not a meter charge but a minimum charge and that the Commission had the case under investigation and he would be advised of any ruling in the matter.

ELECTRIC RATES AT WEED.

I. C. 1362.

December 29, 1913.

*W. Miles vs. California-Oregon Power Company.* On May 10, 1913, the Commission received a letter from W. Miles, whose postoffice address is Box 55, Weed, complaining of the rates of the California-Oregon Power Company.

Complainant stated that inasmuch as they were charging him for lights on a flat rate basis, he had requested the company to install a meter, but that they had refused to do so. The subject of this complaint was taken up in application of the California-Oregon Power Company requesting the Commission to fix rates for the sale of electric energy at Edgewood and Sisson.

RATES IN SANTA CLARA COUNTY.

I. C. 1391.

December 29, 1913.

*Elinor Pratt Lewandowski vs. Coast Counties Gas and Electric Company.* On May 16, 1913, the Commission received a letter from Elinor Pratt Lewandowski of 1121 Crocker Building, San Francisco, bringing into question the rates and charges of the Coast Counties Gas and Electric Company.

After an investigation by the Commission, the complainant was advised that inasmuch as the Commission could not reduce the rates without a formal hearing in

which the utility is given an opportunity to defend its rates, it would be necessary that a formal complaint be filed, if she wished to pursue this matter further.

Nothing further having been heard from the complainant, it is presumed that the matter has been dropped.

#### FUTURE ADJUSTMENT OF RATES.

I. C. 1403.

October 16, 1913.

*W. D. Tillotson vs. Northern California Power Company, Consolidated.* On May 19, 1913, W. D. Tillotson, Redding, complained of unreasonable rates for the sale of electric energy by the Northern California Power Company, Consolidated.

Investigation was made by the Commission and complainant advised that rates of the defendant company would be readjusted in the near future, at which time the case would receive attention.

#### LACK OF JURISDICTION.

I. C. 1461.

October 17, 1913.

*H. A. George vs. Pacific Gas and Electric Company.* Under date of February 13, 1913, the Commission received a letter from H. A. George of Petaluma complaining that the wiring of his motor had been burned out due to improper insulation of same by the Pacific Gas and Electric Company who served him with electric energy. After an extensive investigation of the matter by the Commission Mr. George was advised that the Commission could not be of assistance in this matter, due to lack of jurisdiction, due to the fact that the company in installing this motor acted purely in the capacity of a wiring concern.

#### RATES AT BAKERSFIELD.

I. C. 1490. (Reopened.)

December 29, 1913.

*Jay A. Hinman vs. San Joaquin Light and Power Corporation.* On July 23, 1913, the Commission received a letter from Jay A. Hinman of Bakersfield, bringing into question rates and charges of the San Joaquin Light and Power Corporation.

Complainant was advised that the rates complained of were not in accordance with the rates as filed by that utility with this Commission; complainant was further advised on a personal visit to this office, that the Commission could not be of any assistance in the matter, due to lack of jurisdiction.

#### LINE EXTENSION.

I. C. 1500.

*Samuel Fox vs. Northern California Power Company.* On July 11, 1913, the Commission received a letter from Samuel Fox complaining that the Northern California Power Company, Consolidated, required him to pay for line extension to his pumping plant, some 500 feet distant from the company's lines. The matter was taken up with the company and Mr. Fox was requested to furnish detailed information of the facts in the case. As nothing further has been heard from Mr. Fox it is presumed that the matter has been dropped.

#### SERVICE AT HUGHSON.

I. C. 1535.

December 29, 1913.

*H. W. Low vs. Yosemite Power Company.* On June 19, 1913, the Commission received a letter from H. W. Low, who operates a condensed milk factory at Hughson, complaining of the practice of the Yosemite Power Company in requiring him to furnish his own transformers in order to enjoy a reduced rate for electric energy.

This complaint was automatically adjusted by this Commission's decision in Case 456.

#### ALLEGED OVERCHARGE AT COLTON.

I. C. 1551.

*Linda Vista Water Company vs. —————.* On June 19, 1913, the Commission received a letter from the Linda Vista Water Company complaining of an alleged overcharge for power purchased from an electric utility at Colton. The Commission requested complainant to furnish detailed information on the subject but nothing further having been heard in reply, it is presumed that the matter has been dropped.

## WINTER CHARGES.

I. C. 1552.

*Minard L. Orcutt vs. West Coast Gas Company.* On June 2, 1913, the Commission received a letter from Minard L. Orcutt complaining of the minimum charge of the West Coast Gas Company for winter charges at Beach Cottages. An investigation was made and the complainant was advised that the charges brought into question were in conformity with the rates as filed with this Commission. As nothing further has been heard from Mr. Orcutt it is presumed that the matter has been dropped.

## RATES AT CUPERTINO.

I. C. 1556.

*J. E. Wiesendanger vs. Pacific Gas and Electric Company.* On June 19, 1913, J. E. Wiesendanger of Cupertino, complained of discriminatory rates for the sale of electric energy by the Pacific Gas and Electric Company.

Commission made careful investigation in the hope of arriving at some informal adjustment, but as the company maintained that its rates were reasonable and non-discriminatory, complainant was advised that in order to make further investigation it would be necessary to file formal complaint bringing into question the rates of the defendant utility.

## RATES AT CUPERTINO.

I. C. 1556. (Reopened.)

December 29, 1913.

*J. E. Wiesendanger vs. Pacific Gas and Electric Company.* On November 19, 1913, the Commission received a letter from J. E. Wiesendanger of Cupertino, complaining of the rates and charges of the Pacific Gas and Electric Company for agricultural purposes.

After an investigation by the Commission for electric energy, the complainant was advised that it would be impossible to arrive at any adjustment of this matter on an informal basis, inasmuch as the company maintained that its rates and charges were just and reasonable, and that if the matter was to be pursued further, it would be necessary for him to file formal complaint, bringing into question the rates of the above named utility.

## COMPLAINT FROM ANAHEIM.

I. C. 1564.

*A. A. Mills vs. Southern California Edison Company.* On June 25, 1913, the Commission received a letter from A. A. Mills of Anaheim, complaining of the practices of the Southern California Edison Company. An investigation was made of the matter and Mr. Mills was advised that the rates and charges complained of were in accordance with the filed rates of the defendant utility. As nothing further has been heard from Mr. Mills on the subject, it is presumed that the matter has been dropped.

## MINIMUM METER CHARGE.

I. C. 1577.

*John A. Payne vs. Pacific Light and Power Corporation.* On June 23, 1913, the Commission received a complaint from John A. Payne, 241 Saint Andrews Place, Los Angeles, that the Pacific Light and Power Corporation demanded a minimum charge of \$1.00 per month for each meter in some seven apartments. The installation of a single meter that would register the consumption of the entire establishment and separate meters at his own expense was suggested, thereby reducing the minimum to \$1.00. Inasmuch as nothing further has been heard from Mr. Payne, we presume this arrangement has been made.

## DISCRIMINATION ALLEGED.

I. C. 1578.

*H. E. Brandenburg vs. Pacific Gas and Electric Company.* On June 25, 1913, H. E. Brandenburg of Campbell visited the office of the Commission and complained of undue discrimination on the part of the Pacific Gas and Electric Company by refusing him a 3-cent rate for the same class of service they were giving to other consumers. A careful investigation was made of the matter and a letter from the Pacific Gas and Electric Company defending their action in the matter was forwarded



to the complainant. As no reply has been received from Mr. Brandenburg, we presume that he has dropped the matter.

The cases as cited by the complainant were filed as deviations by the Pacific Gas and Electric Company in Case No. 293.

#### SERVICE AT DENVERTON.

I. C. 1580.

December 29, 1913.

*E. L. Stewart vs. Great Western Power Company.* On May 20, 1913, E. L. Stewart of Denverton complained that the Great Western Power Company had refused to extend its lines in order to supply him with electric service, notwithstanding the fact that he had a contract with the above named utility in which they agreed to furnish him the service requested.

This matter was brought formally before the Commission in Case No. 497.

#### CHANGE IN RATES.

I. C. 1584.

February 6, 1914.

*Dr. F. E. Kerr vs. Southern California Edison Company.* On June 25, 1913, Dr. F. E. Kerr complained to the Commission relative to rates charged by the Southern California Edison Company for electric energy used by him for a pumping plant near Garden Grove.

The Commission made a thorough investigation which showed that in January, 1907, a five-year contract was entered into between Messrs. Rogers and Otto and the Edison Company for energy for a 25 horsepower motor situated near Garden Grove. The rate was  $2\frac{1}{2}$  cents per kilowatt with a \$120.00 annual minimum. Later Dr. Kerr purchased Mr. Otto's property and share in the pump and the contract continued in effect until 1912, when the company applied the filed schedule to this installation, which resulted in a minimum charge over and above energy consumed of \$23.25 for that year. During 1913 the consumption exceeded the minimum and no additional charge was made.

As the previous rate was in effect October 10, 1911, the company agreed to refund the \$23.25 and was requested to file this rate as a deviation or make application for change, which adjustment was satisfactory to complainant.

#### SERVICE COMPLAINT.

I. C. 1589.

*Edw. J. Lagoria vs. Pacific Gas and Electric Company.* On June 25, 1913, the Commission received a letter from Edw. J. Lagoria of Fresno, complaining that the Pacific Gas and Electric Company had refused to extend gas service to his residence. After an investigation by the Commission service was installed, which adjustment was satisfactory to the complainant.

#### FAST METER COMPLAINT.

I. C. 1605.

*George H. Sabine vs. Palo Alto Gas Company.* On June 28, 1913, George H. Sabine of Palo Alto, complained of unjust overcharge by the Palo Alto Gas Company on account of meter being fast. New meter was installed by company and rebate made, which adjustment was satisfactory to complainant.

#### LACK OF JURISDICTION.

I. C. 1615.

*J. B. Merritt vs. Northern California Power Company, Consolidated.* On June 30, 1913, the Commission received a letter from J. B. Merritt in which he complained that his motor had been burned out, due to improper insulation by the Northern California Power Company, Consolidated. Mr. Merritt was advised that the Commission could be of no assistance in this matter through lack of jurisdiction, inasmuch as the utility was acting purely as a wiring concern in installing this motor.

#### CASH DEPOSIT COMPLAINT.

I. C. 1618.

*G. N. Simmons vs. Pacific Gas and Electric Company.* On June 13, 1913, the Commission received a letter from G. N. Simmons of Oakland, complaining of the practice of the Pacific Gas and Electric Company in requiring a \$5.00 cash deposit for



gas service. The complainant was advised that the practice was general on the part of the Pacific Gas and Electric Company and it would be necessary to bring formal action before this Commission in order that investigation of the matter be made.

#### REFUSAL OF SERVICE ALLEGED.

I. C. 1629.

October 16, 1913.

*Henry M. Tilson vs. Great Western Power Company.* On July 1, 1913, the Commission received a letter from Henry M. Tilson of Sacramento, complaining of the practice of the Great Western Power Company in refusing to serve consumers that had broken their contracts with the Pacific Gas and Electric Company. The complainant was advised that if a specific instance of this practice was brought to the attention of this Commission the matter would be taken up and an investigation made. Nothing further having been heard from the complainant, it is presumed that the matter has been dropped.

#### RATES AT STRATHMORE.

I. C. 1634.

*H. P. Boardman vs. Mt. Whitney Power and Electric Company.* On July 2, 1913, the Commission received a letter from H. P. Boardman of Strathmore, complaining of the rates of the Mt. Whitney Power and Electric Company. An investigation was made of the matter and the complainant was advised that the rates complained of were in accordance with the schedule as filed with this Commission by the Mt. Whitney Power and Electric Company, and that no further investigation could be made in an informal way.

#### RATE ADJUSTED AT WEST HOLLYWOOD.

I. C. 1641.

*William B. Odgen vs. Pacific Light and Power Corporation.* Under date of July 5, 1913, the Commission received a letter from William B. Odgen of West Hollywood, Los Angeles, complaining that the Pacific Light and Power Corporation was charging him 10 cents per kilowatt hour for electric service while the rate of the Southern California Edison Company inside the city limits of Los Angeles, some two blocks away, was 6 cents per kilowatt hour. An investigation was made and an adjustment reached which was satisfactory to the complainant.

#### CHARGES FOR LIGHT EXTENSIONS.

I. C. 1662.

*W. N. Woodson vs. Northern California Power Company, Consolidated.* On July 10, 1913, the Commission received a letter from W. N. Woodson of Corning, questioning the charges for light extensions on the part of the Northern California Power Company, Consolidated. After an investigation by the Commission the complainant was advised that each case should be settled on its merits and that it would be necessary for each consumer to furnish detailed information in each case.

#### SERVICE RECONNECTED.

I. C. 1668.

*Andrew Veach vs. Sierra and San Francisco Power Company.* On July 10, 1913, Andrew Veach of Manteca complained that the utility had refused him service at the rate per horsepower agreed upon and when he refused to pay the increased rate service was discontinued.

Investigation was made and service reconnected by order of Commission, which adjustment was satisfactory to complainant.

#### METER READINGS IRREGULAR.

I. C. 1670.

*A. J. Jefferson vs. Western States Gas and Electric Company.* Under date of June 22, 1913, the Commission received a letter from A. J. Jefferson of Lodi, stating that the Western States Gas and Electric Company was reading his meters at intervals of less than thirty days thereby subjecting him to an injustice. After an investigation by the Commission, the company defended its action in the matter by stating that the readings had been made at irregular intervals due to an error and that the matter had been rectified.

## SERVICE AT SUISUN.

I. C. 1676.

December 27, 1913.

*Herbert English vs. Great Western Power Company.* On July 12, 1913, the Commission received a letter from Herbert English of Suisun, complaining that the Great Western Power Company had refused to supply him with electric service after promising to do so.

After an investigation by the Commission a line extension was made by the power company and complainant supplied with electric service, which adjustment of the matter was satisfactory to complainant.

## SERVICE AT SUISUN VALLEY.

I. C. 1694.

December 27, 1913.

*J. R. Chadbourne vs. Great Western Power Company.* On July 14, 1913, the Commission received a letter from J. R. Chadbourne, Suisun Valley, complaining that the Great Western Power Company had refused to supply him with electric service, after securing a right of way to construct its power line over complainant's property.

After an investigation by the Commission, the complainant was supplied with electric service, together with six other residents of Suisun Valley who desired service.

This adjustment of the matter was satisfactory.

## EXTENSION INSTALLED.

I. C. 1703.

*Mrs. F. G. Kennedy vs. Pacific Gas and Electric Company.* The Commission received a letter from Mrs. F. G. Kennedy of Saratoga, dated July 13, 1913, in which she stated that the Pacific Gas and Electric Company had refused to extend their electric service to the complainant's residence. After an investigation by the Commission this service was installed, which adjustment was satisfactory to the complainant.

## MOVING PICTURE COMPLAINT.

I. C. 1704.

*P. S. Braun vs. California Telephone and Light Company.* On July 16, 1913, the Commission received a letter from P. S. Braun, of 1315 Filbert street, Oakland, complaining that due to an accident on the lines of the California Telephone and Light Company he had been forced to shut down his moving picture business at Camp Meeker, thereby suffering a financial loss. After an investigation of the matter by the Commission the complainant was advised that the Commission could not assess damages, inasmuch as this was a question for the courts to decide.

## SERVICE REINSTALLED.

I. C. 1705.

*W. N. Gregory vs. California Oregon Power Company.* On July 16, 1913, the Commission received a letter from W. N. Gregory of Sisson, stating that the California Oregon Power Company had increased his rate for electric service; upon complainant refusing to pay the increased rate his service was discontinued. After an investigation of the matter by the Commission, Mr. Gregory's service was reinstalled and he was given the rate for electric service which he formerly enjoyed, which adjustment was satisfactory to him.

## RATES NEAR LINDSAY.

I. C. 1714.

December 29, 1913.

*Dr. R. E. Price vs. Mt. Whitney Power and Electric Company.* On July 18, 1913, Dr. R. E. Price of Lindsay, Tulare County, visited the office of the Commission, and questioned the practice of the Mt. Whitney Power and Electric Company in charging him a higher rate for electric energy for cooking than for pumping purposes, notwithstanding he has a flat rate for electric power for 24-hour service.

Complainant stated that he would so advise the Commission in the event that he wished any further action taken. Nothing further having been heard in this connection, it is presumed that the matter has been dropped.

SERVICE REFUSED.

October 17, 1913.

I. C. 1715.

*Chas. G. Keehner vs. Mt. Whitney Power Company.* On July 18, 1913, Chas. G. Keehner, of 540 Howard street, San Francisco, visited the office of the Commission and complained that the Mt. Whitney Power Company had refused him service from their electric line, which ran about one and one fourth miles distant from his ranch. Mr. Keehner stated at that time that he would communicate further with the Commission and give full details of the case. Nothing further having been heard from him up to the present date, it is presumed that the matter has been dropped.

RATES AT LODI.

December 29, 1913.

I. C. 1716.

*C. C. Woodworth vs. Western States Gas and Electric Company.* On July 18, 1913, C. C. Woodworth, of Lodi, complained that the method adopted by the Western States Gas and Electric Company charging him for electric energy for agricultural purposes resulted in discrimination to himself and other consumers at Lodi.

After an investigation by the Commission, Mr. Woodworth filed a formal complaint, bringing into question the whole matter of the company's practices at Lodi.

CASH DEPOSIT COMPLAINT.

October 17, 1913.

I. C. 1721.

*T. A. Frye vs. Pacific Gas and Electric Company.* Under date of July 21, 1913, the Commission received a letter from T. A. Frye, of 3358 1/2 Sixteenth street, San Francisco, complaining of the practice of the Pacific Gas and Electric Company in demanding a cash deposit before service would be installed. The matter was taken up with the company by the Commission and a letter defending their action in the matter was forwarded to the complainant; also a letter from the Commission, asking to be advised how to proceed further in the matter. Having heard nothing further from the complainant up to the present date, it is presumed that the matter has been dropped.

CASH GUARANTEE FOR SERVICE AT CORTE MADERA.

April 7, 1914.

I. C. 1725.

*P. A. Richards vs. Pacific Gas and Electric Company.* On July 19, 1913, P. A. Richards, of Corte Madera, complained of the practices of the Pacific Gas and Electric Company in exacting a cash guarantee from its consumers for service to be installed.

Investigation was made by the Commission and the company maintained that they were entitled to a certain guarantee before going to the expense of installing service in certain cases.

On March 16th the company advised the Commission that inasmuch as complainant had established his credit they were returning the deposit in question, which adjustment was satisfactory to the complainant.

RATES NEAR REEDLEY.

December 29, 1913.

I. C. 1744.

*H. R. Bell vs. San Joaquin Light and Power Corporation.* On July 24, 1913, the Commission received a letter from H. R. Bell, of Reedley, stating that the San Joaquin Light and Power Corporation had refused to supply him with electric service under its so-called summer rate, inasmuch as "they were all sold up on this," and that if he desired service he would be compelled to sign a contract on a yearly basis.

After an investigation by the Commission, a copy of the letter of the above-named utility, defending their action in the matter, was forwarded to complainant, and nothing further having been heard from him, it is presumed that the matter has been dropped.

MINIMUM RATE AT CORNING.

I. C. 1756.

*J. D. Wilder vs. Northern California Power Company, Consolidated.* On July 26, 1913, the Commission received a letter from J. D. Wilder, of Corning, complaining that the Northern California Power Company charged him a minimum rate of \$1.00 per horsepower on a three horsepower motor, even though his demand was only one horsepower. Mr. Wilder was advised to exchange his three horsepower motor for a



one horsepower motor, thereby cutting down his demand rate. It is presumed that Mr. Wilder has acted on this suggestion, inasmuch as nothing further has been heard from him.

#### DEPOSIT REBATE EFFECTED.

I. C. 1763.

*G. B. McKinney vs. California Telephone and Light Company.* On July 28, 1913, the Commission received a letter from G. B. McKinney, of 450 Ellis street, Santa Rosa, complaining that he had been subjected to unjust discrimination on the part of the California Telephone and Light Company by requiring him to pay a cash deposit of \$5.00 for service at two different times. An investigation was made by the Commission and a rebate made, which adjustment was satisfactory to the complainant.

#### SERVICE EXTENSION ADJUSTED.

I. C. 1764.

*W. J. Stadelman vs. Southern California Edison Company.* On July 28, 1913, the Commission received a letter from W. J. Stadelman, of Santa Monica, questioning the practice of the Southern California Edison Company in refusing to extend electrical service to his residence unless the complainant paid for the cost of such extension. After some investigation by the Commission, the matter was adjusted by the company to the complainant's satisfaction.

#### SERVICE AT NAPA JUNCTION.

I. C. 1784.

December 27, 1913.

*Peter Chanin vs. Great Western Power Company.* On August 1, 1913, the Commission received a letter from Peter Chanin, of Napa Junction, complaining that the Great Western Power Company had, in a written agreement, promised to serve him with electric energy, and complainant, thinking they were acting in good faith, went to the expense of wiring his buildings for electric service, but the company had consistently refused to furnish electric service, even though they were supplying many other consumers in the neighborhood.

After an investigation by the Commission, complainant was advised that the Commission could not be of assistance to him in this matter informally, because the company maintained it could not make the necessary line extensions, due to financial stringency, and that it would be necessary for him to file a formal complaint.

Complainant, in a later communication, indicated that he would pursue this course.

#### RATES AT WATSONVILLE.

I. C. 1787.

December 29, 1913.

*Watsonville Railway and Navigation Company vs. Coast Counties Gas and Electric Company.* On August 1, 1913, J. M. Foley, of the Watsonville Railway and Navigation Company, complained of discriminatory practices on the part of the Coast Counties Gas and Electric Company in the sale of electric energy.

Investigation was made and complainant advised that it would be necessary to file formal complaint in order to reach an adjustment, as the company maintained that its charges were just and reasonable.

Nothing further has been heard from complainant, and it is presumed that the matter has been dropped.

#### PRACTICES QUESTIONED.

I. C. 1798.

*Thomas Elam & Son vs. Western States Gas and Electric Company.* On August 14, 1913, the Commission received a letter from Thomas Elam & Son, of 180 Jessie street, San Francisco, questioning the practices of the San Joaquin Light and Power Corporation. An investigation was made of the matter and an adjustment reached satisfactory to the complainant.

#### GAS EXTENSION REFUSED.

I. C. 1810.

October 17, 1913.

*J. Dooley vs. Pacific Gas & Electric Company.* On August 6, 1913, the Commission received a letter from J. Dooley, 515 Valley street, San Francisco, complaining that the Pacific Gas and Electric Company refused to extend their gas service to his



residence, unless he paid for such extension. The matter was taken up with the company and a copy of a letter received from them in which they defended their action was forwarded to Mr. Dooley, with a request that he advise the Commission if he wished to proceed further. Not having heard from Mr. Dooley up to the present date, it is presumed that the matter has been dropped.

#### ADJUSTMENT AT LONG BEACH.

I. C. 1833.

*Max Morlock vs. Southern California Edison Company.* On July 18, 1913, the Commission received a letter from Max Morlock, of Long Beach, complaining of the rates and practices of the Southern California Edison Company. Although lacking jurisdiction, the Commission made an adjustment of the matter satisfactory to the complainant.

#### SERVICE AT WOODLAND.

December 29, 1913.

I. C. 1858.

*C. W. Bush vs. Pacific Gas and Electric Company.* On August 14, 1913, the Commission received a letter from C. W. Bush, of Woodland, complaining of the actions of the Pacific Gas and Electric Company, in requiring him to pay the cost of line extension before they would supply him with electric service.

After an investigation of the matter by the Commission, an adjustment was reached to complainant's satisfaction.

#### LACK OF JURISDICTION.

I. C. 1886.

*Wm. B. Stewart vs. Southern California Gas Company.* On August 19, 1913, the Commission received a letter from Wm. B. Stewart, of 809 West Fifty-third street, Los Angeles, complaining of an overcharge on the part of the Southern California Gas Company. The complainant was advised that the Commission could be of no assistance to him, through lack of jurisdiction.

#### EXTENSION REFUSED.

I. C. 1905.

*Mrs. D. B. Mead vs. Los Angeles Gas and Electric Corporation.* On August 22, 1913, the Commission received a letter from Mrs. D. B. Mead, of Inglewood, complaining that the Los Angeles Gas and Electric Corporation had refused to extend gas service to her residence. A careful investigation was made of the matter, after which complainant was advised that before the company could be ordered to make the extension in question it would be necessary that a formal complaint be filed. Nothing further having been heard from the complainant up to the present date, it is presumed that the matter has been dropped.

#### RATES AT INGOT.

December 27, 1913.

I. C. 1947.

*Afterthought Copper Company vs. Northern California Power Company.* On September 23, 1913, the Commission received a letter from the Afterthought Copper Company, at Ingot, questioning the demand charges of the Northern California Power Company on their electric equipment at their mines.

The matter was taken up with the power company, who stated that due to their small consumption and the fact that complainant's plant was shut down most of the time, it would be impossible to reduce the demand charges, inasmuch as they were serving complainant at a loss, from an investment point of view.

After investigation, Commission advised complainant that the demand charges, concerning which complaint had been made, were in accordance with the rates filed with this Commission, and that when a readjustment was made in the rates of the above-named utility due consideration would be given to this case.

#### RATES AT ANTIOCH.

December 29, 1913.

I. C. 1955.

*L. W. Moore vs. Pacific Gas and Electric Company.* On September 3, 1913, the Commission received a letter from Dr. L. W. Moore of Antioch, complaining of the

rate charged him by the Pacific Gas and Electric Company for electric energy furnished to his pumping plant on Sherman Island.

As Case No. 400, *Town of Antioch vs. Pacific Gas and Electric Company*, was of a similar nature, the complainant was invited to be present at the hearing of this case, at which time the matter complained of would be given due consideration.

#### SERVICE EXTENSION ADJUSTED.

I. C. 1965.

October 17, 1913.

*R. N. Jackson vs. Southern California Edison Company.* On September 5, 1913, the Commission received a letter from R. N. Jackson of La Habra, complaining that the Southern California Edison Company had refused to install electric service to his residence, also to a number of near-by neighbors, notwithstanding the fact that the electric service would require no extension to the company's lines. After an investigation by the Commission the service was installed by the company, which adjustment was satisfactory to the complainant.

#### DISCONTINUANCE OF SERVICE IN STOCKTON.

I. C. 1985.

February 9, 1914.

*Mrs. Charles Ball vs. Western States Gas and Electric Company.* On September 8, 1913, Mrs. Charles Ball of 635 E. Miner avenue, Stockton, complained that the Western States Gas and Electric Company had treated her unjustly by discontinuing her electric service due to non-payment of disputed bill.

Commission investigated and advised complainant that they could be of no assistance in this case due to lack of jurisdiction.

#### SERVICE EXTENSION.

I. C. 1996.

February 5, 1914.

*Clinton W. South et al. vs. Sierra and San Francisco Power Company.* On October 21, 1913, the Commission received a petition signed by eleven residents of Ripon complaining that the Sierra and San Francisco Power Company had refused to extend their lines in order to supply complainants with electric service unless complainants advanced cost of said extension.

After careful investigation by the Commission service was extended to complainants free of charge, which adjustment was satisfactory.

#### COOKING AND HEATING RATE, MAYFIELD.

I. C. 2002.

April 7, 1914.

*Reed Company vs. Pacific Gas and Electric Company.* On September 12, 1913, the Commission received a letter from the Reed Company, Mayfield, complaining of the unreasonable charges of the Pacific Gas and Electric Company for electric energy for heating and cooking purposes.

Inasmuch as the company had no rate purely for cooking and heating purposes, the matter was taken up with them with the result that they made filing of a rate covering this class of service. Copy of rate was forwarded to the complainant.

#### NOTIFICATION OF DISCONTINUANCE.

I. C. 2027.

October 18, 1913.

*Roy Staples vs. Santa Catalina Island Company.* On September 22, 1913, the Commission received a telegram from Roy Staples of Avalon, Santa Catalina Island, complaining that the Santa Catalina Company had served notice on all its patrons that they would discontinue service excepting between the hours of five and ten-thirty at night and that this would cause irreparable damage to the residents. A representative of the Commission was sent to Avalon and an investigation made of the matter, after which the company was instructed that in the event they wished to cut down the hours of service, it would be necessary to make formal application to the Commission to do so. Nothing further having been heard from the complainant, and as no application to discontinue service was received, the incident was considered closed.

## SERVICE EXTENSION. LEMOORE.

I. C. 2071.

May 26, 1914.

*Jake Reynolds vs. San Joaquin Light and Power Corporation.* On September 23, 1913, the Commission received a communication from Jake Reynolds of Lemoore, bringing into question the refusal of the San Joaquin Light and Power Corporation to extend their lines in order to supply him with electric service.

The matter was gone into carefully with the company, but no adjustment was made as the company maintained that it would be impossible for them to make extensions of this kind due to the tightness of the money market.

Complainant was advised that inasmuch as the company had assumed this position, it would be impossible to go into the matter further in an informal way.

## SERVICE AT LOCKEFORD.

I. C. 2096.

December 29, 1913.

*L. W. Russell vs. Western States Gas and Electric Company.* On September 24, 1913, the Commission received a letter from L. W. Russell of Lockeford, complaining that the Western States Gas and Electric Company had refused to supply him with electric service for lighting purposes for garage.

After an investigation by the Commission, the company supplied him with electric service, which adjustment was satisfactory to complainant.

## GAS EXTENSION. HUNTINGTON BEACH.

I. C. 2115.

March 4, 1914.

*Mrs. T. A. Broderick vs. Los Angeles Gas and Electric Corporation.* On September 29, 1914, a complaint was received from Mrs. T. A. Broderick stating that the Los Angeles Gas and Electric Company had refused to serve her with gas although their main passed within twenty-five feet of her residence. Upon investigation it was found that the company had no franchise to lay their mains in that district. The company advised that as soon as a franchise and other necessary permits could be obtained that the application of complainant would receive prompt attention.

## LOW PRESSURE REMEDIED.

I. C. 2132.

October 17, 1913.

*W. G. Monroe vs. Palo Alto Gas Company.* On October 1, 1913, the Commission received a telephonic communication from W. G. Monroe of Palo Alto complaining of the low pressure of the gas service, which made it practically impossible to use gas for domestic purposes. He stated that this condition had existed four days previous to the date of complaint. After an investigation by the Commission it was found by the company's inspector that the low pressure was caused by the opening of a cock on the transmission line, allowing the gas to escape. This defect was remedied and normal pressure was restored, which adjustment was satisfactory to complainant.

## SERVICE AT OAKLAND.

I. C. 2137.

December 29, 1913.

*H. G. Jordan vs. Pacific Gas and Electric Company.* On October 7, 1913, the Commission received a letter from H. G. Jordan, 2109 One Hundred and Eighth avenue, Oakland, complaining that the Pacific Gas and Electric Company had refused to make extension of its gas and electric distribution systems in order to supply him with service.

A personal investigation of the matter was made on the ground by a representative of the Commission, shortly after which time the complainant was supplied with the service requested.

## SERVICE AT SANTA PAULA.

I. C. 2142.

December 29, 1913.

*F. A. Shipley Company vs. Ventura County Power Company.* On October 4, 1913, the Commission received a letter from F. A. Shipley Company of Santa Paula, complaining of the practice of the Ventura County Power Company requiring consumers of electric power to pay for transformers necessary to reduce the electric energy to the voltage required by their motors.



After an investigation by the Commission, complainant was advised that inasmuch as the company maintained that its practices were just and reasonable, it would be necessary that a formal complaint be filed if the matter was to be pursued further.

Inasmuch as nothing further has been heard from the complainant, it is presumed the matter has been dropped.

#### EXTENSION OF GAS MAINS AT CORONA.

I. C. 2154.

December 30, 1913.

*G. G. Gould vs. Citrus Belt Gas Company.* On October 6, 1913, the Commission received a letter from G. G. Gould of Corona, stating that he was required by the gas company to pay for the repairing of a leak in his service pipe which extended over his property.

After an investigation of the matter by the Commission, complainant was informed that, inasmuch as the utility maintained that its action was just and reasonable, it would be necessary that a formal complaint be filed if the matter was to be pursued further and complainant was furnished with a copy of the Commission's Rules of Procedure. Nothing further having been heard from the complainant, it is presumed the matter has been dropped.

#### SERVICE AT SAN FRANCISCO.

I. C. 2163

December 27, 1913.

*Luzerne Dean vs. Pacific Gas and Electric Company.* On October 7, 1913, the Commission received a letter from Miss L. Dean of 2231 Bancroft way, Berkeley, complaining that the electric utility in that locality had refused to supply her with electric service unless she furnished funds to cover cost of necessary line extension. Complainant also brought into question the practice of the company of charging \$1 minimum per month whether she used that amount of electric energy or not.

Matter dropped by complainant.

#### RATES AT SAN JOSE.

I. C. 2173.

December 29, 1913.

*O. A. Hale & Company vs. Pacific Gas and Electric Company.* On October 9, 1913, the Commission received a letter from O. A. Hale & Company of San Jose, complaining that the Pacific Gas and Electric Company in revising its rates at that city required that complainant sign a new form of contract that would result in an increase in rates.

A careful investigation was made of the matter by the Commission and the original contract of the complainant was filed with the Commission by the utility as deviations in Case 293 and the complainant was allowed to enjoy their former rate, which adjustment of the matter was satisfactory to complainant.

#### GAS SERVICE AT OAKLAND.

I. C. 2202.

December 29, 1913.

*W. S. Goodrich vs. Pacific Gas and Electric Company.* On October 10, 1913, the Commission received a letter from W. S. Goodrich, who resides near the intersection of Hopkins and Redwood streets, Oakland, complaining that the Pacific Gas and Electric Company had refused to make extension to supply him with gas service, on the ground that it was too expensive.

An investigation was made of the matter by a representative of the Commission at Oakland, and an adjustment reached satisfactory to complainant.

#### GAS EXTENSION AT SHERMAN.

I. C. 2204.

December 29, 1913.

*Sherman Improvement Association vs. Los Angeles Gas and Electric Company.* On October 14, 1913, the Commission received a letter from the Sherman Improvement Association, stating that the Los Angeles Gas and Electric Company had refused to make extension to its mains in order to supply the residents of Clark street with gas service.

After an investigation by the Commission, the company extended its mains, supplying the service requested, which adjustment was satisfactory to complainant.



SERVICE AT CAMPBELL.

I. C. 2210.

December 29, 1913.

*J. E. Palmer vs. Pacific Gas and Electric Company.* On October 16, 1913, the Commission received a letter from J. E. Palmer of Campbell, Santa Clara county, stating that the Pacific Gas and Electric Company had refused to extend its lines a distance of one pole in order to supply complainant with electric service.

After careful investigation was made at Campbell by a representative of the Commission the company made the necessary line extension, supplying Mr. Palmer with electric service, which adjustment of the matter was satisfactory to him.

SERVICE AT WINTERS.

I. C. 2239.

December 29, 1913.

*H. T. Soule vs. Pacific Gas and Electric Company.* On October 20, 1913, H. T. Soule, of Winters, complained to the Commission that the Pacific Gas and Electric Company refused to make extension necessary to supply him with electric service for his pumping plant, unless he "donated" \$200.00 to cover cost of extension.

After investigation by the Commission, the service was supplied, which adjustment was satisfactory.

MINIMUM CHARGE FOR GAS SERVICE AT CHICO.

I. C. 2241.

December 27, 1913.

*Dr. P. F. Bullington vs. Pacific Gas and Electric Company.* On October 20, 1913, the Commission received a letter from Dr. P. F. Bullington, of Chico, bringing into question the practice of the Pacific Gas and Electric Company in demanding meter rental of 50 cents per month for gas service.

The complainant was advised that the charge complained of was not in the nature of a rental charge, but as a minimum charge to cover the cost of maintenance, operation and investment of the utility's system, and that the Commission had no way of knowing at the present time, without a careful investigation into the investment, revenues and expenses of the utility, whether or not the charge of 50 cents per month for meter installed was a just and reasonable charge.

GAS SERVICE AT PALO ALTO.

I. C. 2245.

December 29, 1913.

*Norman E. Malcolm vs. Pacific Gas and Electric Company.* On October 28, 1913, the Commission received a letter from Norman E. Malcolm, City Attorney of Palo Alto, complaining of inefficiency of gas service.

A thorough investigation of the matter was made by the Commission and the trouble found to be in a leak in the high pressure mains of the Pacific Gas and Electric Company that supplied the city of Palo Alto.

The trouble was remedied and normal service restored.

SERVICE AT GERMANTOWN.

I. C. 2246.

December 29, 1913.

*R. W. Lohman vs. Northern California Power Company.* On October 10, 1913, R. W. Lohman, of Los Altos, stated that the Northern California Power Company, Consolidated, had refused to extend its lines to give him electric service at a distance of six miles west of Germantown, Glenn County.

After an investigation by the Commission, complainant, in his letter of November 12, 1913, advised this office that he had decided to install a gasoline engine; therefore, further action on the part of the Commission would be unnecessary.

SERVICE EXTENSION NEAR PETALUMA.

I. C. 2161.

February 6, 1914.

*Geo. P. Haskell et al. vs. Great Western Power Company.* On October 7, 1913, the Commission received a letter from G. P. Haskell and three other residents of Middle Two Rock Road, near Petaluma, complaining that the Great Western Power Company had refused to extend its lines in order to supply complainants with electric service, after promising to do so and after two complainants already wired their buildings on the strength of this assurance.

Careful investigation was made at Petaluma by a representative of the Commission, after which the company extended the lines, supplying complainants with service, which adjustment was satisfactory.

## GAS SERVICE EXTENSION AT FRESNO.

I. C. 2267.

April 6, 1914.

*J. J. Harris vs. Pacific Gas and Electric Company.* On October 10, 1913, this Commission received a letter from J. J. Harris, of Fresno, complaining that the Pacific Gas and Electric Company had refused to extend its mains in order to supply him with gas service.

This matter was gone into very carefully at Fresno by a representative of the Commission, but as it was found impossible to reach an informal adjustment in the matter the complainant was advised that it would be necessary for him to file a formal complaint. He was supplied with a copy of the Commission's Rules of Procedure.

## REQUEST FOR 110-VOLT LIGHTING SERVICE.

I. C. 2269.

February 9, 1913.

*R. F. Smitzdorf vs. Pacific Light and Power Company.* On October 22, 1913, a complaint was received from R. F. Smitzdorf of Riverside to the effect that the Pacific Light and Power Company had refused to give him 110-volt electric lighting service at his home on the West Riverside Estate Company's property near Riverside.

Upon investigation it was found that the estate company owns a large tract of land near Cement on which an electric distribution system had been installed by the Pacific Light and Power Company. The distribution system consists of a 15,000-volt to 440-volt 3-phase substation and 440-volt and 220-volt distributing lines for giving power and lighting service. Originally a 110-volt system was proposed but as the lengths of extensions were excessive the 220-volt lighting system was adopted.

Mr. Smitzdorf's home is located near the station and as he owned 110-volt electric fixtures he desired to obtain the lower voltage. The length of service wires in this case is too great to give satisfactory service at 110 volts. To change the station and distribution lines so that 110-volt service could be given would require an expense not justified by the greater convenience obtained.

The reasons for the 220-volt service were explained in some detail to the complainant and as no further correspondence has been received the complaint is considered closed.

## SERVICE AT REDWOOD CITY.

I. C. 2275.

December 29, 1913.

*Miss M. A. Sarsfield vs. Pacific Gas and Electric Company.* Under date of October 20, 1913, the Commission received a letter from Miss M. A. Sarsfield of Redwood City, complaining that the Pacific Gas and Electric Company had refused to extend its lines to give her electric service, notwithstanding the fact that she had already wired her house.

After an investigation by the Commission, the required extension was made by the company and complainant supplied with electric service, which adjustment was satisfactory to her.

## RATES AT LINDSAY.

I. C. 2279.

December 27, 1913.

*Maynard Bailey vs. Tulare County Power Company.* On October 24, 1913, the Commission received a letter from Maynard Bailey of Lindsay, complaining of the minimum charge of the Tulare County Power Company for electric energy for pumping purposes.

Complainant was advised that the rate referred to had not been approved by this Commission and had only been accepted for filing subject to any further action, and in the event that complainant wished to pursue the matter further, it would be necessary to file a formal complaint. Complainant was furnished with a copy of the public utilities act and also a copy of the Commission's Rules of Procedure.

Commission has heard nothing further concerning this case, and presumes that the matter has been dropped.

## SERVICE EXTENSION AT SAN JOSE.

I. C. 2282.

February 16, 1914.

*Mrs. Francis Madronic vs. Pacific Gas and Electric Company.* On October 24, 1913, Mrs. Francis Madronic, 571 North Nineteenth street, San Jose, complained to the Commission that the Pacific Gas and Electric Company had refused to extend

their lines in order to supply her with electric service unless she paid for the said extension.

Investigation was made by the Commission and the company agreed to make the extension without cost to complainant, which adjustment was satisfactory.

#### SERVICE EXTENSION AT RICHMOND.

I. C. 2288.

February 5, 1914.

*Dr. W. E. Cunningham vs. Western States Gas and Electric Company.* On October 23, 1913, E. J. Burg called at the offices of the Commission in behalf of Dr. W. E. Cunningham, stating that Western States Gas and Electric Company had refused to extend their lines in order to supply complainant with electric service unless complainant advanced cost of said extension.

After a personal investigation of the matter at Richmond by a representative of the Commission the Company made the extension requested free of charge to the complainant, which adjustment was satisfactory.

#### RATES AT BEN LOMOND.

I. C. 2290.

December 29, 1913.

*Mrs. L. B. Sowell vs. Ben Lomond Light Company.* On October 25, 1913, Mrs. L. B. Sowell, representing the Ben Lomond Hotel, Ben Lomond, complained of discrimination in rates for electric energy sold by Ben Lomond Light Company.

Commission made investigation and adjustment satisfactory to complainant.

#### SERVICE AT MILL VALLEY.

I. C. 2298.

December 29, 1913.

*A. E. Pollexfen vs. Pacific Gas and Electric Company.* On October 21, 1913, A. E. Pollexfen, Cascade drive, Mill Valley, visited the office of the Commission, complaining that the Pacific Gas and Electric Company had refused to supply him with electric service at his residence.

An investigation was made at Mill Valley by a representative of the Commission, and complainant was supplied with service.

#### GAS EXTENSION AT SAN RAFAEL.

I. C. 2299.

June 30, 1914.

*Thomas McCaughern vs. Pacific Gas and Electric Company.* October 21, 1913, Thomas McCaughern called at the offices of this Commission and complained that the Pacific Gas and Electric Company had refused to extend gas service to his residence in San Rafael.

This matter was taken up with the company's district manager and after a careful investigation by the Commission an agreement was reached whereby complainant and several other residents in the vicinity were served with gas, which adjustment was satisfactory.

#### RATES AT SANTA ANA.

I. C. 2306.

December 29, 1913.

*Anaheim Union Water Company vs. Southern California Edison Company.* On May 26, 1913, the Commission received a letter from the Anaheim Union Water Company, in which they questioned the reasonableness of the rates of the Southern California Edison Company.

The complainant, who has several pumping plants, wished to have the meters of the various plants taken as a whole in figuring the monthly consumption of electric energy.

The complainant was advised that this practice was not in accordance with the views of this Commission. However, another power rate was offered to the complainant by the power company, which adjustment was satisfactory to the complainant.

#### RATES IN SACRAMENTO.

I. C. 2318.

February 10, 1914.

*Morris Brooke vs. Great Western Power Company.* On October 31, 1913, the Commission received a letter from Morris Brooke, whose postoffice address is 807 "J" street, Sacramento, in which he complained that the Great Western Power Company



had refused to allow him to use electricity at his residence for the same rate that they charged him for current used at his pumping plant, after they had agreed to do so. The matter was thoroughly gone into with the power company, after which an adjustment was reached satisfactory to complainant.

## ELECTRIC SERVICE, SACRAMENTO.

I. C. 2324.

February 10, 1914.

*O. E. Van Tassel vs. ————.* On November 3, 1913, the Commission received a letter from O. E. Van Tassel, whose postoffice address is Box 199, Sacramento, complaining of an alleged hazardous condition of a telephone line that extended beneath a 11,000-volt power line.

Complainant was requested to furnish more detailed information in this connection. Nothing further having been heard from complainant, it is presumed that he has decided to drop the matter.

## RATES NEAR SACRAMENTO.

I. C. 2328.

December 29, 1913.

*Edward E. Reese vs. West Sacramento Electric Company.* On November 4, 1913, the Commission received a complaint from Edward E. Reese, 810 Twenty-seventh street, Sacramento, concerning the action of the West Sacramento Electric Company in billing him on a monthly basis for electric energy used for irrigation purposes.

Complainant was advised that this action was in accordance with rates and rules as filed with this Commission by the company, and that it would be necessary to file a formal complaint if he wishes to pursue the matter further. Complainant was furnished a copy of this Commission's Rules of Procedure.

## RATES AT McFARLAND.

I. C. 2331.

December 27, 1913.

*R. Bullimore vs. San Joaquin Light and Power Corporation.* On November 5, 1913, the Commission received a letter from R. Bullimore of McFarland, complaining of the rates of the San Joaquin Light and Power Corporation.

Complainant indicated that he would like to bring the matter formally before the Commission, and asked for information as to the necessary procedure. Complainant was furnished with a copy of the Commission's Rules of Procedure and his attention invited to the section where the information he requested could be found.

## LINE EXTENSION.

I. C. 2339.

January 7, 1914.

*Dr. F. A. Hennessy vs. Ojai Power Company.* On November 7, 1913, a complaint was received from Dr. F. A. Hennessy, Nordhoff, that the Ojai Power Company demanded that he pay for the transformer and equipment necessary to serve his house with electric energy from their line extending five miles east from Nordhoff.

After a personal investigation of the matter by a representative of the Commission on the ground an adjustment was reached satisfactory to complainant.

## REGULATION AND DISCRIMINATORY CHARGES FOR ELECTRICITY.

I. C. 2340.

February 2, 1914.

*Oscar Piowaty vs. Holton Power Company.* Under date of November 4, 1913, the Imperial Engineering Company wrote this Commission on behalf of Oscar Piowaty, complaining of excessive connection charges imposed by Holton Power Company and alleging discrimination in regard to such charges. Also questioned right of company to refuse service to three-phase motor installations totaling less than five horsepower and requested ruling thereon. Matter was taken up with the company, who explained apparent discrimination.

Complainant was advised that the Commission had not passed on reasonableness of company's regulations, neither had it approved rule regarding three-phase motors, which had never been filed. An explanation of their arbitrary ruling without authorization was requested of the Holton Power Company, who, in replying through their attorney, questioned the jurisdiction of the Commission inside incorporated towns. Their counsel was advised that this was a service matter over which in this case the Commission retained jurisdiction and referred to opinion of Commission's attorney on this point.

Under date of January 9, 1914, company replied stating that the ruling in question had been revoked pending an application to this Commission.

Such adjustment was satisfactory to the complainant.



## RATES AT PARLIER.

I. C. 2341.

December 29, 1913.

*H. B. Quick vs. San Joaquin Light and Power Corporation.* On November 7, 1913, the Commission received a letter from H. B. Quick of Parlier, Fresno County, bringing into question rates and charges of the San Joaquin Light and Power Corporation.

After an investigation by the Commission, complainant indicated that he would bring the matter formally before the Commission in conjunction with the chamber of commerce of Parlier, and requested necessary instruction for such procedure. Complainant was furnished with a copy of the Commission's Rules of Procedure.

## DANGER TO TELEPHONE LINE FROM POWER LINE NEAR STOCKTON.

I. C. 2344.

February 14, 1914.

*P. A. Bryant vs. The Pacific Telephone and Telegraph Company.* On November 8, 1913, P. A. Bryant, 189 Madison street, Stockton, made inquiry to the Commission concerning the action of the Pacific Telephone and Telegraph Company in requiring subscribers of the Sonora Road Telephone Company to install a transformer to be used as a protective device in crossing the 11 kilovolt power lines of the Western States Gas and Electric Company.

The Commission communicated with both complainant and company in an endeavor to adjust the matter, and as nothing further has been heard from complainant, it is presumed that a satisfactory adjustment has been made.

## DANGER TO TELEPHONE LINE FROM POWER LINE NEAR STOCKTON.

I. C. 2346.

February 14, 1914.

*Chas. H. Minahen vs. The Pacific Telephone and Telegraph Company.* On November 10, 1913, Chas. H. Minahen, R.F.D. No. 4, Box 118, Stockton, wrote the Commission questioning the action of The Pacific Telephone and Telegraph Company's practice of requiring subscribers of the Sonora Road Telephone Company to install a transformer to be used as a protective device in crossing the 11 kilovolt power lines of the Western States Gas and Electric Company.

Defendant company maintained that the Sonora Road Telephone Company had agreed to stand cost of said transformer. The matter was again taken up with complainant, but as nothing further has been heard from him, it is presumed a satisfactory adjustment has been made.

## GAS EXTENSION, ALBANY (BERKELEY).

I. C. 2357.

March 4, 1914.

*J. Brown Schuyler vs. Pacific Gas and Electric Company.* On November 12, 1913, J. Brown Schuyler complained that the Pacific Gas and Electric Company had refused to serve him and twelve other residents in the vicinity of Peralta and Marin avenues in the city of Albany.

On December 20th the company advised the Commission that they would make a careful investigation and on February 27th advice was received from them that the extension would be completed within a short time. This adjustment was satisfactory to the complainant.

## GAS SERVICE AT BANNING.

I. C. 2358.

December 29, 1913.

*C. E. Obarr vs. Banning Gas and Lighting Company.* On November 12, 1913, the Commission received a letter from C. E. Obarr, complaining of the practice of the Banning Gas and Lighting Company requiring the consumer to pay for extension to its gas mains in order to receive service.

After investigation by the Commission, complainant was advised that adjustment could not be reached in this matter on an informal basis.

## SERVICE EXTENSION, WALNUT CREEK.

I. C. 2360 (Reopened 4-15, '14).

March 4, 1914.

*F. Randall vs. Pacific Gas and Electric Company.* On November 11, 1913, F. Randall called at the office of the Commission and complained that the Pacific Gas and Electric Company had refused to extend their lines in order to supply his residence with electric service unless he advanced cost of the necessary extension.

An investigation was made of the matter at Walnut Creek by a representative of the Commission, after which time the complainant was advised that due to the fact

that this extension would necessitate an expenditure of approximately \$120.00, it would be necessary for the complainant to guarantee the sum of \$30.00 per year to cover fixed charges. Inasmuch as no reply was made to this letter, it is presumed that the complainant has dropped the matter.

#### SERVICE EXTENSION.

I. C. 2363.

January 30, 1914.

*L. W. Samuels vs. Vallejo Light and Power Company.* On December 4, 1913, L. W. Samuels of Vallejo wrote to the effect that the Vallejo Light and Power Company, after accepting a \$5.00 deposit for service, refused to extend their lines to serve his home.

Commission made investigation which showed that the necessary extension would cost \$150; that there were several other prospective consumers and that the extension would be justified within a few months. The company agreed to make the extension in the near future, which adjustment was satisfactory to complainant.

#### ELECTRIC LINE EXTENSION.

I. C. 2365.

February 21, 1914.

*R. I. Peck vs. Pacific Gas and Electric Company.* On November 13, 1914, the Commission received a letter from R. I. Peck of Hayward, complaining that the Pacific Gas and Electric Company had refused to extend their lines in order to supply him with electric service.

An investigation was made of the matter at Hayward by a representative of the Commission. The company's estimate of \$180.00 for the cost of this extension was found to be conservative and for the guarantee of \$24.00 a year the Commission would not be justified in requiring the company to make the extension unless further prospective consumers are located in this vicinity.

#### SERVICE EXTENSION, EL VERANO.

I. C. 2366.

May 26, 1914.

*W. Semmel vs. California Telephone and Light Company.* On November 14, 1913, a communication was received from W. Semmel of El Verano, complaining that the California Telephone and Light Company refused to extend their lines in order to supply him with lighting service.

After an extended investigation over a period of many months the company finally agreed to extend as requested. This adjustment of the matter was satisfactory to complainant.

The company at first refused to make the extension, alleging that it was not a practice to make extension where the return would not insure its return of 30 per cent on the investment; however, it was pointed out to the utility that their rules and regulations as filed with this Commission only call for a return of 20 per cent.

#### FURNISHING OF ELECTRIC SERVICE AT ARTESIA.

I. C. 2371.

March 4, 1914.

*E. J. Diehl vs. Pacific Light and Power Corporation.* On November 14, 1913, E. H. Diehl of Artesia requested the Commission to require the Pacific Light and Power Corporation to furnish electric energy to the town of Artesia from their power line to Newport Beach.

On February 14, 1914, the utility advised the Commission that they expected to supply the required service by February 20th, which adjustment was satisfactory to complainant.

#### GAS SERVICE AT OAKLAND.

I. C. 2376.

January 2, 1913.

*John M. Eshleman vs. Pacific Gas and Electric Company.* On November 14, 1913, J. M. Eshleman complained of a leak in the gas service at his residence at 1115 Glendora avenue, Oakland, that had existed for about two months. The matter was immediately taken up with the company who, after an investigation, reported that the odor of gas was caused by water drained from the gas riser and deposited a short distance from the house. This drip pipe was extended which served to rectify the trouble inasmuch as the complainant indicated on December 30, 1913, that no further difficulty had been experienced.

#### DISCRIMINATION IN RATES AT SAN DIEGO.

I. C. 2379.

December 29, 1913.

*The San Diego Hotel, Rooming and Apartment House Association vs. San Diego Consolidated Gas and Electric Company.* On November 17, 1913, the Commission received a letter from the San Diego Hotel, Rooming and Apartment House Associa-

tion, complaining of the non-uniformity of the rates of the San Diego Consolidated Gas and Electric Company.

Complainant was advised that the Commission could not be of assistance in this matter through lack of jurisdiction.

#### LINE EXTENSION.

I. C. 2386.

February 9, 1913.

*J. H. Harkness vs. Coast Counties Gas and Electric Company.* On October 19, 1913, J. H. Harkness called to complain that the Coast Counties Gas and Electric Company had refused to extend their lines to serve the residents of Paradise Valley near Morgan Hill.

The Commission requested an investigation by the company. From the report received it appears that the length of the extension necessary is about three miles and was estimated to cost \$2,538.00. The probable annual return to be obtained will not be more than \$200.00 and as this does not justify the investment Mr. Harkness was informed to that effect.

Mr. Harkness decided not to pursue the matter further at the present and so the complaint is considered closed.

#### RATES NEAR SAN JOSE.

I. C. 2387.

February 6, 1914.

*Melvin E. Van Dine vs. Pacific Gas and Electric Company.* On November 19, 1913, Melvin E. Van Dine, Merchants' National Bank Building, San Francisco, complained to the Commission that the Pacific Gas and Electric Company had subjected him and other ranchers near Cupertino to a raise in rates.

After a careful investigation by the Commission complainant was given his old rate, which was satisfactory.

#### DISCONTINUANCE OF SERVICE.

I. C. 2388.

February 5, 1914.

*Frank E. Daubenbiss vs. Western States Gas and Electric Company.* On November 8, 1913, the Commission received a letter from Frank E. Daubenbiss, 484 East Pine street, Stockton, complaining that the Western States Gas and Electric Company had refused to supply him with electric service at his new residence unless complainant furnished a cash guarantee.

Investigation of the matter was made by the Commission and upon complainant's landlord guaranteeing his account service was resumed to complainant.

#### RATES AT DURHAM.

I. C. 2394.

May 26, 1914.

*G. W. Jones et al. vs. Durham Light and Power Company.* On November 20, 1913, the Commission received a letter from G. W. Jones and other petitioners complaining of the rates for the sale of electric energy of the Durham Light and Power Company at Durham.

The matter was gone into very carefully with the utility who maintained that due to high purchase cost of electric energy it would be impossible to reduce the rates, but that after a reduction was secured in the purchase price a reduction would also be made in turn to consumers.

Complainants were advised of the position taken by the utility and also that if they did not desire to wait for the reduction in an informal way they were at liberty to file formal complaint against the rates of the above mentioned utility.

#### SERVICE DEPOSIT AT SAN DIEGO.

I. C. 2400.

December 28, 1913.

*Joseph W. Childress vs. San Diego Gas and Electric Corporation.* On November 16, 1913, the Commission received a letter from Joseph W. Childress of 4211 I street, San Diego, complaining of the action of the San Diego Gas and Electric Corporation in requiring a cash deposit for electric service; also of refusing to pay interest on said cash deposit, even though his neighbors were not required to do so.

The matter was taken up with the company and an adjustment reached to the complainant's satisfaction.

#### FURNISHING SERVICE AT ARTESIA.

I. C. 2403.

March 4, 1914.

*Clarence Dougherty vs. Pacific Light and Power Corporation.* On November 14, 1913, the Commission received a letter from Clarence Dougherty of Artesia, stating that the Pacific Light and Power Corporation had constructed a power line to Newport Beach and that said line ran in close proximity to the town of Artesia. The



complainant requested that above company be required by the Commission to furnish electric energy to the town of Artesia. The matter was taken up with the utility in question and in their letter of February 14, 1914, they advised the Commission that they had installed their distribution lines in said town and were rushing the installation of their substation and expected to supply service by February 20th. This adjustment of the matter was satisfactory to the complainant.

#### SERVICE EXTENSION AT COURTLAND.

I. C. 2435.

December 29, 1913.

*J. M. Stephenson vs. Great Western Power Company.* On November 17, 1913, J. M. Stephenson, Courtland, complained in person regarding refusal of Great Western Power Company to extend him service. The case was taken up with the Great Western Power Company, and on December 23, 1913, Mr. Stephenson stated that a satisfactory understanding had been reached regarding the matter and that he would inform the Commission when the installation was made.

#### SERVICE EXTENSION.

I. C. 2454.

February 9, 1914.

*E. T. Downs vs. Calistoga Light and Power Company.* On December 5, 1913, E. T. Downs of Calistoga requested the Commission to require the Calistoga Light and Power Company to make an extension to serve him and three of his neighbors near Dunawael.

After a careful investigation of the matter at Calistoga by a representative of the Commission, complainant was advised that no adjustment of the matter could be reached on an informal basis. Complainant afterward filed a formal complaint.

#### PRACTICES AT DIXON.

I. C. 2455.

April 7, 1914.

*Fred A. Hutton vs. Pacific Gas and Electric Company.* On November 21, 1913, the Commission received a letter from Fred A. Hutton of Dixon, complaining that at the time of the hearing of Application 35 the Pacific Gas and Electric Company had agreed to purchase certain transformers from its consumers and that they had not fulfilled their promise up to the time of the present writing.

Upon investigation by the Commission it was found that there was no reference made to any such matter in the testimony in the case above referred to.

Complainant was therefore requested to furnish more detailed information in regard to the matter. Inasmuch as nothing further has been heard from complainant it is presumed that the matter has been dropped.

#### SERVICE EXTENSION AND RATES.

I. C. 2463.

January 22, 1914.

*Z. J. King vs. Sierra and San Francisco Power Company.* On December 4, 1913, a complaint was received from Z. J. King relative to payment for water service extension and electric rates at Riverbank. As the rates in effect were those filed, Mr. King was informed that in order to give the matter further attention, it would be necessary to file a formal complaint.

#### ELECTRIC SERVICE EXTENSION.

I. C. 2462.

May 1, 1914.

*B. D. Kemp vs. Pacific Gas and Electric Company.* On December 5, 1913, a communication was received from B. D. Kemp of Suisun to the effect that the Pacific Gas and Electric Company had refused to extend their lines to give lighting service to his and K. Miller's residences unless they would advance the cost of the extension, money to be refunded on a basis of 20 per cent of the revenue received.

Upon investigation it appeared that the total cost of this extension would be approximately \$236.00 while the return would probably not exceed \$30.00.

On January 30, 1914, it was suggested to Mr. Kemp by the Commission that if he and Mr. Miller would guarantee a \$4.50 monthly return the company would be requested to make the extension.

As no further communication has been received by the Commission from Mr. Kemp, the complaint has been considered dropped.

#### SERVICE NEAR BERENDO.

I. C. 2464.

December 29, 1913.

*J. B. Wideman vs. San Joaquin Light and Power Corporation.* On December 8, 1913, the Commission received a letter from J. B. Wideman, whose post-office address is Palo Alto, complaining of the rates and charges of electric energy for agricultural



purposes of the San Joaquin Light and Power Corporation, at his ranch near Berendo.

Complainant stated, in a personal visit to the office of the Commission, that he did not at this time wish any action in the matter, but merely wished to file the letter as a protest against the practice of the above company.

#### RATES AT LODI.

I. C. 2481.

December 29, 1913.

*W. P. Gehan vs. Western States Gas and Electric Company.* On December 10, 1913, the Commission received a letter from W. P. Gehan, whose post-office address is Box 617, Sacramento, complaining that the method adopted by the Western States Gas and Electric Company in supplying energy for agricultural purposes, resulted in discrimination to himself and other farmers of Lodi.

Complainant was advised that inasmuch as formal case No. 497, of *C. C. Woodworth vs. Western States Gas and Electric Company*, was a parallel case, it would be advisable for complainant to be present at the hearing in said case and the whole matter would be taken up at one time, and in the event that the utility's practices were found unreasonable, a proper adjustment would be ordered.

#### SERVICE EXTENSION AT MENLO PARK.

I. C. 2490.

January 31, 1914.

*Chas. Williamson vs. Pacific Gas and Electric Company.* On December 11, 1913, Chas. Williamson, 260 California street, San Francisco, complained that the Pacific Gas and Electric Company demanded that he pay the cost of line extension to furnish electric energy at his home at Menlo Park.

On December 29, 1913, the company advised the Commission that they had decided to make the extension, which adjustment was satisfactory to the complainant.

#### RATES AT MOSS BEACH.

I. C. 2492.

April 7, 1914.

*John Van Dycke vs. Half Moon Bay Light and Power Company.* On December 10, 1913, John Van Dycke visited the offices of the Commission and complained that he was induced by the Half Moon Bay Light and Power Company to install a 20 horsepower motor on the basis that the rate would be 2½ cents per kilowatt hour, no mention being made of demand charge.

Complainant stated that he would furnish the Commission with full information in regard to this matter before he wished any action taken. Inasmuch as nothing has been heard from complainant it is presumed that he has dropped the matter.

#### SERVICE EXTENSION, EL VERANO.

I. C. 2494.

May 26, 1914.

*Selig Rosenthal vs. California Telephone and Light Company.* On December 11, 1913, the Commission received a letter from Selig Rosenthal of El Verano complaining that the California Telephone and Light Company refused to extend their lines in order to supply him with lighting service.

After an extended investigation over a period of many months the company finally agreed to make the extension as requested. This adjustment of the matter was satisfactory.

#### SERVICE EXTENSIONS AT MOUNTAIN VIEW.

I. C. 2507.

June 1, 1914.

*Chas. Sawyer vs. Pacific Gas and Electric Company.* On December 11, 1913, Chas. Sawyer complained that he was unable to obtain electric service for lighting and power purposes at his property near Mountain View without advancing the cost of the line.

A careful investigation showed that Mr. Sawyer's property was located about 2,000 feet from the company's 11,000-volt distribution line and that the present number of consumers would not justify the expenditure of \$350.00, which would be necessary.

The Commission suggested that the extension be made if Mr. Sawyer would guarantee a monthly minimum of \$7.00 from the extension for a period of five years, or until the return should equal that amount. Service was rendered on May 9, 1914, and the company thereafter filed Application No. 1140 to have this deviation granted. Adjustment was satisfactory to complainant.

## FURNISHING SERVICE AT ARTESIA.

I. C. 2511.

March 4, 1914.

*Jas. W. Gillespie vs. Pacific Light and Power Corporation.* On December 15, 1913, Jas. W. Gillespie of Artesia requested the Commission to require the Pacific Light and Power Corporation to supply electric service to the town of Artesia from their power line to Newport Beach.

On February 14, 1914, the utility advised the Commission that their distribution line had been installed and service would be supplied by February 20th, which adjustment was satisfactory to complainant.

## RATES AT WILLIAMS.

I. C. 2515.

May 26, 1914.

*J. W. Forgens vs. Northern California Power Company, Consolidated.* On December 15, 1913, the Commission received a letter from J. W. Forgens, of Williams, complaining that the Northern California Power Company, Consolidated, is requiring him to pay 3 cents per kilowatt hour for electric energy for pumping purposes, as per agreement between complainant and company, even though the rates of that utility had been reduced to  $1\frac{1}{2}$  cents per kilowatt hour for this class of service subsequent to the time of entering into the contract.

The matter was gone into very carefully with the company, who agreed to cancel complainant's contract and allow him the benefit of the rate reduction. Complainant was advised of this and, as nothing further has been heard from him, we presume adjustment was satisfactory.

## ELECTRIC RATES.

I. C. 2529.

February 9, 1914.

*Robert Summers & Co. vs. Florin Brothers.* On December 12th a communication was received from Robert Summers & Co., of Fall River Mills, regarding the charges for lighting made by Florin Brothers.

Upon investigation by the Commission, it was found that the rates as filed by the company were very indefinite, being based on a charge per drop without apparent limit as to size of lamps. An inquiry was made to determine the exact practice and rulings of the company in this regard and the company forwarded a copy of their rates as based on size of lamp. The original schedule was apparently based on 60-watt installations, while the lamps used by Summers & Co. were 150-watt and were charged for at the rate of 75 cents per lamp per month.

On January 28th an explanation was forwarded to the complainant, and as no further communication has been received the complaint is considered closed.

## SERVICE EXTENSION AT WINTERS.

I. C. 2533.

February 27, 1914.

*Winters Dried Fruit Company vs. Pacific Gas and Electric Company.* Fred W. Winton, manager of the Winters Dried Fruit Company, visited the office of the Commission December 19, 1913, complaining that the Pacific Gas and Electric Company had refused to extend their electric distribution system in order to supply him with electric energy for pumping purposes unless complainant advanced cost of said extension. The matter was taken up with the defendant utility, who later agreed to install the necessary line extension without cost to complainant, which adjustment was satisfactory.

## GAS SERVICE AT MOUNTAIN VIEW.

I. C. 2534.

December 29, 1913.

*J. G. Hult vs. Pacific Gas and Electric Company.* On December 1, 1913, J. G. Hult, whose post-office address is R. F. D. 17, Box 65, Mountain View, visited the office of the Commission and complained that the Pacific Gas and Electric Company had refused to extend its mains, unless consumers paid the cost of said extension.

After an investigation of the matter by the Commission, an adjustment was reached to complainant's satisfaction.

## SERVICE AT SUISUN.

I. C. 2535.

December 27, 1913.

*Mrs. W. Berry vs. Pacific Gas and Electric Company.* On December 6, 1913, Mrs. W. Berry, whose post-office address is R.F.D. No. 1, Suisun, complained to the Commission that the Pacific Gas and Electric Company demanded that she pay the cost of extension of its lines in order to supply her with electric service.

Complainant has a pumping plant located on her place, which she is operating from this company's lines. The consumption of electric energy for this plant is measured by the company's rate for agricultural service.

Complainant was advised that if she constructed her own lines to the pumping plant she would be able to take advantage of pumping rate for lighting service. She stated she would take advantage of this suggestion, and, inasmuch as nothing further has been heard from her, it is presumed that she has done so.

#### ELECTRIC LINE EXTENSION.

I. C. 2543.

May 1, 1914.

*W. H. Baugh vs. Pacific Gas and Electric Company.* On December 17, 1913, a communication was received from W. H. Baugh, of San Jose, stating that the Pacific Gas and Electric Company refused to extend their lines to give electric service to a 20-horsepower pumping plant on a 13-acre ranch owned by B. S. Houston unless he would advance the sum of \$348.95, to be returned on a basis of 20 per cent of receipts. The total investment was estimated at \$351.60, while the return would probably not exceed \$150.00 under the most favorable conditions.

As Mr. Baugh appears to be only an agent of Mr. Houston, and as the justification of the extension does not seem apparent from an informal investigation, it has appeared advisable to hold this matter in abeyance, subject to the decision in Case No. 550, in which this complaint has been considered in evidence.

#### GAS EXTENSION, ALTADENA.

I. C. 2545.

March 4, 1914.

*R. A. Hill vs. Los Angeles Gas and Electric Corporation.* On January 17, 1914, R. A. Hill complained to the Commission that a number of residents, including himself, on Holliston avenue, Altadena, had repeatedly requested the gas company to extend service to them.

Company was requested to investigate this complaint, together with that of Geo. L. Andrews (I. C. 2546), and the desired extension was made, which adjustment was satisfactory to complainant.

#### GAS EXTENSION, ALTADENA.

I. C. 2546.

*Geo. L. Andrews vs. Los Angeles Gas and Electric Corporation.* On December 18, 1913, Geo. L. Andrews complained that the Los Angeles Gas and Electric Corporation had refused to extend gas service a distance of 700 feet to his residence on Rubio street, Altadena.

Complaint was referred to the company, and on February 14th advice was received that the extension would be made immediately.

#### SERVICE AT SAN JACINTO.

I. C. 2552.

January 31, 1914.

*Miss S. D. Morrison vs. Southern Sierras Power Company.* Through error on part of representative of Southern Sierras Power Company, Miss S. D. Morrison, of San Jacinto, was advised that 220-volt service would be furnished for a 20-horsepower motor, and accordingly purchased and installed a 220-volt motor. Upon refusal of company to install transformers she made complaint to this Commission through the Los Angeles office. The matter was taken up with the company, who on December 5, 1913, agreed to protect the consumer by replacing the 220-volt motor by a 2200-volt motor. Such adjustment was satisfactory to complainant and was made in December, 1913.

#### FURNISHING SERVICE AT ARTESIA.

I. C. 2558.

March 4, 1914.

*H. C. Lewis vs. Pacific Light and Power Corporation.* On December 19, 1913, the Commission received a letter from H. C. Lewis, of Artesia, stating that the Pacific Light and Power Corporation had constructed a power line to Newport Beach and that said line ran in close proximity to the town of Artesia. The complainant requested that above company be required by the Commission to furnish electric energy to the town of Artesia. The matter was taken up with the utility in question and in their letter of February 14, 1914, they advised the Commission that they had installed their distribution lines in said town and were rushing the installation of their substation and expected to supply service by February 20th. This adjustment of the matter was satisfactory to the complainant.

#### FURNISHING SERVICE AT ARTESIA.

I. C. 2562.

March 4, 1914.

*Levi Carte vs. Pacific Light and Power Corporation.* On December 19, 1913, Levi Carte, of Artesia, advised the Commission that the Pacific Light and Power Cor-



poration had constructed a power line to Newport Beach, and requested that they be required to furnish electric energy to the town of Artesia.

On February 14, 1914, the utility advised the Commission that distribution lines had been installed and they expected to supply service by February 20th. Adjustment was satisfactory to complainant.

## ELECTRIC SERVICE.

I. C. 2564.

February 21, 1914.

*H. E. Brandenburg vs. Pacific Gas and Electric Company.* On December 19, 1913, the Commission received a letter from H. E. Brandenburg, of Campbell, complaining of the practice of the Pacific Gas and Electric Company in refusing to give small consumers of electric energy of less than 5 horsepower installations the benefit of their agricultural rate.

It was explained to the complainant that since the electric rates in San Jose will possibly be rearranged as a result of the investigation now pending before the commission it would be advisable to wait until a decision was rendered in Case 477 before going further into the matter.

## SERVICE DEPOSIT, BAKERSFIELD.

I. C. 2570.

March 4, 1914.

*Mrs. Henry Fisher vs. San Joaquin Light and Power Corporation.* On December 20, 1913, Mrs. Fisher, of Bakersfield, complained of the practice of the San Joaquin Light and Power Corporation in requiring consumers to make \$5.00 deposit in advance for gas and electric service.

Complainant was advised that the Commission had no jurisdiction in that city.

## SERVICE EXTENSION AT PALO ALTO.

I. C. 2571.

April 11, 1914.

*J. D. Miller Company vs. Pacific Gas and Electric Company.* On December 21, 1913, J. L. Goldsmith complained to the Commission in behalf of J. D. Miller Realty Company of the Stanford University Villa Tract, Santa Clara County, that the Pacific Gas and Electric Company had required them to pay for extension necessary to serve the tract with electricity.

Careful investigation was made by the Commission, after which the matter was dropped upon request of the complainant, who stated that owing to a change in conditions the service would not be required.

## GAS EXTENSION, BERKELEY.

I. C. 2572.

February 5, 1914.

*R. W. Mason vs. Pacific Gas and Electric Company.* On December 12, 1913, R. W. Mason complained to the Commission that the Pacific Gas and Electric Company had refused to serve him with gas at his residence, 1325 Bonita avenue, Berkeley.

The matter was taken up with the company, with the result that a letter was received from Mr. Mason, under date of January 2d, stating that the company had installed service, which adjustment of the matter was satisfactory to complainant.

## SERVICE EXTENSION NEAR OAKLEY.

I. C. 2573.

March 3, 1914.

*F. V. Nelson vs. Pacific Gas and Electric Company.* On December 24, 1913, F. V. Nelson, secretary of the Green Lodge Dairy Company, complained that the Pacific Gas and Electric Company had refused to extend their electric distribution system in order to supply him with electric service for pumping purposes, unless he advanced cost of said extension. The matter was taken up with the utility in question and after reconsidering the matter, they installed service without cost to the complainant, which adjustment was satisfactory.

## SERVICE EXTENSION NEAR ATHERTON.

I. C. 2595.

*W. C. Christopher vs. Pacific Gas and Electric Company.* On December 24, 1913, W. C. Christopher complained to the Commission that the Pacific Gas and Electric Company had refused to extend their lines in order to supply him with electric service unless he advanced \$137.95 to cover cost of extension.

Investigation was made by Commission and adjustment made which was satisfactory to complainant.



## GAS SERVICE CHARGE, SAN FRANCISCO.

I. C. 2628.

February 10, 1914.

*B. Taylor vs. Pacific Gas and Electric Company.* On January 3, 1914, complaint was received from Benjamin Taylor that the Pacific Gas and Electric Company had charged him \$23.00 for extending gas service to his residence in San Francisco. The matter was taken up with the company and it was learned that the extension was through private property a distance of 160 feet, which was the only feasible way of reaching Mr. Taylor at that time.

On February 5th Mr. Taylor called at the office of the Commission and stated that in view of the fact that he had agreed to pay for the extension before it was made and that the company was probably justified in requiring him to pay for that portion which was over private property, he did not care to have the Commission investigate the matter further.

## FURNISHING SERVICE AT ARTESIA.

I. C. 2641.

March 4, 1914.

*C. H. Bolt vs. Pacific Light and Power Corporation.* On December 29, 1913, C. H. Bolt of Artesia requested that the Pacific Light and Power Corporation be required by the Commission to furnish electric energy to the town of Artesia from the line running to Newport Beach.

On February 14, 1914, the utility advised the Commission that distribution line had been installed and they expected to furnish service by February 20th. Adjustment was satisfactory to complainant.

## FURNISHING SERVICE AT ARTESIA.

I. C. 2642.

March 4, 1914.

*Walter Frampton vs. Pacific Light and Power Corporation.* On December 20, 1913, Walter Frampton of Artesia requested that the Pacific Light and Power Corporation be required to furnish electric service to the town of Artesia.

On February 14, 1914, the utility advised the Commission that the necessary extension had been made and electric service would be supplied by February 20, 1914, which adjustment was satisfactory to the complainant.

## FURNISHING SERVICE AT ARTESIA.

I. C. 2643.

March 4, 1914.

*Geo. A. Frampton vs. Pacific Light and Power Corporation.* On December 29, 1914, Geo. A. Frampton requested the Commission to require the Pacific Light and Power Corporation to furnish electric service to the town of Artesia from their line to Newport Beach.

On February 14, 1914, the utility advised the Commission that their distribution lines had been installed and service would be supplied by February 20th, which adjustment was satisfactory to complainant.

## SERVICE EXTENSION.

I. C. 2651.

February 4, 1914.

*P. A. Shultz vs. Pacific Gas and Electric Company.* On January 2, 1914, complaint was received from P. A. Shultz that the Pacific Gas and Electric Company had refused service unless the cost of extension was advanced. The total cost was about \$80.00 and there was possibility of a motor installation in the summer. After investigation by the Commission, the company agreed to construct line at its own expense, which adjustment was satisfactory to the complainant.

## GAS EXTENSION AT BERKELEY.

I. C. 2653.

June 30, 1914.

*L. C. Stanley vs. Pacific Gas and Electric Company.* January 2, 1914, L. C. Stanley complained that the Pacific Gas and Electric Company had refused to extend gas service to his residence on San Lorenzo avenue, Berkeley.

Upon request of the Commission the company furnished a detailed estimate of the cost of serving complainant, amounting to a total of \$864.00. Mr. Stanley was advised that it would be necessary for him to guarantee at least \$15.00 per month to secure service. The reason for this guarantee was thoroughly explained to the complainant, who agreed that the company would not be justified in extending the service for the revenue to be derived therefrom.

## FURNISHING SERVICE AT ARTESIA.

I. C. 2656.

March 4, 1914.

*J. H. Niemes vs. Pacific Light and Power Corporation.* On December 31, 1913, the Commission received a letter from J. H. Niemes, of Artesia, stating that the

Pacific Light and Power Corporation had constructed a power line to Newport Beach and that said line ran in close proximity to the town of Artesia. The complainant requested that above company be required by the Commission to furnish electric energy to the town of Artesia. The matter was taken up with the utility in question and in their letter of February 14, 1914, they advised the Commission that they had installed their distribution lines in said town and were rushing the installation of their substation and expected to supply service by February 20th. This adjustment of the matter was satisfactory to the complainant.

## ELECTRIC RATES.

I. C. 2657.

May 27, 1914.

*E. Van Every vs. Pacific Gas and Electric Company.* On December 31, 1913, this Commission received a complaint from E. Van Every of Edenvale, in which he objected to the rate for power service for 25-horsepower motors, alleging discrimination as compared with the rates charged for 30-horsepower motors. After investigation, he was advised that it would be necessary to file formal complaint in order to determine the reasonableness of this rate.

## ALLEGED RAISE OF ELECTRIC RATES.

I. C. 2661.

February 9, 1914.

*Arthur Artlett vs. Mt. Whitney Light and Power Company.* On January 3, 1914, Arthur Artlett, Sheldon Building, San Francisco, requested the Commission to investigate rates charged by the Mt. Whitney Light and Power Company for electric power service on his ranch, near Porterville.

Investigation showed that in March, 1911, Mr. Artlett contracted with the power company for electric current to be supplied to a 10-horsepower motor used for pumping purposes, contract rate \$50.00 per year for each horsepower of maximum demand during the year, with a minimum of \$375.00.

Due to lowering of water level in wells horsepower had increased, as shown by test, and company had therefore increased the annual charge.

Complainant was advised that charges were in compliance with contracts and further action would necessitate filing formal complaint.

## SERVICE EXTENSION AT LOS ALTOS.

I. C. 2672.

May 4, 1914.

*F. M. Munger vs. Pacific Gas and Electric Company.* On January 5, 1914, the Commission received a letter from Fred M. Munger, of Los Altos, complaining of the action of the Pacific Gas and Electric Company in requiring him to advance the cost of a line extension necessary to give him electric service.

The matter was gone into very carefully by a representative of the Commission and, inasmuch as it was found that the rate of return would be low, the complainant suggested installing an electric cooking apparatus provided the company would furnish reasonable rates for this service. The matter was taken up with the company again, with the result that they filed a heating and cooking rate. Complainant, however, is of the opinion that the rate filed was prohibitive and advised the Commission that he wished to drop the matter.

## SERVICE EXTENSION.

I. C. 2678.

February 4, 1914.

*Beryl L. Gregg vs. Pacific Gas and Electric Company.* On January 5, 1914, a complaint was received from Beryl L. Gregg that the Pacific Gas and Electric Company had refused service extension to his and one other house unless cost was advanced, to be refunded on a 20 per cent basis.

Investigation was made and the company agreed to make the extension at their own expense, which adjustment was satisfactory to complainant.

## DISCRIMINATION IN GAS EXTENSIONS IN EAGLE ROCK.

I. C. 2697.

March 30, 1914.

*Hartley Shaw, for the City of Eagle Rock, vs. Los Angeles Gas and Electric Corporation.* On January 5, 1914, a communication was received from Hartley Shaw, attorney for the city of Eagle Rock, complaining that the Los Angeles Gas and Electric Corporation were discriminatory in the making of gas extensions in that territory.

Complainant stated that the company had extended a distance of 1,200 feet to serve a single consumer and later had refused to extend a distance of 1,400 feet to serve three.

The matter was referred to the company with a request for an explanation of the alleged discrimination. Report was received January 30th, the company explaining that the 1,200-foot extension referred to by complainant was made at the special request of the trustees of the city of Eagle Rock. The Commission was later informed by complainant that this extension was made for the reason that the city was about to macadamize the streets where the mains were to be placed and it was decided to have it installed and gas pipes completed before the macadam was put in. On March 18th the matter was closed by the withdrawal of Mr. Shaw's complaint.

#### CHARGES FOR EXTENSION IN VENTURA.

I. C. 2710.

May 1, 1914.

*Roy Steele vs. Ventura County Power Company.* On January 9, 1914, a complaint was received from Roy Steele, whose address is Santa Paula, to the effect that the Ventura County Power Company had charged him for the current and potential transformers used in metering the energy used in connection with his pumping plant.

From the investigation made by the Commission it developed that the standard practice of the company since 1910 had been to charge power consumers for the transformers used and that the act of charging Mr. Steele could not be considered a discrimination.

Although this action on the part of the company might appear unreasonable, Mr. Steele was informed that this point could not be determined without formal hearing.

The Ventura County Power Company has been purchased by the Huntington interests and the Commission was informed at the hearing in Application No. 1028 that the practice of charging for extensions would be discontinued.

As no further communication has been received from Mr. Steele, the complaint is considered closed.

#### ELECTRIC SERVICE.

I. C. 2717.

April 18, 1914.

*W. T. Johnson vs. United Light, Fuel and Power Company.* Under date of January 9, 1914, W. T. Johnson of Coronado, complained to this Commission that the voltage regulation at his residence was poor. The matter was taken up with the serving utility who promptly installed a larger transformer, thus materially improved service resulting in entire satisfaction to complainant.

#### RAISE IN RATES.

I. C. 2719.

February 6, 1914.

*Harless Moser vs. Pacific Gas and Electric Company.* On January 12, 1914, H. Moser, whose address is Saratoga and Mountain View road, Saratoga, made complaint through Melvin Van Dine that the Pacific Gas and Electric Company had raised his rates for a two horsepower pump motor.

Upon investigation it was found that this complaint was a similar one to that of Mr. Van Dine. The installation was a two horsepower motor and the contract rate was Schedule 115 as filed by the company for five horsepower and over. The contract was made in March, 1913, and later the company notified the consumer of the error and commenced to charge him under Schedule No. 110.

Upon investigation by the Commission the company requested permission to continue the contract until its expiration or until ordered to change by the Commission.

The contract was allowed to continue and the parties notified to that effect.

#### RAISE OF RATES AND ANNULMENT OF CONTRACT.

I. C. 2720.

February 13, 1914.

*Fletcher Raymond vs. Pacific Gas and Electric Company.* On January 12, 1914, Fletcher Raymond complained to the Commission that the Pacific Gas and Electric Company had raised his rates and annulled the contract which had been made for electric service to a three horsepower motor at his place near Cupertino.

After investigation by the Commission complainant was given his old rate, which adjustment was satisfactory.

#### MINIMUM CHARGE FOR SERVICE.

I. C. 2722.

March 7, 1914.

*T. G. Patterson vs. Southern California Edison Company.* Under date of November 25, 1913, T. G. Patterson, of Pomona, wrote this Commission questioning the right of a power company to demand the payment of a minimum charge and asking if a rate had been fixed by this Commission eliminating this minimum. He was advised that the Commission had not investigated the rates of the Southern California Edison Company.



Upon investigation it was found that the consumer had been connected for nine months on an annual minimum basis which, when prorated over the shorter period, left a nominal sum still due. Complainant was so advised and the matter adjusted.

#### GAS EXTENSION, GARDENA.

I. C. 2725.

March 4, 1914.

*Mrs. Laura Holzhausen vs. Southern California Gas Company.* On January 12, 1914, Mrs. Laura Holzhausen, 15906 Vermont avenue, Gardena, complained that the California Gas Company had refused to extend gas service to her residence.

After investigation by the Commission the service was extended, which adjustment was satisfactory to the complainant.

#### RATES AT CORONADO.

I. C. 2726.

February 5, 1914.

*George L. Ferguson vs. Southern California Edison Company.* On January 12, 1914, the Commission received a letter from George L. Ferguson, Coronado, complaining of excessive charges for gas and electricity in that city.

The complainant was advised that due to the lack of jurisdiction the Commission could not be of assistance in this matter.

#### FURNISHING SERVICE AT ARTESIA.

I. C. 2730.

March 4, 1914.

*Mrs. C. A. Hampton vs. Pacific Light and Power Corporation.* On January 10, 1914, the Commission received a letter from Mrs. C. A. Hampton, of Artesia, stating that the Pacific Light and Power Corporation had constructed a power line to Newport Beach and that said line ran in close proximity to the town of Artesia. The complainant requested that above company be required by the Commission to furnish electric energy to the town of Artesia. The matter was taken up with the utility in question and in their letter of February 14, 1914, they advised the Commission that they had installed their distribution lines in said town and were rushing the installation of their substation and expected to supply service by February 20th. This adjustment of the matter was satisfactory to the complainant.

#### ELECTRIC RATES.

I. C. 2732.

May 27, 1914.

*F. A. Curtiss vs. Pacific Gas and Electric Company.* On January 7, 1914, F. A. Curtiss, secretary of Electric Necessities Company, wrote to this Commission complaining of the charges which were demanded for heating service. Negotiations were initiated with the Pacific Gas and Electric Company as a result of which they filed a schedule applicable to heating and cooking service, which was satisfactory to the complainant.

#### GAS EXTENSION, LOS ANGELES.

I. C. 2743.

March 4, 1914.

*Louis Kramer vs. Southern California Gas Company.* On January 14, 1914, the complaint of Louis Kramer was referred to the Commission from the Los Angeles office. Upon investigation the length of extension necessary to serve the complainant was found to be approximately 660 feet. In view of the great distance the complainant was advised that he should guarantee the company a minimum of \$1.50 per month. This proposal proved satisfactory to both complainant and the company, the extension being made on that basis.

#### SERVICE EXTENSION CHARGE.

I. C. 2745.

February 16, 1914.

*C. H. Pratt vs. Los Angeles Gas and Electric Company and Southern California Edison Company.* On January 12, 1914, C. H. Pratt, Title Insurance Building, Los Angeles, complained that the above utilities had required him to furnish the cost of gas and electric extensions to a certain subdivision. He was advised that each particular case was investigated on its own merits and requested to submit further details necessary for such investigation.

Upon receiving no reply the complaint was closed.

#### FURNISHING SERVICE AT ARTESIA.

I. C. 2749.

March 4, 1914.

*Henry Hauser vs. Pacific Light and Power Corporation.* On January 15, 1914, the Commission received a letter from Henry Hauser of Artesia, stating that the Pacific Light and Power Corporation had constructed a power line to Newport Beach and that said line ran in close proximity to the town of Artesia. The com-



plainant requested that above company be required by the Commission to furnish electric energy to the town of Artesia. The matter was taken up with the utility in question and in their letter of February 14, 1914, they advised the Commission that they had installed their distribution lines in said town and were rushing the installation of their substation and expected to supply service by February 20th. This adjustment of the matter was satisfactory to the complainant.

#### CASH GUARANTEE FOR SERVICE. SAN JOSE.

I. C. 2754.

April 15, 1914.

*W. E. Austin vs. Pacific Gas and Electric Company.* On January 15, 1914, the Commission received a letter from Mr. W. E. Austin, 487 North Seventeenth street, San Jose, complaining that the Pacific Gas and Electric Company had required him to advance a deposit of \$7.50 as a guarantee for electric service.

The matter was gone into very carefully and an adjustment was reached which was satisfactory to the complainant.

#### METER RENTAL CHARGE.

I. C. 2760.

April 4, 1914.

*H. W. Manby vs. Southern Sierras Power Company.* Under date of January 13, 1914, H. W. Manby, Randsburg, complained of meter rental of 25 per cent per month collected by the Southern Sierras Power Company.

The matter was taken up with the utility which agreed to withdraw meter rental and substitute a consumer charge to recompense it for the expenses attendant on metering, billing, collecting, etc. Complainant was so advised and, upon failing to press the matter further, it was considered closed.

#### SERVICE EXTENSION. GARDENA.

I. C. 2767.

May 28, 1914.

*B. W. De Hart et al. vs. Southern California Gas Company.* On October 19, 1913, B. W. De Hart, of Gardena, wrote this Commission on behalf of a number of residents of Gardena, complaining that the Southern California Gas Company had refused to extend service to them.

After a very thorough and careful survey it was found that the present business did not warrant the extension. This matter was explained to the satisfaction of complainant who suspended further action until additional business should develop in this district.

#### MINIMUM CHARGE.

I. C. 2786.

April 6, 1914.

*The Ruhl-Goodell Company vs. Western States Gas and Electric Company.* On January 14, 1914, the Commission received a letter from the Ruhl-Goodell Company, Stockton, in which they questioned the action of the Western States Gas and Electric Company in requiring them to pay \$1.00 per horsepower minimum on horsepower installed on their two 5-horsepower electric motors.

Complainant alleged that inasmuch as they do not use current to the amount of the minimum charge the rate was unreasonable.

Although lacking jurisdiction the Commission took up the matter informally with the utility in question and an adjustment was reached which was satisfactory to the complainant.

#### SPECIAL RATES FOR ENERGY AT CAMPBELL.

I. C. 2788.

February 5, 1914.

*Fire Commissioners of Campbell vs. Pacific Gas and Electric Company.* On November 20, 1913, the Commission received a letter from the Board of Fire Commissioners of the town of Campbell, Santa Clara County, asking this Commission's assistance in securing a special rate from the Pacific Gas and Electric Company for the purchase of electric energy to be used in connection with its plant for fire fighting purposes.

Complainant was advised that in the event the company granted a reduced rate to a body resembling the complainant it would be entirely at the option of that company, and that should the matter be pursued further it would be necessary that formal complaint be filed with the Commission.

#### SERVICE EXTENSION AT EAGLE ROCK.

I. C. 2811.

March 30, 1914.

*Wm. F. Rice vs. Pacific Light and Power Corporation.* On January 21, 1914, the Commission received a letter from Rev. Wm. F. Rice of Eagle Rock, stating that he had wired his premises for electric service and installed fixtures upon the promise of

a representative of the Pacific Light and Power Corporation that he would be supplied with service, but after this work had been completed complainant alleges that company attempted to exact a fee of \$100.00 to cover cost of the necessary line extension.

After careful investigation by the Commission the company reconsidered the stand taken by its representative and furnished service to the complainant free of charge which adjustment was satisfactory.

#### SERVICE AT HAMILTON CITY.

I. C. 2814.

February 6, 1914.

*P. S. Quigley vs. Sacramento Valley Sugar Company.* On January 21, 1914, P. S. Quigley of Hamilton City complained to the Commission that the Sacramento Valley Sugar Company had refused to supply him with electric service unless he advanced the cost of transformer to be placed on the company's pole.

After investigation had been made Mr. Quigley advised the Commission that he had abandoned the idea of installing electric service and had decided to put in a gasoline plant, whereupon the matter was dropped.

#### EXCESSIVE GAS BILLS, SAN FRANCISCO.

I. C. 2816.

May 19, 1914.

*Robert Barbee vs. Pacific Gas and Electric Company.* On February 3, 1914, Robert Barbee, 452 Castro street, San Francisco, complained to the Commission that his bills for gas for the months of November and December were excessive and also that poor pressure was maintained in that district.

At the request of the Commission complainant's meter was tested, same being found correct to within the allowable limit of 2 per cent. Recording pressure gauge charts were also furnished showing that a fairly adequate pressure was being maintained in that district. Complaint was therefore considered closed.

#### PRACTICE OF COMPANY REQUIRING CONSUMER TO SIGN CONTRACT FOR SERVICE AND CASH GUARANTEE.

I. C. 2818.

March 30, 1914.

*Omar A. Du Esler vs. Vallejo Electric Light and Power Company.* On January 23, 1914, Omar A. Du Esler, Vallejo, complained that the Vallejo Electric Light and Power Company required its consumers to sign a contract for five years before service would be installed and also demanded \$5.00 cash guarantee.

Complainant was advised that investigation of revenue, expenses and investment of utility would be necessary before the Commission could determine whether or not they were justified in making the above referred to demands, and in event general ruling was made in this connection he would be advised.

#### EXCESSIVE GAS BILLS, SAN FRANCISCO.

I. C. 2835.

May 19, 1914.

*L. A. Ireland vs. Pacific Gas and Electric Company.* On January 23, 1914, a complaint was received from L. A. Ireland, 644 Ninth avenue, San Francisco, concerning excessive gas bills for the month of December.

The matter was taken up with the company who tested the meter and furnished recording pressure gauge charts from the complainant's service. The meter was found correct and pressure charts showed that a fair pressure was being maintained in that district.

Mr. Ireland was advised that the gas had apparently been used and that no reason could be found for the high bill except the unusually cold weather during that month.

#### RATES IN KERN COUNTY.

I. C. 2839.

May 26, 1914.

*Wm. Van Den Heuvel vs. Southern Sierras Power Company.* On January 24, 1914, the Commission received a letter from Wm. Van Den Heuvel of Los Angeles, bringing into question the rates of the Southern Sierras Power Company.

Complainant was advised that no change could be made in the rates of a utility without a formal hearing in which the utility was given an opportunity to defend its rates and it would be necessary that formal complaint be filed if the matter was to be pursued further.

#### ELECTRIC SERVICE EXTENSION.

I. C. 2847.

March 10, 1914.

*Guilbert Brothers vs. Pacific Gas and Electric Company.* On January 27, 1914, the Commission received a letter from Guilbert Brothers, 274 W. Santa Clara street, San Jose, questioning the practice of the Pacific Gas and Electric Company of

requiring a consumer to advance the cost of extension in order to supply him with electric service.

It was carefully explained to the complainant that the whole question of rates, service, and extensions would be gone into in connection with Case No. 477, being the *City of San Jose vs. The Pacific Gas and Electric Company*.

## DISCONTINUANCE OF SERVICE.

I. C. 2851.

March 7, 1914.

*Wm. J. May vs. Western States Gas and Electric Company.* On January 23, 1914, Wm. J. May, 521 N. Edison street, Stockton, complained to this Commission that the gas and electric service to his home had been discontinued without notice. Explanation was requested of the company which stated that its action was in accordance with its regulation on file with this Commission providing for discontinuance of service to consumers whose bills are not paid within fourteen days after presentation.

Complainant was advised that further action could not be taken through lack of jurisdiction.

## ELECTRIC SERVICE EXTENSION.

I. C. 2856.

February 17, 1914.

*A. H. Gordon vs. Pacific Gas and Electric Company.* On January 30, 1914, a complaint was received from A. H. Gordon, Mountain View, that the Pacific Gas and Electric Company had refused to extend their lines to serve six lighting consumers. Investigation showed that the extension necessary would cost \$265.00.

On February 16, 1914, the Commission was advised by the company that the extension had been authorized which adjustment was satisfactory to complainant.

## RATES AT ALTADENA.

I. C. 2878.

April 7, 1914.

*F. W. Kellogg vs. Southern California Edison Company.* On January 16, 1914, the Commission received a letter from F. W. Kellogg, who complained of a charge by the Southern California Edison Company for the sale of electric energy utilized for charging storage batteries at his place in Altadena.

The matter was gone into carefully; afterward an adjustment was reached to the complainant's satisfaction.

## MINIMUM CHARGE.

I. C. 2901.

February 2, 1914.

*J. Rue vs. Half Moon Bay Light and Power Company.* On February 2, 1914, J. Rue of Half Moon Bay called at the office of rate department to make complaint against rates of the Half Moon Bay Light and Power Company, alleging that one dollar per horsepower per month minimum was excessive under his condition of infrequent operation. The nature of and reason for such a charge was explained to him and he was advised that this payment could be avoided by discontinuing use of motor during off season.

## GAS EXTENSION AT MONETA.

I. C. 2907.

May 19, 1914.

*L. Lyde vs. Southern California Gas Company.* On January 21, 1914, the Commission received a petition signed by L. Lyde, M. T. Sprague, F. G. Drews, Robt. B. Atelison and R. O. Williams of Moneta, requesting that the Southern California Gas Company extend their mains a distance of 1,500 feet to serve them with gas. The matter was taken up with the company who advised that the extension would require an investment of \$436.92 with an estimated income of \$60.00 per year.

Complainants were advised that in view of the long extension they should guarantee a minimum return of \$2.25 each per month, this minimum guarantee to apply until such time as four more, making a total of eight consumers, were being served from this extension.

Complainants were unwilling to make this guarantee and were advised that the Commission could do nothing more informally. Having received no further word the matter has been considered closed.

## INCREASES IN RATES.

I. C. 2911.

April 6, 1914.

*Templeton Board of Trade vs. Midland Counties Public Service Corporation.* On February 4, 1914, the Commission received a letter from the Templeton Board of Trade advising that the rate for electric energy had been increased from 10 cents, 6 cents, and 3 cents to 10 cents flat.

The matter was taken up with the Midland Counties Public Service Corporation and after investigation the rate was restored to the original basis, which adjustment was satisfactory to the complainant.



## LINE EXTENSION FOR POWER.

I. C. 2919.

March 10, 1914.

*B. R. Burroughs vs. Pacific Gas and Electric Company.* On February 5, 1914, a communication was received from B. R. Burroughs of Knightsen, Contra Costa County, regarding line extensions for power service at the dairy of the Walnut Grove Creamery Company near Knightsen.

At the request of the Commission the company investigated the complaint and on reconsidering the matter informed the Commission that the extension would be made at their expense. The complaint was therefore considered closed.

## SERVICE EXTENSION AT MERCED.

I. C. 2933.

March 9, 1914.

*J. E. Russell vs. San Joaquin Light and Power Corporation.* On February 7, 1914, J. E. Russell of Merced complained to the Commission that the San Joaquin Light and Power Corporation had refused to extend their lines to supply him with electric service unless he advanced \$130.00 to cover cost of extension, even though they had verbally agreed to make this extension for \$34.00.

Careful investigation was made by the Commission and the company agreed to make the extension for \$34.00, which adjustment was satisfactory to the complainant.

## MINIMUM CHARGE AT HERMOSA BEACH.

I. C. 2943.

March 4, 1914.

*J. M. Rust vs. Western Fuel Gas and Power Company.* On February 11, 1914, a letter was received from J. M. Rust complaining of the practice of the Western Fuel Gas and Power Company of charging a minimum of 50 cents per month. The complainant was advised that the 50 cents minimum charge referred to was included in the rates of that company which were on file with the Commission and was therefore a part of their legal and effective rates.

## SERVICE GUARANTEE AT STOCKTON.

I. C. 2970.

February 18, 1914.

*P. J. Smith vs. Western States Gas and Electric Company.* February 16, 1914, the Commission received a letter from P. J. Smith of 1104 South Center street, Stockton, complaining of the practice of the Western States Gas and Electric Company of requiring a consumer to have his landlord guarantee his account before they would furnish him with electric service. It was explained to complainant that the rules of the above utility, as filed with this Commission, require a prospective consumer to make a deposit equal to an estimated six-weeks bill unless his account was guaranteed. It was further explained that the Commission could not be of assistance in this matter through lack of jurisdiction.

## CASH DEPOSIT FOR SERVICE, FERDALE.

I. C. 2973.

April 7, 1914.

*Thompson and Brenner vs. Western States Gas and Electric Company.* On February 16, 1914, the Commission received a letter from Messrs. Thompson and Brenner of Ferndale, complaining that the Western States Gas and Electric Company demanded \$15.00 cash deposit before they would furnish electric service for power purposes. Though lacking jurisdiction the Commission took the matter up with the company, who stated that this charge had been in force for the past eight years.

Complainant was advised that, through lack of jurisdiction, the Commission could not be of assistance in this matter.

## ELECTRIC SERVICE.

I. C. 2976.

April 4, 1914.

*George Stephens vs. Great Western Power Company.* On February 14, 1914, George Stephens of Napa complained that the Great Western Power Company had refused to extend their lines to him after soliciting his business and promising service.

After a thorough investigation, it was found that an informal adjustment was impossible and complainant being so advised the matter was closed.

## ELECTRIC RATES.

I. C. 2982.

May 27, 1914.

*John Hubert Mee vs. Pacific Gas and Electric Company.* Under date of February 16, 1914, John Hubert Mee of San Rafael wrote to this Commission complaining of the method of collecting bills adopted by the Pacific Gas and Electric Company. He stated it was their practice to bill consumer with the minimum charge when unable to read the meter. After investigation he was advised that his difficulty could



be remedied by applying to have meter installed to location accessible to the meter reader. Nothing further has been heard from complainant and it is presumed that the adjustment is satisfactory.

#### SERVICE EXTENSION AT SAN JOSE.

I. C. 2985.

April 21, 1914.

*O. M. Lanham vs. Pacific Gas and Electric Company.* At the hearing in Case No. 479 held at San Jose on February 15, 1914, O. M. Lanham testified that the Pacific Gas and Electric Company had refused to give him lighting and power service at his house at 325 West Empire street, San Jose.

Upon investigation by the Commission it was found that the extension required would cost the company approximately \$156.55. Mr. Lanham requested service for lighting and for a three-horsepower motor. The extension is approximately 2,000 feet long and runs through a territory in which there are several small residences. The probable return to be obtained from these two services and one additional applicant for service will be in excess of 30 per cent on the investment.

Under date of April 11th the Commission was informed that the extension would be made at the expense of the company, which adjustment was satisfactory to the complainant.

#### SERVICE EXTENSION AT SAN JOSE.

I. C. 2986.

April 4, 1914.

*Lucy E. Botsford vs. Pacific Gas and Electric Company.* In connection with Case No. 477, *City of San Jose vs. Pacific Gas and Electric Company*, Lucy E. Botsford was named as a party being refused electric service.

The matter was taken up with the company informally in order to expedite an adjustment in the matter.

The company in their reply maintained that they were now willing to serve this party and had offered to do so, but that Miss Botsford did not desire service at the present time. Complainant was advised of their reply and the matter is considered closed.

#### SERVICE EXTENSION AT SAN JOSE.

I. C. 2987.

April 4, 1914.

*F. W. Waddell vs. Pacific Gas and Electric Company.* In connection with Case No. 477, being the complaint of the *City of San Jose vs. The Pacific Gas and Electric Company*, F. W. Waddell complained that the above utility had refused to supply him with electric service. The matter was taken up with the company in order to expedite an adjustment in the matter.

In reply the company maintained that they were now ready to supply this party but that complainant did not desire service until his fixtures had been installed.

Complainant was advised of their reply and the matter is considered closed.

#### SERVICE EXTENSION AT SAN JOSE.

I. C. 2987.

April 14, 1914.

*F. W. Waddell vs. Pacific Gas and Electric Company.* A letter was received from the complainant on April 8, 1914, in reference to the above matter stating that the wires had been connected on that date and that he was now enjoying electric service.

#### ELECTRIC RATES.

I. C. 2995.

February 19, 1914.

*J. F. Brown vs. Pacific Gas and Electric Company.* On February 18, 1914, J. F. Brown of San Jose complained to the commission concerning rates for the sale of electric energy by the Pacific Gas and Electric Company. Mr. Brown was advised that the matter would be given due consideration at the time of hearing in connection with Case No. 477, bringing into question the whole matter of rates of the Pacific Gas and Electric Company.

#### SERVICE EXTENSION AT STOCKTON.

I. C. 2999.

May 26, 1914.

*Fred P. Clark vs. Western States Gas and Electric Company.* On February 19, 1914, the Commission received a letter from Fred P. Clark of Stockton, bringing into question the action of the Western States Gas and Electric Company in refusing to extend their facilities in order to supply him with electric energy for pumping purposes.

The matter was gone into with the utility who maintained that the investment necessary in this extension would not insure a reasonable return. Complainant was advised of the position they had taken and was requested to furnish the Commission with the names and addresses of other parties who desired power from this extension.

Inasmuch as nothing further has been heard from complainant, it is presumed that the complaint has been dropped.

#### GAS RATES AT SEBASTOPOL.

I. C. 3002.

May 26, 1914.

*A. B. Tarcira et al. vs. Pacific Gas and Electric Company.* On February 19, 1914, a petition signed by a large number of residents of Sebastopol complaining of the rates for the sale of gas by the Pacific Gas and Electric Company was received by the Commission.

After investigating this matter complainant was advised that the Commission could be of no assistance through lack of jurisdiction as the city of Sebastopol had not surrendered to the Commission its powers over public utilities.

#### DISCRIMINATORY PRACTICE.

I. C. 3006.

April 4, 1914.

*George W. Diron vs. Southern California Edison Company.* On February 16, 1914, George W. Dixon, Los Angeles, complained of discriminatory practice on the part of his landlord charging him a higher rate for electric service than that paid to the Southern California Edison Company for the same class of service.

Investigation was made by the Commission and the defendant company and landlord absolutely denied charges of complainant.

The matter was again taken up with complainant, but as he had already left the city, no further action was taken.

#### ELECTRIC RATE AT OAKLAND.

I. C. 3012.

May 26, 1914.

*Karl Raentsch vs. Pacific Gas and Electric Company.* On February 21, 1914, Karl Raentsch, 362 Euclid avenue, Oakland, complained regarding disputed bill for gas and electric service rendered him by the Pacific Gas and Electric Company.

He requested that the case be held in abeyance until April, at which time he would again bring the matter to the attention of the Commission, but as nothing further has been heard from him, it is presumed that the matter has been dropped.

#### RATES FOR AGRICULTURAL PURPOSES.

I. C. 3013.

April 7, 1914.

*Orangevale Grange No. 854 vs. Electric Utility Corporations of California.* On March 3, 1914, the Commission received a resolution from the Orangevale Grange No. 854 in connection with the matter of uniform rates to large and small consumers for electric energy utilized for agricultural purposes in the State of California. The complainant was advised that the matter would be given careful consideration by the Commission and that a formal complaint would be entertained bringing into question the matter involved in any specific locality.

#### SERVICE EXTENSION AT SUNNYVALE.

I. C. 3022.

March 6, 1914.

*E. F. Dawson vs. Pacific Gas and Electric Company.* On February 24, 1914, E. F. Dawson complained that the Pacific Gas and Electric Company had refused to supply him with electric service unless he advanced cost of necessary extension.

Investigation was made by the Commission and the extension made by the power company free of charge to complainant, which adjustment was satisfactory.

#### LINE EXTENSION FOR MOTOR SERVICE IN CAMPELL.

I. C. 3023.

April 21, 1914.

*Charles Schlessinger vs. Pacific Gas and Electric Company.* On February 21, 1914, Charles Schlessinger informed the Commission that the Pacific Gas and Electric Company had refused to extend their lines in order to supply him with electric service for a 75-horsepower pumping installation.

From investigation it developed that Mr. Schlessinger had, upon recommendation of the company's employees, purchased and installed a 75-horsepower motor with the understanding that when the installation was completed he would receive electric service. Nothing was said at the time regarding the payment or advancement of the cost of the extension. After the installation was completed the company requested that Mr. Schlessinger advance \$1,090.25 to pay for the necessary line extension. The total cost including the transformer and the meter was estimated at \$1,633.05. The return to be obtained from this service would exceed 30 per cent of the cost of extension.

It was suggested that under the circumstances the company should make the extension at their own expense. On April 10th the company informed the Com-

mission that the extension would be made without cost to the consumer. Therefore the matter is considered closed.

#### RATES IN MARIN COUNTY.

I. C. 3045.

March 3, 1914.

*George Breck vs. Pacific Gas and Electric Company.* On February 27, 1914, the Commission received a letter from George Breck complaining of the practice of the Pacific Gas and Electric Company in refusing small agricultural consumers the advantage of their Schedule No. 114.

Complainant was advised that inasmuch as their action was in accordance with their filed rates, it would be necessary to bring formal action before any adjustment could be made in the matter.

Reopened March 4, 1914.

#### ELECTRIC RATES.

I. C. 3051.

May 27, 1914.

*H. F. Bannard vs. Pacific Light and Power Company.* On March 2, 1914, this Commission received a complaint from H. F. Bannard of San Gabriel, who alleged discrimination in the charge of minimum rate for electricity. After investigation it was found that apparent discrimination was due to the fixing of a 50-cent minimum by the city of San Gabriel, which applied only within the incorporated limits of the town. An explanation was made which was satisfactory to the complainant.

#### GAS METER REMOVED.

I. C. 3056.

March 2, 1914.

*Mrs. Wilson vs. Pacific Gas and Electric Company.* On Thursday Mrs. Wilson, Sixth avenue, San Francisco, complained to the Commission that the Pacific Gas and Electric Company had removed her gas meter for the purpose of repairing leaks, but had neglected to install another. The matter was referred to the company's representative, who promised to rectify the trouble.

#### EXCESSIVE GAS BILLS IN ALAMEDA.

I. C. 3057.

March 30, 1914.

*A. H. Vermillion vs. Pacific Gas and Electric Company.* On Wednesday, February 25, 1914, A. H. Vermillion called at the office of the Commission and complained of excessive gas bills which he received from the Pacific Gas and Electric Company.

The matter was referred to the Oakland office of the Pacific Gas and Electric Company and report was received from them, dated February 28th, stating that the meter had been tested and found correct. Company further stated that the excessive bills were greatly due to use of gas grate for heating purposes.

As the city of Alameda still retains the power over public utilities, complainant was advised that the Commission could do nothing further in the matter.

#### EXCESSIVE RATES FOR ENERGY.

I. C. 3065.

March 6, 1914.

*Hannah J. Ward vs. Electric Utilities of California.* The Commission received a letter from Hannah J. Ward, of Mountain View, under date of December 2, 1913, bringing into question the rates for the purchase of electric energy for domestic purposes. Complainant contended that the rates for such purposes were three times greater in California than in certain eastern cities. It was carefully explained to complainant that the rates for electricity were generally lower than in eastern states for the same class of service, and that "at present there is little that can be accomplished other than that being done by the many commissions and companies in determining means of reducing the cost of electric energy."

#### RATES FOR AGRICULTURAL PURPOSES.

I. C. 3069.

April 7, 1914.

*Poplar Grange, No. 359, vs. Electric Corporations of California.* On March 4, 1914, the Commission received a resolution from the Poplar Grange, No. 359, in connection with the matter of uniform rates to large and small consumers for electric energy utilized for agricultural purposes in the State of California. The complainant was advised that the matter would be given careful consideration by the Commission and that a formal complaint would be entertained bringing into question the matter involved in any specific locality.



## RATES FOR AGRICULTURAL PURPOSES.

I. C. 3081.

April 7, 1914.

*Lincoln Grange, No. 318, vs. Electric Utility Corporations of California.* On February 25, 1914, the Commission received a resolution from the Lincoln Grange, No. 318, in connection with the matter of uniform rates to large and small consumers for electric energy utilized for agricultural purposes in the State of California. The complainant was advised that the matter would be given careful consideration by the Commission and that a formal complaint would be entertained bringing into question the matter involved in any specific locality.

## RATES FOR AGRICULTURAL PURPOSES.

I. C. 3083.

April 7, 1914.

*Geyserville Grange, No. 312, vs. Electric Utility Corporations of California.* On March 5, 1914, the Commission received a resolution from the Geyserville Grange, No. 312, in connection with the matter of uniform rates to large and small consumers for electric energy utilized for agricultural purposes in the State of California. The complainant was advised that the matter would be given careful consideration by the Commission and that a formal complaint would be entertained bringing into question the matter involved in any specific locality.

## SERVICE EXTENSION, SEBASTOPOL.

I. C. 3087.

May 26, 1914.

*L. G. Scott vs. California Telephone and Light Company.* On March 7, 1914, the Commission received a letter from L. G. Scott, of Sebastopol, calling into question the action of the California Telephone and Light Company in refusing to extend their lines in order to supply him with electric service.

The matter was gone into very carefully with the company, who finally agreed to supply the necessary service, which adjustment was satisfactory.

## RATES FOR AGRICULTURAL PURPOSES.

I. C. 3095.

April 7, 1914.

*San Jose Grange, No. 10, vs. Electric Utility Corporations of California.* On March 10, 1914, the Commission received a resolution from the San Jose Grange, No. 10, in connection with the matter of uniform rates to large and small consumers for electric energy utilized for agricultural purposes in the State of California. The complainant was advised that the matter would be given careful consideration by the Commission and that a formal complaint would be entertained bringing into question the matter involved in any specific locality.

## SERVICE EXTENSION NEAR WOODSIDE, SAN MATEO COUNTY.

I. C. 3096.

April 21, 1914.

*Geo. D. Squires vs. Pacific Gas and Electric Company.* On March 12, 1914, a complaint was received from Geo. D. Squires, stating that the Pacific Gas and Electric Company had refused to extend their electric lines to give him service for lighting at his home, near Woodside.

Investigation showed that the total expense to the company would be approximately \$75.00. The larger portion of this extension was across Mr. Squires' private property and the company desired to charge him for that portion of the line.

Upon suggestion by the Commission, the company decided to make the extension at their own expense, and the complaint was therefore considered closed.

## RATES FOR AGRICULTURAL PURPOSES.

I. C. 3097.

April 7, 1914.

*Tulare Grange, No. 198, vs. Electric Utility Corporations of California.* On March 10, 1914, the Commission received a resolution from the Tulare Grange, No. 198, in connection with the matter of uniform rates to large and small consumers for electric energy utilized for agricultural purposes in the State of California. The complainant was advised that the matter would be given careful consideration by the Commission and that a formal complaint would be entertained bringing into question the matter involved in any specific locality.

## RATES FOR AGRICULTURAL PURPOSES.

I. C. 3101.

April 7, 1914.

*Alpaugh Grange, No. 362, vs. Electric Utility Corporations of California.* On March 11, 1914, the Commission received a resolution from the Alpaugh Grange, No. 362, in connection with the matter of uniform rates to large and small consumers for electric energy utilized for agricultural purposes in the State of California. The



complainant was advised that the matter would be given careful consideration by the Commission and that a formal complaint would be entertained bringing into question the matter involved in any specific locality.

# SERVICE EXTENSION, CAMPBELL.

I. C. 3104.

June 19, 1914.

*W. L. Beacock vs. Pacific Gas and Electric Company.* On May 12, 1914, W. L. Beacock, of Campbell, wrote complaining that the Pacific Gas and Electric Company refused to give him electric lighting service unless he would advance the cost of the line, to be refunded on the basis of 20 per cent of the gross receipts from the service.

Upon investigation, it appeared that the estimated total cost was \$226.00, that there was little possibility of additional consumers and that the annual revenue would probably not exceed \$20.00. Mr. Beacock was therefore informed that under the circumstances the extension would not be requested unless a greater return could be obtained.

No further communication being received, the complaint has been considered closed.

# DAMAGES FOR INTERRUPTED SERVICE.

I. C. 3112.

May 27, 1914.

*C. F. and D. J. Whitmore vs. Southern Sierras Power Company.* Under date of March 11, 1914, C. F. and D. J. Whitmore, of Perris, wrote to this Commission stating their motor and crops were damaged by interruptions to service on the lines of the Southern Sierras Power Company. They requested that the company be required to indemnify them for their losses.

Complainants were notified that the Commission had no jurisdiction to assess damages.

# RATES FOR AGRICULTURAL PURPOSES.

I. C. 3121.

April 7, 1914.

*Dairyville Grange, No. 365, vs. Electric Utility Corporations of California.* On March 13, 1914, the Commission received a resolution from the Dairyville Grange, No. 365, in connection with the matter of uniform rates to large and small consumers for electric energy utilized for agricultural purposes in the State of California. The complainant was advised that the matter would be given careful consideration by the Commission, and that a formal complaint would be entertained bringing into question the matter involved in any specific locality.

# SERVICE EXTENSION.

I. C. 3123.

May 27, 1914.

*Jas. F. Hallett vs. Peninsular Railway Company.* On February 17, 1914, a complaint was received from Jas. F. Hallett, 84 East Santa Clara street, San Jose, stating that the Peninsular Railway Company had refused to give him direct current power service for a 15-horsepower motor installation. From an investigation it appeared that the installation would be about 200 feet from an extension of the company's line serving a neighbor. Mr. Hallett desired this service on account of the small minimum charge as compared with the Pacific Gas and Electric Company's rates. The company was willing to serve if the line was extended to within 100 feet of their line, but would rather the Pacific Gas and Electric Company would serve. Although the service to be obtained will probably be poor, due to the poor regulation, the company was requested to give service in accordance with Mr. Hallett's request. The company has made the connections and the complaint is therefore considered closed.

# SERVICE EXTENSION, SAN JOSE.

I. C. 3128.

June 1, 1914.

*W. A. McMasters vs. Pacific Gas and Electric Company.* On March 13, 1914, a complaint was received from W. A. McMasters, R. F. D. No. 1, Box 94b, San Jose, in which he stated that the Pacific Gas and Electric Company had refused to give him electric lighting service except upon the advancement of about \$125.00. From an investigation it developed that Mr. McMasters' house is located approximately 1,400 feet from the company's present 4,000-volt line and the estimated investment in service was \$183.75.

Mr. McMasters desired lighting service only and as there was no possible additional business to be obtained from this extension, he was advised that the Commission would not request the extension unless a guarantee was made. No answer having been received the complaint has been considered closed.

## SERVICE EXTENSION, SAN JOSE DISTRICT.

I. C. 3130.

April 21, 1914.

*Albert Foster vs. Pacific Gas and Electric Company.* On March 7, 1914, a letter was received from Albert Foster to the effect that the Pacific Gas and Electric Company had refused to make the line extension necessary to give him electric power service for a pumping installation on his place east of San Jose.

Upon investigation by the Commission it was found that the cost of the extension as estimated by the company's engineers was \$591.90 for one 15-horsepower motor installation and three lighting services. The territory in the neighborhood is very prosperous and there are possibilities of additional pumping to be secured.

The company was therefore requested to consider this matter in view of making the extension. On April 18th the Commission was informed that the company would make the extension, so the matter was considered closed.

## SERVICE DEPOSIT AT REEDLEY.

I. C. 3138.

May 26, 1914.

*Friesen Brothers vs. San Joaquin Light and Power Corporation.* On March 14, 1914, the Commission received a letter from Friesen Brothers, Reedley, bringing into question the action of the San Joaquin Light and Power Corporation in requiring them to advance a cash guarantee of \$5.00 for electric service from parties who had bought out stock of complainant.

Complainant was requested to furnish more detailed information, but as nothing further has been heard in this connection we presume that the matter has been dropped.

## RATES FOR AGRICULTURAL PURPOSES.

I. C. 3139.

April 7, 1914.

*Sunnyvale Grange, No. 331, vs. Electric Utility Corporations of California.* On March 14, 1914, the Commission received a resolution from the Sunnyvale Grange, No. 331, in connection with the matter of uniform rates to large and small consumers for electric energy utilized for agricultural purposes in the State of California. The complainant was advised that the matter would be given careful consideration by the Commission and that a formal complaint would be entertained bringing into question the matter involved in any specific locality.

## RATES AT SANTA ANA.

I. C. 3140.

May 26, 1914.

*S. H. Pendleton Lumber and Mill Company vs. Southern California Edison Company.* On March 14, 1914, the Commission received a letter from the Pendleton Lumber Company, Santa Ana, complaining that for the past three years they had paid the Southern California Edison Company the rate of  $2\frac{1}{2}$  cents per kilowatt hour for electric energy purchased not knowing that the power company had in effect a rate of 2 cents per kilowatt hour for this class of service during this entire period.

The utility in defending their action in the matter stated that complainant had been offered the 2-cent rate with \$100.00 per year minimum in 1911 but they had not taken advantage of it.

Complainant was advised of the company's defense and no further advice having been received in this connection, we presume the matter has been dropped.

## RATES FOR AGRICULTURAL PURPOSES.

I. C. 3141.

April 7, 1914.

*American River Grange, No. 172, vs. Electric Utility Corporations of California.* On March 13, 1914, the Commission received a resolution from the American River Grange, No. 172, in connection with the matter of uniform rates to large and small consumers for electric energy utilized for agricultural purposes in the State of California. The complainant was advised that the matter would be given careful consideration by the Commission, and that a formal complaint would be entertained bringing into question the matter involved in any specific locality.

## PRACTICES AT SANTA BARBARA.

I. C. 3145.

May 26, 1914.

*J. R. Whittemore vs. Santa Barbara Gas and Electric Company.* On March 16, 1914, a letter was received from J. R. Whittemore of Santa Barbara, questioning the practice of the Santa Barbara Gas and Electric Company in requiring him to pay \$1 per horsepower per month on the rated capacity of his motor, alleging that the maximum demand should be considered.

After investigation complainant was advised that the interpretation of this rule by the company was in accordance with the rates filed with this Commission by that utility and that formal action would be required in order to bring the rates and rules of the company into question.

# SERVICE EXTENSION, PROBERTA.

I. C. 3156.

May 26, 1914.

*Albert Silverman vs. Northern California Power Company, Consolidated.* On March 17, 1914, the Commission received a letter from Albert Silverman, Proberta, complaining that the Northern California Power Company, Consolidated, had refused to supply him with electric service for agricultural purposes.

The matter was gone into very carefully with the company who maintained that they could not afford to make extensions as requested as the probable return in revenue would not insure a reasonable return on the investment.

When complainant was advised of the position taken by the company he advised the Commission that he would file a formal complaint.

# RATES FOR AGRICULTURAL PURPOSES.

I. C. 3169.

April 7, 1914.

*Fort Romie Grange, No. 353, vs. Electric Utility Corporations of California.* On March 18, 1914, the Commission received a resolution from the Fort Romie Grange, No. 353, in connection with the matter of uniform rates to large and small consumers for electric energy utilized for agricultural purposes in the State of California. The complainant was advised that the matter would be given careful consideration by the Commission and that a formal complaint would be entertained bringing into question the matter involved in any specific locality.

# ELECTRIC LINE EXTENSION.

I. C. 3189.

March 3, 1914.

*H. F. Harold vs. Northern California Power Company.* On March 14, 1914, H. F. Harold, 905 First National Bank Building, San Francisco, complained that the Northern California Power Company, Consolidated, had refused to extend their lines north of Orland to furnish electric energy for agricultural purposes.

Investigation was made by the Commission, and the company agreed to make the necessary extension, which adjustment was satisfactory to the complainant.

# CHARGE FOR METER RENTAL IN SAN FRANCISCO.

I. C. 3191.

May 26, 1914.

*Geo. F. Eberhard Company vs. Pacific Gas and Electric Company.* On March 21, 1914, the Commission received a letter from Geo. F. Eberhard Company questioning the action of the Pacific Gas and Electric Company in requiring meter rental of 50 cents per month on a meter used to check the amount of gas consumed by a tenant of complainant, this gas first having been measured on complainant's meter.

Complainant was advised that the company was probably justified in requiring some compensation in this meter as it was not necessary to the supplying of service, but as the question had never come formally before the Commission it could not definitely be decided at this time.

# PRACTICES AT MCFARLAND.

I. C. 3193.

May 26, 1914.

*George D. Carter vs. Mt. Whitney Power and Electric Company.* On March 21, 1914, the Commission received a letter from George D. Carter of McFarland, complaining on behalf of himself and a number of residents of McFarland of the action of the Mt. Whitney Power and Electric Company in refusing to issue separate bills for electric energy used for agricultural purposes.

The matter was gone into very carefully with the company who maintained that request of the complainant was not in accordance with the general practices, and that if granted, would result in dissatisfaction to all parties concerned. Complainant was advised of the position taken by the utility; also that before the Commission could go further in this matter it would be necessary to file formal complaint. Inasmuch as the complainant has not replied to the Commission's letter it is presumed that the matter has been dropped.

# SERVICE EXTENSION, MADERA.

I. C. 3207.

May 26, 1914.

*John S. Bradford vs. San Joaquin Light and Power Corporation.* On March 24, 1914, the Commission received a letter from John S. Bradford, Madera, calling into



question the action of the San Joaquin Light and Power Corporation in requiring him to advance the cost of line extension necessary to serve him with electric service.

The matter was taken up with the company who maintained that due to the tightness of the money market they were forced to assume this attitude. Complainant was advised that inasmuch as the company had taken this position it would be necessary to file formal complaint if he wished to go further in this matter. Having heard nothing further from complainant we presume that he does not care to follow this course.

#### ELECTRIC RATES.

I. C. 3213.

April 10, 1914.

*Consolidated Mines Company vs. Southern Sierras Power Company.* On March 24, 1914, the Consolidated Mines Company of Los Angeles wrote to this Commission questioning the method of calculating rates for electric service used by the Southern Sierras Power Company.

Complainant was advised that the rates as billed were those on file with this Commission.

#### GAS SERVICE IN SAN FRANCISCO.

I. C. 3217.

May 26, 1914.

*Herbert Filmer vs. Pacific Gas and Electric Company.* On March 26, 1914, the Commission received a letter from Herbert Filmer, 1681 Oak street, San Francisco, complaining of poor regulation of the gas service of the Pacific Gas and Electric Company.

Complainant was advised that inasmuch as the board of supervisors of San Francisco have passed an ordinance regulating gas service which ordinance had been held up due to injunction proceedings, it would be impossible to state whether this Commission would have jurisdiction over such matters in the city of San Francisco.

#### RATES FOR AGRICULTURAL PURPOSES.

I. C. 3231.

April 7, 1914.

*Greenfield Grange No. 357, vs. Electric Utility Corporations of California.* On March 28, 1914, the Commission received a resolution from the Greenfield Grange, No. 357, in connection with the matter of uniform rates to large and small consumers for electric energy utilized for agricultural purposes in the State of California. The complainant was advised that the matter would be given careful consideration by the Commission and that a formal complaint would be entertained bringing into question the matter involved in any specific locality.

#### RATES FOR AGRICULTURAL PURPOSES.

I. C. 3237.

April 7, 1914.

*Santa Clara County Pomona Grange, No. 4, vs. Electric Utility Corporations of California.* On March 30, 1914, the Commission received a resolution from the Santa Clara County Pomona Grange, No. 4, in connection with the matter of uniform rates to large and small consumers for electric energy utilized for agricultural purposes in the State of California. The complainant was advised that the matter would be given careful consideration by the Commission and that a formal complaint would be entertained bringing into question the matter involved in any specific locality.

#### ELECTRIC SERVICE.

I. C. 3242.

May 27, 1914.

*A. J. Snow vs. Sierra and San Francisco Power Company.* Under date of March 30, 1914, this Commission received a complaint from A. J. Snow, of Ripon, in which he alleged that he had been refused electric service by the Sierra and San Francisco Power Company. Upon taking up the matter with the company, it was found that complaint was the result of a misunderstanding and complainant was already receiving service.

#### RATES FOR AGRICULTURAL PURPOSES.

I. C. 3252.

April 7, 1914.

*Bennett Valley Grange, No. 16, vs. Electric Utility Corporations of California.* On April 1, 1914, the Commission received a resolution from the Bennett Valley Grange, No. 16, in connection with the matter of uniform rates to large and small consumers for electric energy utilized for agricultural purposes in the State of California. The complainant was advised that the matter would be given careful consideration by the Commission and that a formal complaint would be entertained bringing into question the matter involved in any specific locality.



# RATES AND DISCONTINUANCE OF SERVICE.

I. C. 3256.

June 23, 1914.

*Rainbow Gold Mining Company vs. Middle Yuba Hydroelectric Power Company.* On March 31, 1914, L. P. Woodbury, president of the Rainbow Gold Mining Company, complained in person that the power rates charged him by the Middle Yuba Hydroelectric Power Company were excessive and discriminatory and that his motor service had been disconnected on account of nonpayment of bills.

Upon investigation it was found that the rates were in accordance with filed schedules and that the power bills were larger than Mr. Woodbury had expected them to be apparently on account of a misunderstanding of the power requirement of the connected load.

As regards the reconnecting of service Mr. Woodbury was not in need of the power except as "break down" service and decided to hold the matter in abeyance until he could again take up the matter with the company. Nothing further was received from complainant and apparently the matter has been settled, so the complaint is therefore considered closed.

## RATES AT HOLLISTER.

I. C. 3259.

March 26, 1914.

*George E. Shaw vs. Coast Counties Gas and Electric Company.* On March 25, 1914, a letter was received from George E. Shaw of Hollister, in which he stated that the manager of the Coast Counties Gas and Electric Company had refused to serve him with electric energy unless he signed a contract, as the manager of that company stated that this was necessary in order to comply with the "Rules of the Railroad Commission."

Complainant was advised that the rates and rules of the company had merely been accepted for filing and were subject to formal complaint or to investigation by the Commission on its own initiative.

## RATES AT WILLOWS.

I. C. 3260.

May 26, 1914.

*J. C. Terry vs. Northern California Power Company, Consolidated.* On March 24, 1914, the Commission received a letter from J. C. Terry, Willows, inquiring whether or not the Northern California Power Company, Consolidated, was required to cancel his contract in view of the fact that this Commission had fixed the rates for the sale of electric energy of that utility. Complainant also requested copy of rates that would apply in his case.

Copy of rate requested was furnished and complainant was advised that his contract had been filed with the Commission as an exception to the company's regular rates as required in the Commission's order in Case 293.

## RATES AT ESCONDIDO.

I. C. 3269.

May 26, 1914.

*L. M. Brainie vs. Escondido Utilities Company.* On April 3, 1914, the Commission received a communication from L. M. Brainie of Escondido, questioning the reasonableness of the 50-cent "tap rate" or service charge of the Escondido Utilities Company.

An endeavor was made to make an informal adjustment, but inasmuch as the company maintained that the charge was just and reasonable, complainant was advised that the Commission could not be of further assistance, inasmuch as it was without jurisdiction in Escondido.

## CASH DEPOSIT AT LOS GATOS.

I. C. 3270.

May 26, 1914.

*Miss Lucy A. Keith vs. Pacific Gas and Electric Company.* On April 1, 1914, the Commission received a letter from Miss Lucy A. Keith of Los Gatos, complaining of the action of the Pacific Gas and Electric Company in requiring of her a cash deposit for gas and electric service.

Complainant was advised that while this matter had never come before the Commission in any formal case no general ruling had ever been made and notwithstanding the above, until decision was rendered in the Glendale case, it would be impossible to determine whether or not this Commission has jurisdiction over such matters in municipalities, the city of Los Gatos not having surrendered to this Commission its powers to regulate public utilities.

## SERVICE EXTENSION, MT. TAMALPAIS.

I. C. 3275.

May 9, 1914.

*Chas. A. Neale vs. Pacific Gas and Electric Company.* On April 13, 1914, the Commission received a letter from Chas. A. Neale complaining that the Pacific Gas and Electric Company had refused to extend its lines in order to supply him with

electric service at his residence at Camp Tamalpias, Marin County, even though they had repeatedly promised to do so, on the strength of which promise the complainant had wired his house in anticipation of receiving such service. The complainant also alleged that he was being discriminated against inasmuch as the company was serving consumers in more remote locations.

After careful investigation by the company lines were extended to serve complainant, which adjustment was satisfactory.

#### CASH GUARANTEE, STOCKTON.

I. C. 3280.

May 26, 1914.

*F. E. Bosworth vs. Western States Gas and Electric Company.* On April 6, 1914, F. E. Bosworth of Stockton complained to the Commission that the Western States Gas and Electric Company had compelled him to pay a cash guarantee of \$10.00 before they would supply him with gas and electric service and had refused to pay any interest on this money.

After investigation by the Commission the utility agreed to make a reduction in the deposit of this consumer. Complainant was advised of this fact, and inasmuch as nothing further has been heard it is assumed that this adjustment was satisfactory.

#### SERVICE EXTENSION AT SAN JOSE.

I. C. 3297.

May 19, 1914.

*E. Keesling vs. Pacific Gas and Electric Company.* On April 8, 1914, a communication was received from E. Keesling, address Willow street opposite Cherry avenue, San Jose, stating that the electric company had refused to give him electric lighting service unless he advanced the cost of the extension which amounted to \$56.00, to be refunded at the rate of 20 per cent of annual receipts. After investigation by the Commission it was suggested that the company make the extension which the company willingly agreed to do, especially as Mr. Keesling would install a two horsepower motor in addition to the lighting service. The complaint has therefore been considered closed.

#### ELECTRIC RATES.

I. C. 3328.

May 27, 1914.

*Napa Cured Fruit Association vs. Great Western Power Company.* On April 11, 1914, the Napa Cured Fruit Association wrote to this Commission complaining of the collection of a minimum by the Great Western Power Company. They were advised that the rates charged were in accordance with those on file with the Commission and in order to determine their reasonableness it would be necessary to file formal complaint. On receiving no further communication the matter was considered closed.

#### EXTENSION AT FRESNO.

I. C. 3329.

May 26, 1914.

*A. M. Sanderson vs. San Joaquin Light and Power Corporation.* On March 27, 1914, the Commission received a communication from A. M. Sanderson, Fresno, bringing into question the refusal of the San Joaquin Light and Power Corporation to extend their lines in order to supply him with electric service.

The matter was gone into carefully with the company but no adjustment was made as the company maintained that it would be impossible for them to make extensions of this kind due to the tightness of the money market.

Complainant was advised that inasmuch as the company had assumed this position it would be impossible to go into the matter further in an informal way.

#### ELECTRIC SERVICE.

I. C. 3334.

May 27, 1914.

*H. De C. Richards vs. Western States Gas and Electric Company.* On April 15, 1914, H. De C. Richards wrote to this Commission and called into question the action of the Western States Gas and Electric Company in requiring him to pay the cost of a substation for the purpose of reducing voltage from 60,000 volts to 2,200 volts for service to his mining location near Placerville. Upon investigation it was found that the rate for this service was based on the cost of energy delivered at the transmission line voltage and that construction of a substation by the company as requested by Mr. Richards would be a discrimination in his favor. Complainant was so advised and the matter closed.

#### SERVICE EXTENSION, NESTOR.

I. C. 3337.

May 26, 1914.

*John S. Hull vs. San Diego Consolidated Gas and Electric Company.* On April 16, 1914, the Commission received a letter from John S. Hull of Nestor, questioning the action of the San Diego Consolidated Gas and Electric Company in regard to a certain contract.

The matter was gone into very carefully with the company and complainant was advised that inasmuch as the company's action appeared to be in accordance with the contract and the rates on file with this Commission no assistance could be rendered in an informal manner and that if he wished to go further into the matter it would be necessary to file formal complaint.

## RATES AT CORNING.

I. C. 3341.

May 26, 1914.

*City of Corning vs. Northern California Power Company, Consolidated.* On April 17, 1914, the Commission received a letter from the city of Corning complaining of the action of the Northern California Power Company, Consolidated, in increasing its minimum charge on pumping plant and also increasing its rate for electric energy furnished for street lighting.

Complainant was advised that inasmuch as the city of Corning had not surrendered its powers of control over public utilities to this Commission the Commission could not be of assistance in this matter through lack of jurisdiction.

## RATES FOR AGRICULTURAL PURPOSES.

I. C. 3368.

April 25, 1914.

*Two Rock Grange, Petaluma, vs. Electric Utility Corporations of California.* On March 4, 1914, the Commission received a resolution from the Two Rock Grange, Petaluma, in connection with the matter of uniform rates to large and small consumers for electric energy utilized for agricultural purposes in the State of California. The complainant was advised that the matter would be given careful consideration by the Commission and that a formal complaint would be entertained bringing into question the matter involved in any specific locality.

## RATES IN CLOVERDALE.

I. C. 3371.

May 26, 1914.

*M. Goldman vs. California Telephone and Light Company.* On April 22, 1914, the Commission received a letter from M. Goldman, Cloverdale, bringing into question the reasonableness of the rates of the California Telephone and Light Company in Cloverdale.

Complainant was advised that when the California Telephone and Light Company was given permission to purchase the properties of the Cloverdale Light and Power Company by this Commission it was with the understanding that no increase in the rates for the sale of electric energy should be made and as no increase has been made it would appear that the Commission could be of no further assistance in the matter through lack of jurisdiction, the city of Cloverdale not having surrendered its powers over public utilities to this Commission.

## SERVICE CONNECTION.

I. C. 3374.

May 27, 1914.

*Mrs. Susie B. Edwards vs. Pacific Gas and Electric Company.* On April 22, 1914, a complaint was received from Mrs. Susie B. Edwards, 717 H street, Petaluma, stating that the Pacific Gas and Electric Company refused to give lighting service.

From correspondence it appeared that Mrs. Edwards had received lighting service from the Great Western Company but had been disconnected because of nonpayment of bills. The Pacific Gas and Electric Company refused to connect for this reason. On May 4, 1914, the connection was made because notice was given as provided by provision of Civil Code. The complaint has, therefore, been closed.

## GAS EXTENSION IN OAKLAND.

I. C. 3388.

June 30, 1914.

*Mrs. H. Kern vs. Pacific Gas and Electric Company.* April 24, 1914, Mrs. H. Kern, 4135 Thirty-ninth avenue, Oakland, complained that the Pacific Gas and Electric Company had refused her gas service.

Upon the request of the Commission the company reported that to serve the complainant would require an investment of \$965.00. In view of the small revenue to be derived the company refused to make the extension unless the cost of line be advanced by the complainant. Mrs. Kern was advised that the Commission could do nothing more informally and that, providing she desired to pursue the matter further, it would be necessary to file formal complaint in accordance with the Commission's Rules of Procedure, copy of which was forwarded.

Nothing more has been heard from the complainant and the matter is considered closed.

## RATES AT NEEDLES.

I. C. 3398.

May 26, 1914.

*G. P. Smith vs. Needles Gas and Electric Company.* On April 27, 1914, the Commission received a letter from G. P. Smith of Needles, complaining that the rate for the sale of gas of the Needles Gas and Electric Company was exorbitant.



Complainant was advised that as the rates of a company could not be reduced without a hearing it would be impossible to secure any adjustment of this matter in an informal way.

#### CHARGES FOR SERVICE EXTENSION, LOS ALTOS.

I. C. 3403.

May 19, 1914.

*R. W. Lohman vs. Pacific Gas and Electric Company.* On April 27, 1914, a complaint was received from R. W. Lohman of Los Altos stating that the Pacific Gas and Electric Company had charged him \$25.00 for the electric service extension to his home. Upon investigation by the Commission it appears that the extension is entirely over private property and that the total cost would be about \$65.00.

Originally Mr. Lohman planned a 25-horsepower motor installation, but did not install it and the company charged him \$25.00 to partly pay for the extension for lighting service. This payment Mr. Lohman agreed to make before the extension was made.

Mr. Lohman has been informed that the matter should be settled with the company as the points at issue are the fulfillment of a contract, rather than the determination of the reasonableness of a practice.

This complaint has therefore been considered closed.

#### RATES AT DUNSMUIR.

I. C. 3420.

May 26, 1914.

*Mason A. Bailey vs. California Oregon Power Company.* On April 28, 1914, Mason A. Bailey, city attorney of Dunsmuir, advised the Commission that the town was dissatisfied with the rates of the California-Oregon Power Company for water and electricity, requesting data necessary for procedure to obtain a rate reduction.

Complainant was advised that inasmuch as the city of Dunsmuir had not surrendered its powers of regulation over public utilities, this Commission could not be of assistance through lack of jurisdiction.

#### RATES AT HAYWARD.

I. C. 3426.

May 26, 1914.

*Rosenberg Company vs. Pacific Gas and Electric Company.* On May 1, 1914, Leonard Rosenberg of Rosenberg Company, Incorporated, Hayward, called at the office of the Commission complaining of the unreasonableness of the minimum charge required by the Pacific Gas and Electric Company.

The matter was taken up with the company, but they refused to make any adjustment as they maintain that the charge is just and reasonable. Complainant was advised that inasmuch as the charge referred to was in accordance with the rates filed with this Commission it would be necessary that formal complaint be filed before the matter could be given further consideration.

#### CHARGE FOR MOVING METER.

I. C. 3439.

June 30, 1914.

*Mrs. M. E. Johnson vs. West Side Gas Company.* May 4, 1914, Mrs. M. E. Johnson of Taft complained to the Commission that the West Side Gas Company had charged her \$2.90 for moving a gas meter.

After an investigation by the Commission it developed that the charge of which Mrs. Johnson complained was made by the Appliance Company.

The complainant was advised that the Commission had no jurisdiction in this matter.

#### MINIMUM CHARGE FOR SERVICE AT NEWPORT BEACH.

I. C. 3459.

May 27, 1914.

*A. E. Hawley vs. West Coast Gas Company.* On April 28, 1914, the Commission received a letter from A. E. Hawley of Newport Beach complaining that the West Coast Gas Company had required a minimum charge of \$1.00 per month for gas service, although this charge had never heretofore been in effect.

Complainant was advised that if his residence was located outside the city of Newport Beach that a minimum of \$1.00 per month was not legal as no such charge was ever filed with this Commission as the rate of that company outside the city of Newport Beach and that the Commission had denied the application of the company to place such charge in effect in that territory. If, however, the complainant's place was located inside the city of Newport Beach the Commission would have no jurisdiction in the matter as that municipality had not surrendered its powers of regulation over public utilities to this Commission at the time of the Commission's decision in the above mentioned application.



## INCREASE IN POWER RATES.

I. C. 3469.

May 7, 1914.

*The Brownie vs. Pacific Gas and Electric Company.* May 6, 1914, the Commission received a letter from "The Brownie," a confectionery store at Marysville, calling into question the action of the Pacific Gas and Electric Company in increasing its rates for the purchase of electric energy and also increasing its minimum monthly charge.

Complainant was advised that the Commission could not be of assistance in this matter through the lack of jurisdiction.

## GAS RATES.

I. C. 3476.

May 26, 1914.

*City of San Leandro vs. Pacific Gas and Electric Company.* On May 7, 1914, the Commission received a letter from the city of San Leandro complaining of the discriminatory practices on the part of the Pacific Gas and Electric Company in requiring them to pay \$1.25 per 1,000 cubic feet for gas in the city of San Leandro while in the city of Oakland, immediately adjoining the limits of San Leandro, consumers enjoy a rate of 90 cents per 1,000 cubic feet.

Complainant was advised that as the rates of a utility could not be reduced without a formal hearing it would be necessary that formal complaint be filed if the matter was to be pursued further.

## RATES AT YUBA CITY.

I. C. 3480.

May 26, 1914.

*J. B. Montane vs. Pacific Gas and Electric Company.* Under date of May 4, 1914, a letter was received from J. B. Montane of Yuba City, calling into question the rates and minimum charges of the Pacific Gas and Electric Company.

After investigation complainant was advised that the rates complained of were in accordance with the rates filed by the company with this Commission and if the matter was to be pursued further it would be necessary that a formal complaint be filed.

## RATES AT LINDSAY.

I. C. 3483.

May 26, 1914.

*C. C. Barrick vs. Mt. Whitney Power and Electric Company.* On May 7, 1914, the Commission received a letter from C. C. Barrick, Lindsay, complaining of the rates for electric energy for pumping purposes of the Mt. Whitney Power and Electric Company.

Complainant was advised that inasmuch as the Commission could not reduce the rates of a company without formal hearing in which the company was given opportunity to defend its rates it would be necessary that he make formal application if this matter was to be pursued further. Not having heard further from complainant we presume that this matter has been dropped.

## CASH DEPOSIT IN ALAMEDA.

I. C. 3514.

May 26, 1914.

*C. G. Egbert vs. Pacific Gas and Electric Company.* On May 14, 1914, the Commission received a letter from C. G. Egbert of 645 Central avenue, Alameda, complaining of the practices of the Pacific Gas and Electric Company in requiring cash deposit of \$5.00 before they had furnished service.

Complainant was advised that inasmuch as Alameda was an incorporated city and had not surrendered its powers over public utilities to this Commission and it had not definitely been determined that the Commission had jurisdiction over this question in incorporated cities no assistance could be rendered at this time.

## SERVICE AT LARKSPUR.

I. C. 3717.

June 19, 1914.

*George C. Terrill vs. Pacific Gas and Electric Company.* On June 12, 1914, G. C. Terrill, 1277 Fourth avenue, San Francisco, complained that the Pacific Gas and Electric Company had refused to supply him with electric service at his residence in Larkspur.

Complainant alleged that the company was unwilling to provide service because the wiring in the building did not conform with the local ordinances and that the local inspector had informed him that he had refused to pass upon the work because the company had advised him that the wiring was not in accordance with such ordinances.

After a thorough investigation by the Commission, certain changes were made in the complainant's electrical installation and service supplied as desired. Adjustment was satisfactory to complainant.

## INFORMAL COMPLAINTS, WHARFINGERS.

### DISCRIMINATORY WHARFAGE CHARGES.

#### I. C. 2004.

*Bagalini Bros. vs. Patrick Hanlon.* On September 11, 1913, Wm. C. Antonovich, attorney for Bagalini Bros., of Crockett, complained of treatment accorded his client by Patrick Hanlon, owner of a wharf at Crockett, alleging that discriminatory charges had been assessed against Bagalini Bros. for wharf privileges.

Upon investigation it appeared that nothing whatsoever had been collected by wharfinger from complainant prior to the date of complaint; furthermore, that charges assessed were not out of line with charges made for similar service by other wharfingers in the same vicinity.

Wharfinger was required to file a complete schedule of rates, as required by the Public Utilities Act and directed to enforce the same without discrimination.

### WHARFAGE OVERCHARGE.

#### I. C. 2215.

*E. W. Ormsby vs. Stearns Wharf Company.* On October 13th, E. W. Ormsby of Ventura complained that the Stearns Wharf Company of Santa Barbara had charged him \$1.50 per head for horses passed over the said company's property.

Upon investigation it appeared that the jurisdiction of the Railroad Commission did not extend to service about which complaint was made. Mr. Ormsby was so informed.

### STORAGE OVERCHARGE.

#### I. C. 2236.

*Redwood Shingle Association vs. Pacific Oil and Fuel Company.* On October 14, 1913, the Redwood Shingle Association of Eureka made inquiry as to what were proper storage charges for shingles and shakes stored on wharves located on Humboldt Bay. Complainant later alleged that the Pacific Oil and Fuel Company operating Knights Wharf, had charged 6 cents per thousand for the storage of shingles, whereas the Northwestern Pacific Railroad Company charged but 3 cents per thousand, a period of six months being covered in each case.

The Pacific Oil and Fuel Company explained that the difference was largely accounted for by the fact that the Northwestern Pacific Railroad's storage charge was made in connection with its other general freight charges; and further, that the difference in location of the two wharves—that of defendant within the city limits of Eureka, and the railroad company's on South Bay—would account for the remaining difference. Defendant maintained that its rates were fair and reasonable under the circumstances.

Complainant was advised that it would be necessary in the event that explanation was not satisfactory, to file a formal complaint alleging discrimination or other unfair treatment. No such complaint was filed.

### WHARFAGE OVERCHARGE.

#### I. C. 2636.

*Waddell Lumber Company vs. de Fremery Wharf and Land Company.* On December 24, 1913, the Waddell Lumber Company of Pescadero complained that the de Fremery Wharf and Land Company of Oakland had assessed an unauthorized charge against the former in connection with the handling of lumber over the latter's wharf.

Upon investigation it appeared that charges complained of were rentals covered by land lease having no connection whatsoever with the company's public utility business as a wharfinger or warehouseman. Complainant was advised of the explanation made by the company and requested to offer such evidence as it possessed in refutation of the company's statement. No further information or complaint was forthcoming.

# INFORMAL COMPLAINTS, WAREHOUSEMEN.

## STORAGE CHARGES.

I. C. 894.

The De Puc Warehouse Company of San Francisco on January 11, 1913, requested permission to waive storage charges against unclaimed baggage stored in its warehouse by the Southern Pacific Company. The request was based on the fact that the baggage was sent to storage through a mistake on the part of the storer.

The Commission held that under section 17 of the Public Utilities Act it had no authority to waive the storage charges as such action would be in violation of the law and discriminatory.

## DEMURRAGE CHARGES.

I. C. 907.

E. B. Cutter & Company, San Francisco, addressed a letter to the Commission asking for information with reference to responsibility for demurrage charges when cars were forwarded to a warehouse and not unloaded by the warehouse people within the free time prescribed in the Commission's General Order No. 2.

The Commission held that under the Public Utilities Act warehousemen are required to furnish reasonable facilities necessary for the handling of their business and therefore if demurrage accrued because of their neglect to unload cars promptly, the demurrage charges should be paid by the warehousemen.

## REQUEST FOR REPARATION REFUND.

I. C. 1139.

*Crescent Feather Company vs. Barneson-Hibbard Warehouse Company and South End Warehouse Company.* On March 17, 1913, the Crescent Feather Company requested that Barneson-Hibbard Warehouse Company and South End Warehouse Company, with whom complainant had on storage certain lots of cotton, be compelled to accept payment for such storage on the basis of a private agreement entered into prior to the effective date of the Public Utilities Act.

Complainant was advised that rates filed with and approved by the Railroad Commission were the only rates lawfully applicable to the storage in question, and that reparation could not be ordered as requested.

## REPARATION FOR STORAGE OVERCHARGE.

I. C. 1533.

*Geo. A. Moore & Company vs. South End Warehouse Company.* On August 9, 1913, the Commission authorized reparation in the sum of \$5.35 to Geo. A. Moore & Company, account of overcollection due to amended tariff reducing rate formerly applicable on cocoa beans, as per reparation claim dated July 7, 1913.

## SHORTAGE IN WAREHOUSE WEIGHTS.

I. C. 1656.

*W. D. Sheldon & Company vs. Yolo Land Company.* On June 19, 1913, W. D. Sheldon & Company of San Francisco complained of an unusual shortage in the weight of certain lots of barley covered by warehouse receipts purchased by complainant and covering barley stored in the Yolo Land Company's warehouse at Boyer's Landing on the Sacramento River.

A thorough investigation developed no positive evidence of error in making shipment, warehouseman alleging an unusually dry winter as the only plausible reason for shortage.

Complainant was asked to present any proof of fraud which might be in its possession, but no such evidence was brought forward.

## OVERCHARGE FOR STORAGE.

I. C. 1776.

*Barnard & Bunker vs. Grange Company.* On July 29, 1913, Barnard & Bunker of San Francisco complained that the Grange Company of Modesto charged the former 50 cents per ton for the first month of the second season's storage of grain, notwithstanding the usual charge in such cases was but 25 cents.

The matter was taken up with the Grange Company which stated that no distinction was made by it between the second and first season and that the charge of 50 cents per ton was in accordance with its rate schedule as filed with the Commission. This appeared to be true, and Barnard & Bunker were so advised.



## APPLICATION OF MINIMUM STORAGE CHARGE.

## I. C. 1820.

*California Canneries Company vs. Barneson-Hibberd Warehouse Company.* On August 6, 1913, the California Canneries Company complained against the action of the Barneson-Hibberd Warehouse Company in applying to the former the minimum storage rule intended to cover small remnants of merchandise left on storage, and for which an unusually large floor space would be required. Complainants stated that, owing to the volume of business done, the said rule was particularly onerous as applied to them.

The complaint was taken up with the warehouse company which effected an adjustment whereby storer agreed to take up and combine under a single warehouse receipt a maximum number of small remnants and thus avoid the payment of a large number of minimum assessments.

## OVERCHARGE FOR STORAGE ON AUTOMOBILES.

## I. C. 1838.

*Cuyler Lee vs. South End Warehouse Company.* On August 8th, Cuyler Lee of San Francisco complained that the South End Warehouse Company had assessed a charge covering two months' storage of automobiles when as a matter of fact one month and one day only had elapsed. Complainant stated that he was not aware of exact conditions under which storage was accepted and asked that charge for second month be disallowed.

Upon investigation it appeared that storage charge was assessed in accordance with tariff on file with the Commission, and complainant was therefore advised that warehouseman appeared to be within his rights in assessing charge.

## OVERCHARGE FOR STORAGE.

## I. C. 1869.

*J. W. Leavitt & Co. vs. De Pue Warehouse Company et al.* On June 18, 1913, J. W. Leavitt & Company complained that certain rates set out in the De Pue Warehouse Company's warehouse tariff C. R. C. No. 2, covering storage of automobiles for periods of three and seven days, respectively, has been wrongly applied by that company.

Upon investigation, it appeared that charges were assessed in accordance with the warehouse company's tariff. However, warehouseman agreed to amend tariffs to conform to suggestions of complainant, which amendment, proving satisfactory to the Commission, was adopted.

## OVERCHARGE FOR STORAGE.

## I. C. 1902.

*Lincoln Motor Sales Company vs. De Pue Warehouse Company.* On August 21, 1913, the De Pue Warehouse Company requested authority to waive charge assessed against the Lincoln Motor Sales Company for the storage of automobile trucks, for the reason that warehouseman's rates covering this class of service had been reduced subsequent to acceptance of this merchandise for storage.

Permission was granted and cancellation of charge ordered.

## EXORBITANT MINIMUM CHARGES FOR STORAGE OF MERCHANDISE.

## I. C. 1987.

*Clayburg Brothers vs. San Francisco Warehousemen.* This complaint, filed June 30th, alleged that a minimum charge of 50 cents per bale on pongee silks stored in San Francisco warehouses was exorbitant and compared unfavorably with similar storage charges elsewhere.

The matter was submitted to the warehousemen of San Francisco for investigation and report. The latter undertook to justify rates charged upon the theory of high value of goods stored, and, under the circumstances, were not willing to make a voluntary reduction in rates.

Complainant was advised that if he desired to carry the contention further, it would be necessary to file a formal complaint. No formal papers were filed.

## EXORBITANT CHARGES FOR STORAGE AND HANDLING OF GRAIN.

## I. C. 2005.

*E. B. Cutter & Company vs. Haslett Warehouse Company et al.* On September 10, 1913, E. B. Cutter & Company complained that charges assessed by certain warehousemen of San Francisco for the storage and handling of grain were exorbitantly high, reaching in some instances \$4 per ton for the season.



Tariffs on file by warehousemen did not bear out complainant's allegation, and they were therefore called upon for an explanation. A statement was submitted showing that complaint was not well founded.

E. B. Cutter & Company were informed of the stand taken by the warehousemen and directed to file a formal complaint, which action was not taken.

#### UNAUTHORIZED CHARGE FOR WAREHOUSING.

I. C. 2222.

*Newmark Grain Company vs. Davies Warehouse Company.* On October 15, 1913, the Newmark Grain Company complained that the Davies Warehouse Company of Los Angeles was attempting to collect an unauthorized charge for the loading and weighing of grain.

Upon investigation it appeared that the matter complained of was within the jurisdiction of the city of Los Angeles, and complainant was so informed.

#### OVERCHARGE FOR STORAGE AND REFUSAL TO ACCEPT GOODS FOR STORAGE.

I. C. 2301.

*W. T. Bradbury vs. The Grange Company.* On October 24, 1913, W. T. Bradbury of Turlock complained that the Grange Company of Modesto refused to accept from him certain quantities of rye hay offered for storage at the former's warehouse in Modesto, and that an overcharge had been made for similar storage accepted by this company and stored in its warehouse at Keyes.

The Grange Company maintained that commodity offered for storage by Mr. Bradbury was straw and not hay, and that warehouseman had no rate covering the storage of straw and did not desire to store that commodity at any price. Mr. Bradbury, insisting that commodity offered by him was, in fact, hay for which there was no other accommodation in that district, demanded storage at rates on file with the Commission.

Inasmuch as the whole matter appeared to be a question of fact upon which no agreement could be reached, complainant was advised to file a formal complaint should he desire a further hearing. Such complaint was not filed.

#### EXORBITANT STORAGE CHARGES.

I. C. 2443.

*Bernard, Judae & Company vs. San Francisco Warehouse Company.* On November 29, 1913, Bernard, Judae & Company of Chicago complained of charges assessed against that company by the San Francisco Warehouse Company for the storage and handling of electric lamp bulbs in cases and casks.

The matter was taken up with the warehouse company, which advised that rates complained of were in accordance with tariff on file with the Commission, and not considered too high.

Complainant was informed of these facts, and advised to file a formal complaint alleging unjust or unreasonable rates should it desire to enter further protest. No formal complaint was filed.

#### REPARATION FOR STORAGE OVERCHARGE.

I. C. 2504.

*W. A. Plummer Manufacturing Company vs. South End Warehouse Company.* On December 15, 1913, the Commission authorized reparation in the sum of \$7.95, representing overcharge made against W. A. Plummer Manufacturing Company by reason of amended tariff reducing rates theretofore applicable on seed bags, as per reparation claim dated December 11, 1913.

#### IMPROPER STORAGE CHARGE.

I. C. 2607.

*Brown & Sons vs. De Pue Warehouse Company.* On May 25, 1914, Brown & Sons of Cottonwood, complained against the practice of the De Pue Warehouse Company in assessing a partial delivery charge of 10 cents per ton on grain delivered from its country warehouses.

Complainant was advised that inasmuch as the warehouse company had protected this rate by filing the same with the Commission, it would be necessary to enter a formal complaint, should further action be desired. Such complaint was not filed.

#### DISCRIMINATORY STORAGE RATES.

I. C. 2626.

*L. A. Bailey vs. Vallejo Bonded and Free Warehouses.* On December 29, 1913, L. A. Bailey, secretary of the Warehousemen's Association of the Port of San

Francisco, reported that certain patrons of the Vallejo Bonded and Free Warehouses were enjoying a rate less than that shown in schedule filed by the said warehouseman.

Upon investigation, it appeared that a slightly lower rate had been charged in one instance for the storage of a small quantity of iron and paper, which rate had been superseded by rates set out in Warehouse Tariff, C. R. C. No. 2, but, it being an old account from which deliveries were rarely made, the rate had been inadvertently continued.

The warehouse company was directed to correct the error at once and charge rates as authorized by the Commission, which action was taken.

#### STORAGE REPARATION CLAIMS.

I. C. 2789 to 2806, inclusive.

*Kelley-Clarke Company et al. vs. Sperry Warehouses.* On November 10, 1913, the Sperry Warehouses assumed charge and began operating a warehouse at 1200 Battery street, San Francisco, theretofore operated by the De Pue Warehouse Company under the name of "Whittell" Warehouse. The new company adopted rates then in effect by the said De Pue Warehouse Company with the understanding that a new schedule would be filed as early as practicable thereafter, some of the rates of which would show material reductions from the old schedule. Storage was solicited and accepted upon the basis of the proposed new rates, with the understanding that application would be made to the Railroad Commission for permission to reduce such rates in some cases.

Reparations covered by claims (I. C. 2789 to 2806, inclusive), representing the differences between old and new rates, were authorized by the Commission under section 71 of the Public Utilities Act.

#### SHORTAGE IN CONSIGNMENT OF BARLEY.

I. C. 2852.

*Somers & Company vs. O. H. Allison & Company.* On January 24, 1914, Somers & Company of San Francisco complained that a consignment of barley ordered from the O. H. Allison & Company's warehouse at Elmira to Port Costa had been shipped five sacks short. Complainant stated that warehouseman had been billed for the amount of shortage for the reason that bill of lading had been marked "shipper's load and count," but that settlement had been refused.

The matter was taken up with O. H. Allison & Company, who reported that bill rendered by Somers & Company, covering the amount of shortage, had already been paid, and forwarded a receipt showing accuracy of the statement. Complainant was advised of these facts which were acknowledged to be true and explained as an oversight.

#### STORAGE OVERCHARGE.

I. C. 2971.

*Rosenberg Brothers & Company vs. Gilroy Commercial Company.* On February 14, 1914, Rosenberg Brothers & Company of San Francisco complained that the Gilroy Commercial Company of Gilroy had overcharged the former for the storage of dried apples. A bill was enclosed, showing that charge made was not in accordance with rates shown on form of warehouse receipt used by the said company.

In explanation it was shown that warehouseman's storage business consisted almost solely of grain and bean storage, which commodities the rates shown in printed warehouse receipt were intended to cover; however, upon application, rates were quoted for the storage of dried apples offered by said complainant. Although such rates were higher than rates ordinarily charged, warehouseman considered them reasonable and same were accepted by complainant. In view of this statement, and the further fact that Rosenberg Brothers & Company had full knowledge of charges to be assessed prior to placing storage, warehouseman was advised that reparation would not be ordered.

Gilroy Commercial Company was informed that it would be necessary to protect each and every charge assessed by lawfully filing the same with the Railroad Commission.

#### DEVIATION FROM RATE SCHEDULE.

I. C. 3066.

*C. L. Danly vs. San Francisco Warehouse Company.* On February 11, 1914, C. L. Danly advised the Commission that the San Francisco Warehouse Company was making certain deviations from its rate schedule as filed with the Railroad Commission and covering the storage of toilet paper. This deviation it was alleged, was, in effect, a lower charge than filed rates, and was applied to a single favored patron.

Upon investigation, it was ascertained that complaint was founded upon fact, and warehouseman was directed to cease such deviation and make necessary adjustment of the account affected, which action was taken.

#### FAILURE TO SHOW WAREHOUSE CHARGES ON RECEIPT.

##### I. C. 3094.

*Girvin & Eyre vs. De Pue Warehouse Company.* On March 7, 1913, Girvin & Eyre of San Francisco complained of the practice of the De Pue Warehouse Company in failing to show specific warehouse charges upon the face of negotiable receipts. The particular receipt in question showed that a consignment of wheat had been stored on August 18, 1913, for which a negotiable receipt was issued bearing the notation, "storage as per filed schedule" on the face thereof. This notation, complainant alleged, led to a misunderstanding as to proper storage charges assessable against this account.

Upon investigation, it developed that in many instances warehousemen, owing to the fact that additional charges sometimes accrue on grain kept in storage over a period of several months, found it impracticable to place specific charges on warehouse receipts at the time of issuance, for the reason that in some instances such charges could not be known in advance. Under the conditions shown to exist in this case, the Commission did not deem it advisable to order reparation to complainant.

#### FAILURE TO SHOW ADVANCE CHARGES ON WAREHOUSE RECEIPT.

##### I. C. 3094½.

*Girvin & Eyre vs. De Pue Warehouse Company.* On March 20, 1914, Girvin & Eyre alleged that the De Pue Warehouse Company was undertaking to collect the sum of \$75.00, representing advances made by warehouseman upon a certain lot of grain, notwithstanding such "advances" had not been shown on warehouse receipt.

It appeared upon investigation, that charge referred to was made to cover loading and weighing service, and not in any sense a cash advance made upon the grain in question. Complainant was so advised and informed that the Commission could not order reparation on the facts as shown.

#### WAREHOUSE LOADING CHARGE.

##### I. C. 3161.

*Simon Anspacher vs. Thomas B. Fernandez, proprietor Pinole Warehouses.* On October 12, 1913, Simon Anspacher of Anspacher Brothers, San Francisco, complained that a charge of 50 cents per ton for the loading of hay had been assessed by Thomas B. Fernandez of Pinole in connection with hay left on storage in the latter's warehouse, and later transferred to Anspacher Brothers. Complainant stated that warehouse receipt did not show loading charge, consequently the holder should not be held responsible for such charge.

Upon investigation, it appeared that complainant's agent had been fully informed of all charges assessed against hay in question, and that such rates were uniformly made to all patrons of the Pinole warehouses. Upon this showing, complainant was advised that a deviation from the rule in his favor would amount to a discrimination, and could not be permitted.

#### UNIFORM WAREHOUSE RATES WITHIN THE STATE.

##### I. C. 3332.

*O. B. Olufs, warehouseman of Fresno, vs. Fresno Warehousemen.* On April 14, 1914, O. B. Olufs, proprietor of Oluf's Warehouse of Fresno, complained of irregularity in warehouse rates due to the fact that some warehouses were operated in connection with private businesses, enabling such warehousemen to make better rates to prospective storers, for the reason that warehousing was a mere side line. Mr. Olufs suggested the practicability of uniform storage rates throughout the state.

Complainant was advised that, while uniformity would doubtless be desirable from the warehouseman's standpoint and possibly for other reasons, the Commission could not be expected to compel a public warehouseman, who found it remunerative or desirable to store merchandise for the public under conditions obtaining at his particular warehouse, to order an advance in such rates because another warehouseman found it more expensive to operate.



## MINIMUM STORAGE CHARGE.

I. C. 3362.

*Herbert P. Tyson vs. Haslett Warehouse Company.* On April 21, 1914, Herbert P. Tyson, of San Francisco, registered a complaint against the Haslett Warehouse Company, alleging that an exorbitant minimum charge had been assessed against him, covering the storage of a small quantity of copper bars.

Investigation showed that the charge was made in accordance with the warehouse company's filed rate schedule, and Mr. Tyson was so informed. The method of procedure was pointed out to complainant should he desire to bring the question of rates formally before the Commission for adjustment.

## WAREHOUSE CHARGES IN CONNECTION WITH OVERHAULING POTATOES IN SACKS.

I. C. 3436.

*L. B. Harris vs. Haslett Warehouse Company.* On April 30, 1914, L. B. Harris of North Yakima, Washington, handed to the Commission an unpaid bill covering the storage and overhauling of a quantity of potatoes in sacks.

Complaint was particularly directed against the overhauling charge which was not understood to exist until practically all of said potatoes had been delivered. This, complainant alleged, was irregular, for the reason that he had not been apprised of the pending handling charge.

Charges were found to have been assessed in accordance with the tariff on file with the Commission; however, warehouseman was advised that proper steps should be taken to prevent future misunderstandings in matters of this kind.

## OVERCHARGE DUE TO ADJUSTED TARIFF.

I. C. 3437.

*Quaker Oats Company vs. Sperry Warehouses.* Sperry Warehouses began operation about November 1, 1913, at which time the account of the Quaker Oats Company was transferred to the said warehouses whose rates then on file with the Commission were higher for the class of goods stored by the Quaker Oats Company than rates subsequently established.

Warehouseman was permitted to adjust the charge against this account to correspond with rates subsequently filed with the Commission, which involved a refund of \$66.38.

## REFUSAL TO ACCEPT MERCHANDISE FOR STORAGE.

I. C. 3521.

*Home Wholesale Grocery Company vs. Merchants Warehouse Company of Fresno.* On May 13, 1914, the Home Wholesale Grocery Company of San Francisco complained of action by the Merchants Warehouse Company of Fresno, in refusing to accept complainant's merchandise after tender of rates as filed with the Railroad Commission.

The warehouse company was advised that it would be necessary to accept, for storage, all goods usually received by it up to the capacity of its warehouse, and charge rates therefor, as filed with the Commission. This action was immediately taken, and complainant satisfied.

## RAISE OF STORAGE RATES.

I. C. 3834.

Inquiry by A. L. Harris of Allendale Warehouse, June 22, 1914, at Dixon.

A. L. Harris of Dixon made inquiry as to the right of warehousemen to raise storage rates without consulting the Railroad Commission.

He was informed that such increase would be unlawful under section 63 of the Public Utilities Act, until fully authorized by the Commission.



## INFORMAL COMPLAINTS, WATER CORPORATIONS.

## INSUFFICIENT WATER ALLEGED.

I. C. 655.

October 24, 1912.

*Security Investment Company vs. Palermo Land and Water Company*, Palermo. Complaint, alleged refusal to extend service for irrigation.

The water company alleged insufficient water supply available for further extension. An exhaustive study of the "duty of water" in this system was made, and informal complaint was merged into a formal hearing then before the Commission, Case 627.

## EXORBITANT CHARGES.

I. C. 1289.

*Mrs. C. Brehany vs. Levy Tract Water Company*, Daly City. Complaint, recited exorbitant meter and service connection charges; also intermittent service.

Complainant was advised to seek redress through civic authorities or file a formal complaint against Levy Tract Water Company.

## EXCESSIVE RATES ALLEGED.

I. C. 1462.

*L. E. Cole vs. South Feather Land and Water Company*. L. E. Cole complained against the rates and service of the South Feather Land and Water Company, in that the rates were excessive, both for service and for water rights, and that the service was inadequate and unsatisfactory.

The matter was taken up with the company, which made a general denial of the charges. Thereafter complainant stated that while the service had improved recently a formal complaint for reduction of rates and for better service would be filed with the Commission.

## INJURY TO ORCHARD.

I. C. 1463a.

*Irene Strong vs. Palermo Land and Water Company*. Complaint, overflow of ditch and injury to complainant's orchard; also entire lack of water on certain specified tracts.

Company disclaimed responsibility for overflow injury because of nonownership of ditch. It further appeared that a large portion of tract upon which water is desired is outside the Palermo colony and not entitled to service, conservation of supply making it necessary to refuse demand. No beneficial crop was cultivated on balance of tract entitled to water.

## WATER SERVICE.

I. C. 1463b.

*Herman Heinecke vs. Palermo Land and Water Company*. Complaint, turning off complainant's water service without justification.

Company claimed that water was being used to excess by complainant in order to use overflow on tract not entitled to water. Legitimate use had not been denied.

## DECLINED TO FURNISH WATER.

I. C. 1474.

May 29, 1913.

*Mrs. E. N. Svendsen vs. Baldwin Park Water Company*. It was alleged that although Baldwin Park Water Company supplied certain other consumers not stockholders, it declined to furnish water to complainant except through a third person, and furthermore would not furnish water at stockholders' rates to land owned by complainant and covered by a stockholder's certificate.

The water company maintained that complainant's property was not within the limits of territory which it had undertaken to serve, although apparently covered by stock of a defunct organization whose agreement the Baldwin Park Water Company had not undertaken to carry out. The company claimed to be a mutual organization, and did not wish to extend its service to the general public. Complainant was advised to file a formal complaint and request a public investigation, but the action was not taken.

## METER REMOVAL SETTLED.

I. C. 1538.

June 17, 1913.

*H. A. Marshall vs. Cuyamaca Water Company*, San Diego. Complaint, alleged removal of meter by the company to a location subject to floods; also that complainant was required to pay for water used at the full rate, whereas his supply was not more than half the contract amount to which he was entitled, which act would be contrary to the rules and regulations provided by the Commission.

The matter was taken up with the water company and the question of the removal of the meter was settled satisfactorily. However, the company emphatically denied demanding full payment when only one half the irrigation supply had been furnished, and the complainant was advised that if he did tender payment for one half the supply, it must have been accepted to be in conformity with the rules in force.

#### KINGS RIVER WATER.

##### I. C. 1630.

*Angal Ferrasct et al. vs. Empire Water Company.* Complainants alleged discriminatory distribution of water, in that they and others who live on the west side of the south fork of Kings River do not receive a ratable proportion of the water obtained by this company from the Lemoore canal system. Incidentally improper operation methods of the company were brought into question.

An explanation was requested, and the company answered that the lands west of the water course of the south fork of Kings River are not entitled to any portion of the water received from the Lemoore canal. A committee of the complainants called at the office of the Commission, and later saw Commissioner Thelen at Madera, where they were informed that no further action could be taken by the Commission except upon formal complaint.

#### UNLAWFUL INCREASE IN WATER RATES.

##### I. C. 1687.

*Isaac Myer vs. A. J. Arnaudon.* On July 11, 1913, Isaac Myer of Mendota alleged that the proprietor of the Mendota water system had unlawfully increased rates to certain consumers in the town of Mendota, subsequent to March 23, 1912. An investigation developed the fact that the Southern Pacific Company had abandoned water service rendered in the town of Mendota prior to October 10, 1911, and that A. J. Arnaudon had taken up the task, but found it necessary to sink new wells and establish new rates. Not knowing the provision of the Public Utilities Act governing the matter, Mr. Arnaudon had sought to adjust some of the rates, and, in so doing, had raised those applicable to nine consumers, including complainant. Following instructions from this office, Mr. Arnaudon restored water rates to a lawful basis, and credited the following amounts to patrons of his water system, representing overcollections made under unlawful rates:

F. G. Yost	\$4 00
Mar Lin	4 00
R. R. Youngblood	4 00
R. C. Strunk	4 00
On Lee	4 00
R. M. Vanderhoof	4 00
Mike Kozera	4 00
C. Pecheu	4 00
Isaac Myer	3 50

#### CHARGES FOR WATER.

##### I. C. 1693.

*L. O. Press vs. Glendale Consolidated Water Company.* On July 11, 1913, Leo O. Press of Los Angeles complained that the Glendale Consolidated Water Company would not install a meter for him except upon payment of \$25 therefor. He inquired if such charge were legitimate.

Complainant was advised that the Commission's orders, where applicable, were such as to require water companies installing meters to do so without expense to consumer. With this information Mr. Press again called upon the water company, which proposed to install said meter for \$15. He also protested against the payment of this amount and asked the Commission's further advice.

On August 6th Mr. Press was informed that the Commission's order in the so-called Glendale case required that company to install meters at its own expense; but that said company appealed the case to the supreme court, asking for writ of review, pending the decision of which the company would be entitled to receive payment for such service, this payment to be returned to complainant if the company's contention failed before the court.

#### COMPLAINT OF SERVICE.

##### I. C. 1697.

*San Jacinto Land Company vs. Citizens Water Company of San Jacinto.* The San Jacinto Land Company complained against the service rendered by the Citizens Water Company in that the ditches of the water company are in some cases too low

to furnish gravity water for irrigating all the land of the land company; and prayed that the expense of furnishing gravity water to the high tracts be borne by the water company.

The matter was taken up by correspondence with the water company and these facts were ascertained: That the land company came into existence after the water company, and should have been aware of the grades of the ditches; also that the contract provides for the delivery of water "on the ditches," and that "all pipe lines necessary for the distribution of water over the land company's lands," etc., shall be paid for by the land company. Another fact is that there is only one tract (two acres) not irrigable by gravity water from the ditches. Complainant was advised that no part of the contractual relation between the companies obligates the water company in this matter.

#### SHUTTING OFF WATER SUPPLY.

##### I. C. 1703.

*Mrs. F. G. Kennedy vs. San Jose Water Company.* On July 13, 1913, Mrs. F. G. Kennedy of Saratoga made complaint that her water service had been discontinued without notice or apparent reason. Complainant was asked for further details, but no response was received until August 17th, at which time she stated that water had been turned off for three days only.

#### UNJUST AND UNREASONABLE RATES FOR WATER SERVICE.

##### I. C. 1709.

*L. M. Romer vs. Eagle Rock Water Company.* On July 12, 1913, Leon M. Romer of Los Angeles complained that the Eagle Rock Water Company was charging a so-called base rate of 75 cents for which no allowance of water was made. He asked that the Commission investigate and afford such relief as would be just and reasonable.

The matter was taken up with the company which replied that rates as charged were considered fair and reasonable and no change in same was contemplated. Later Mr. Romer wrote the Commission giving full details and enclosing a petition signed by a number of citizens protesting against the enforcement of said 75 cent base rate.

In the meantime, the city of Eagle Rock filed a formal complaint alleging the same general facts and making similar protests. In view of this latter complaint, Mr. Romer was advised to await determination thereof, at which time his individual complaint would be automatically adjusted.

#### INADEQUATE WATER SERVICE AT ALTA HEIGHTS, NAPA.

##### I. C. 1712.

*L. L. Matthews vs. Theodore A. Bell.* On July 15, 1913, L. L. Matthews of Alta Heights (Napa) complained of insufficiency of water supplied in the district adjacent to the city of Napa, known as Alta Heights.

The complaint was taken up with Theodore A. Bell, owner of the water system, who expressed the opinion that water service as rendered was not within the jurisdiction of the Railroad Commission.

Subsequent to the filing of this complaint, the city of Napa annexed the territory served by the Bell water system, and entered into negotiations with a view of extending the city supply to the district in question.

Complainant was advised that in view of the stand taken by the supplier of water in Alta Heights, it would be necessary to file a formal complaint in order to pursue the matter further. Attention was also directed to the negotiation pending, having for its purpose the taking over of the Alta Heights water system and augmenting the supply by connection with the city's mains.

#### OVERCHARGE FOR WATER FOR IRRIGATION PURPOSES.

##### I. C. 1728.

*P. R. Peterson vs. San Lorenzo Water Company.* On July 14, 1913, P. R. Peterson of Hayward made inquiry as to rates filed with the Commission by the San Lorenzo Water Company, alleging that said company had made an overcharge for water furnished, such overcharge resulting from the fact that a portion of the water furnished was used for irrigation purposes. The Commission was asked to grant such relief as would be just and fair.

Mr. Peterson was informed that, inasmuch as rates complained of covered service rendered within the incorporated town of Hayward, the Railroad Commission was not authorized to undertake an adjustment thereof.



## INCREASED RATES FOR WATER SUPPLIED.

## I. C. 1753.

*W. Davey et al. vs. Excelsior Water and Mining Company.* On July 24, 1913, W. Davey presented a petition signed by a number of citizens of Smartsville and vicinity requesting that rates then in force by the Excelsior Water and Mining Company should be continued as charged during the year 1912. A notice to consumers was enclosed indicating that the company proposed to change its present flat rates to a uniform basis of 16 cents per miner's inch.

Complainant was informed that no advance in rates charged by the company would be permitted, except after full investigation, at which all parties concerned would be given opportunity to be heard.

## ERROR OF CLERK.

## I. C. 1758.

*H. P. Anthony vs. Inglewood Domestic Water Company, Inglewood.* Complaint, refusal of Inglewood Domestic Water Company to render service to H. F. Anthony, indicating that he would have to build his own main.

The Inglewood Domestic Water Company, in refusing to render this service, said that it was due to an error on the part of one of the clerks in the office who was not aware that there was a main in front of Anthony's property. The company stated that it was willing and ready to install water service on demand, in accordance with schedules on file with the Commission, and complainant was so advised.

## OUTSIDE JURISDICTION.

## I. C. 1760.

*J. A. Schieber vs. Sunnyside Water Company.* On July 24, 1913, complaint was made to the Commission by J. A. Schieber that he was required to pay for repairs to his meter; also that the water rates had been raised.

It was ascertained that the Sunnyside Water Company is a mutual concern, and, therefore, outside the jurisdiction of the Commission. Complainant was advised on August 2d that Commission probably had no jurisdiction. Later correspondence with Sunnyside Water Company substantiated this.

## FORMAL COMPLAINT ADVISED.

## I. C. 1762.

*A. Schluter et al. vs. City and Suburban Investment Company.* Complaint, recites a meter and service connection charge of \$15.

Field investigation was made and complainant advised to file formal complaint in accordance with rules of practice of the Commission.

## HIGH RATE FOR WATER SERVICE.

## I. C. 1766.

*C. G. Sweet vs. Lawndale Land and Water Company.* On July 24, 1913, C. G. Sweet of Lawndale complained that the Lawndale Land and Water Company had installed a meter upon his service and was charging rates thereunder, whereas he had bought land from the company with an understanding that he would be charged but \$1.25 per month and be allowed to use all the water which might be necessary.

Upon investigation it appeared that the water company was assessing charges in accordance with rates as fixed by the Commission. Mr. Sweet was so advised and requested to give the same a thorough tryout, at the end of which time, if found unsatisfactory, to write the Commission. No further complaint was registered.

## INSUFFICIENT WATER.

## I. C. 1773.

*Rebecca E. Rancy vs. Croker Land Company.* Complaint, alleged insufficient supply of water and an initial charge of \$12 for meter installation.

The Croker Land Company advised the Commission that it was proceeding as fast as possible to remedy conditions and expected within one week to have ample water.

## WATER STOCK INVOLVED.

## I. C. 1794.

August 1, 1913.

*Peter J. Thull and Anna C. Thull vs. The Pasadena Consolidated Water Company, Altadena.* Complaint, alleged failure to receive forty-two shares of water stock due from the defendant by reason of absorption of the Fair Oaks Tract Company; also that the ownership of a certain old pipe line running across their property was wrongfully claimed by the defendant.



The Commission was informed by the company that this stock is somewhat in the nature of a water right, which should now be turned over to the company if the complainant desires to continue her water right. The water company and the Fair Oaks Tract Company agreed to take up the matter with Mrs. Thull and explain in detail to her the exact status of this stock. In regard to the right of way the Commission has no jurisdiction.

## OVERCHARGE FOR WATER FURNISHED.

I. C. 1795.

*Hermann Fascher vs. Encanto Mutual Water Company.* On August 4, 1913, a complaint was filed by Hermann Fascher of Encanto alleging that the Encanto Mutual Water Company had overcharged him for water supplied during the month of June; that residents on the higher levels were frequently without sufficient water supply; that 10 per cent was added to such bills as were not paid by the tenth of the month in which due; and that meters were allowed to remain "dead" for many weeks after failing to register.

These complaints were taken up with the water company, which explained that "dead" meters were due to a freeze during winter and that certain parts of these could be had only in the East, necessitating a long delay; that the overcharge for June on complainant's bill had been cancelled; that many improvements were being installed, including a new booster pump, and every effort put forth to afford a proper supply of water. Complainant was advised to co-operate with the water company in its efforts to improve the service.

## LOCKING METER BOX MAKING INSPECTION IMPOSSIBLE.

I. C. 1801.

*J. M. Wilson vs. Marin Water and Power Company.* On August 4, 1913, J. M. Wilson of Kentfield complained of action by the Marin Water and Power Company in locking its meter box placed upon his water service in such manner as to make inspection impossible.

The company was asked to formulate a rule guaranteeing to consumers the right of inspection under proper regulation, in accordance with the Commission's order. Case 308, wherein the following language was used:

"The customer has the right at any time to inspect the meter placed upon his service, and there should be a rule safeguarding this right."

The water company thereupon adopted a rule guaranteeing this right to its consumers, and filed a copy with the Commission.

## EXORBITANT CHARGES FOR INSTALLATION OF WATER METERS.

I. C. 1821.

*Alfred A. Sanford vs. Janss Water Company.* About August 1, 1913, Alfred A. Sanford of Los Angeles complained that the Janss Water Company had advanced its price for the installation of water meters from \$16 to \$25, and inquired if he should pay the \$25 rate.

Upon investigation it developed that the change of rates referred to by complainant had been made on August 31, 1911, and therefore at a time prior to the jurisdiction of the Commission in such matters. Complainant was further informed that should he desire to question rates as filed for this class of service, it would be necessary to file a formal complaint, which action was not taken.

## REFUSAL TO LAY MAIN ALLEGED.

I. C. 1829.

August 9, 1913.

*A. R. Swinney et al. vs. Hermosa Beach Water Company,* Redonda Villa, Los Angeles County. Complaint, alleged refusal of the defendant company to lay its main to supply complainants unless they should bear the expense of the service connection and cost of installing meters.

The Commission informed complainants that the company could only be required to extend service through formal action and public hearing, which they were entitled under the law to inaugurate, should they so desire. Information as to the manner of procedure was furnished, but no formal action was taken.

## CHARGE FOR SERVICE CONNECTION.

I. C. 1834.

*Geo. Lack vs. Peoples Water Company.* On August 11, 1913, Geo. Lack of Alameda, inquired if a charge of \$10 per house made by the Peoples Water Company for a service connection was legal. He referred to the so-called Glendale case, and asked that the Commission issue such orders as would give the city of Alameda like privilege.

Mr. Lack's complaint was referred to the Peoples Water Company, which reported that it had an agreement with the city attorney of Alameda whereby the former would continue to charge \$10 for each service connection made, with the understanding that such amount would be refunded in the event that the supreme court affirmed the decision of the Railroad Commission in the said Glendale case.

Complainant was advised of the company's attitude, and signified his willingness to be governed accordingly.

#### LAND IN PALERMO COLONY.

I. C. 1844.

August 12, 1913.

*Aubrey Ward vs. Palermo Land and Water Company*, vicinity of Palermo, Butte County. Complainant alleges that he purchased six acres in the "Palermo Colony" and was refused water for the irrigation of four acres, although the original purchaser had bought both land and water right.

Upon investigation it was found that Palermo Land and Water Company, acting upon legal advice, was withholding water from lands which had not been irrigated for five years, claiming the water rights had lapsed. Complainant was so informed and told that the Commission had under investigation the water supply of this company, and that a decision in the matter might affect his case. He was also informed that his right to water should probably be determined by authority other than the Commission.

#### GLENDALE COMPANY CHARGED.

I. C. 1845.

*Ralph H. Clark vs. Glendale Consolidated Water Company*. It was alleged that water supply was cut off repeatedly in the vicinity in which complainant resided, and particularly that service was discontinued August 7th for nearly one full day.

The company's attention was directed to the matter, and by letter of September 11th informed the Commission that the conditions complained of had been remedied. Complainant was so informed.

#### NOT PROFIT SHARING.

I. C. 1853.

*Miss Ruth G. Zimmerman vs. Garvey Water Company of San Gabriel*. Complaint, concerning intermittent service rendered by the Garvey Water Company, operating near San Gabriel.

The Commission was advised by the Garvey Water Company that the latter was mutual in its nature, and not operating for profit. Complainant was therefore informed that the Commission appeared to have no jurisdiction in this matter.

#### REMEDY PROMISED.

I. C. 1871.

*Gladys P. Richardson vs. Croker Land Company*. Complaint, intermittent service and inefficient management of the company's pumping plant.

The matter was taken up with Croker Land Company and assurance received that trouble would be remedied within one week.

#### LOW PRESSURE ALLEGED.

I. C. 1876.

*Merton K. Cosner vs. Sherman Water Company*. On August 18, 1913, complaint was made against intermittent and low pressure furnished by Sherman Water Company operating near Los Angeles.

The matter was taken up by correspondence with the Sherman Water Company, which replied that the drying up of its springs had necessitated pumping from its lower reservoir and considerable trouble was being encountered, but conditions were expected to improve soon. A heavy demand by street paving companies was largely responsible.

Complainant was advised of this reply, and requested to write Commission again, if conditions did not improve.

#### LOW WATER TROUBLES.

I. C. 1885.

August, 1913.

*Perrin Colony Association vs. Fresno Canal and Irrigation Company*, Oleander. The complaint alleged that very poor water service was furnished by the defendant company.

The matter was taken up with the water company, which stated that the water received from Kings River to be distributed to the complainants was so low that it was impossible to run water to the lower end of the branch mains, one of which

supplied complainants; that the water was therefore prorated and that the Perrin Colony would receive its run accordingly. Complainants were advised to take the question up at the conference to be held between the defendant company and water users in the matter of revised rules and regulations for the distribution of water.

## A CASE FOR THE COURTS.

I. C. 1887.

August 19, 1913.

*Anna C. Thull vs. Pasadena Consolidated Water Company.* Location near Altadena, Los Angeles County. This complaint was made by Miss Thull for a friend whose name does not appear, and alleged that twenty shares of Precipice Canyon Water Company's stock was fraudulently obtained by J. B. Coulston, president of the Pasadena Consolidated Water Company.

Complainant was informed that redress should be obtained through the courts.

## LACK OF WATER FOR CROPS.

I. C. 1891.

*A. C. Eccles vs. Fresno Canal and Irrigation Company.* Complaint, alleged that because of lack of water complainant has been unable to raise crops and asks Commission to compel canal company to pay \$2,500.00 for loss of same; also that canal company threatens suit if delinquent water charges are not paid.

Complainant was advised that claim for damages against the Fresno Canal and Irrigation Company was not a matter in this case for Commission's attention; neither was a threatened suit by said water company against complainant for delinquent water rates. Referred for redress to other competent authorities.

## SERVICE CONNECTION PAYMENT.

I. C. 1910.

August 23, 1913.

*O. Grismore vs. South Los Angeles Water Company.* Mr. Grismore alleged that the water company refused to serve him with water unless he made payment of \$12.00 for service connection.

Complainant was referred to the Commission's decision in the then pending Glendale case, which related to the same matter, and a copy of Rules of Procedure was enclosed for his guidance should he desire to make formal complaint.

## EXTENSION OF SERVICE.

I. C. 1913.

August 22, 1913.

*Mrs. G. Swanson vs. Hermosa Beach Water Company.* Location, Redondo Beach. Complaint, alleged refusal by defendant to extend service unless complainant paid entire cost of extension, meter and service connection.

A copy of this Commission's decision in a similar case was sent to complainant, who was further informed that nothing could be done informally at that time. Filing a formal complaint was recommended, but no action was taken by complainant.

## EL DORADO COUNTY DITCHES.

I. C. 1925.

August 25, 1913.

*J. A. Koch, et al. vs. Diamond Ridge Ditches.* Complaint alleged improper maintenance of ditches and poor service.

Correspondence developed the fact that the complaint could not be settled satisfactorily by informal methods. Complainants were therefore handed a copy of the Commission's Rules of Procedure for their guidance should they desire to file formal complaint.

This matter was finally disposed of by the Commission's order in Case No. 528.

## LOS ANGELES COUNTY CASE.

I. C. 1972.

September 6, 1913.

*Edmund Burke vs. Union Hollywood Water Company.* This complainant alleged that Union Hollywood Water Company refused to make service connection for Edmund Burke except on payment of \$25.00.

Complainant was informed that the Commission had made no general order in regard to charges for service connections, but that in a number of instances had decided that any such charge was improper. However, he was further advised that definite action to change the practice of the company in making such charges would have to be initiated by a formal complaint.



## SERVICE CONNECTION AT COVINA.

I. C. 1988.

September 10, 1913.

*John H. Boal vs. Covina City Water Company.* Complaint, alleged unlawful charge of \$14.50 for service connection. Stated some other consumers have service connections made free of charge.

Complainant was informed that the Commission had held a hearing in the matter of rates and practices of the Covina City Water Company, but had not yet arrived at its decision, which would probably clear up such questions as the complaint had raised.

## PIPE EXTENSIONS AND CHARGES FOR SAME.

I. C. 2000.

*William J. Wilkinson vs. Peoples Water Company.* On September 11, 1913, W. J. Wilkinson of 944 Phelan Building, San Francisco, complained that the Peoples Water Company declined to extend water service pipes to his property in Valle Vista avenue, Oakland, except upon condition that 25 cents per lineal foot be paid therefor. Mr. Wilkinson stated further that the service charge of \$10.00 would also be assessed.

This complaint was taken up with the water company, which, after investigation, agreed to extend the main on Valle Vista avenue without cost to Mr. Wilkinson, which proved satisfactory to complainant.

## PAY FOR CONNECTION.

I. C. 2014.

September 13, 1913.

*H. Havery vs. Sweetwater Water Company.* San Diego. Complaint, protests against being compelled to pay \$26.00 for installing connection and for 1½-inch meter. Also that Sweetwater Water Company refused to install a 2-inch meter.

This complaint was investigated and it was found that Havery's pipe system was of such small diameter that the present 1½-inch meter was working at less than half its rated capacity; also that a 2-inch meter would give him no additional flow.

Complainant was notified that the question of charge for connections and meters had been considered at the hearing of the Sweetwater Water Company's application and had not yet been decided.

## INSUFFICIENT SUPPLY ALLEGED.

I. C. 2015.

*S. S. Southworth vs. H. B. Waler.* Mr. Southworth complained by letter, and Mr. Walker later by telephone, of insufficient water supply and improper and inefficient equipment and methods of the company.

Little was learned by correspondence and on October 4th and 5th an assistant engineer of the Commission made a field investigation of conditions and reported to the Commission that the company could not be compelled to make necessary improvements except upon formal complaint and hearing, of which complainants were informed.

## FAILURE TO PROVIDE PROPER WATER SERVICE.

I. C. 2023.

*Jennie D. Read vs. Davis Water Company.* On August 30, 1913, Jennie D. Read of Davis complained that the Schmeiser Manufacturing Company (now the Davis Water Company) had declined to extend water service to her property in the town of Davis, and asked the Commission to take such action as would compel immediate attention to her requirements.

The matter was taken up with the water company and proved to be the result of a misunderstanding, which was promptly adjusted and water supplied.

## REFUSAL TO SUPPLY WATER.

I. C. 2061.

*F. P. Beckstrum vs. Bartlett Finning Water System.* On September 19, 1913, F. P. Beckstrum of Forest Hill complained that Bartlett Finning, owning a water system at that place, declined to extend water service to his premises on the ground that complainant's father had previously contracted a bill which remained unpaid.

Mr. Finning was advised that water could not be withheld by a public utility solely upon the ground that back bills remained unpaid. Water was thereupon supplied, and complainant satisfied.

## OVERCHARGE FOR WATER SUPPLIED.

I. C. 2093.

*Paul Riceker vs. Oro Water, Light and Power Company.* On September 23, 1913, Paul Riceker of Oroville complained of certain charges made by the Oro Water, Light and Power Company for water supplied upon his premises in that city. Such charges were considered excessive and discriminatory.



Inasmuch as matters complained of appeared to be within the jurisdiction of the city of Oroville, Mr. Riceker was so informed and referred to the proper authorities there for any relief to which he might be entitled.

QUALITY AND COST OF WATER.

I. C. 2097.

*E. W. Bentley vs. Napa City Water Company.* On September 12, 1912, E. W. Bentley of Napa complained that water supplied at his residence was of a very poor quality; also that 40 cents per 1,000 gallons was charged therefor. He asked that the Commission forward such data or printed matter as was in its possession relative to conditions of municipal water systems throughout the state.

Information was furnished as requested and Mr. Bentley was informed that rates charged by the water company operating in the city of Napa were entirely within the jurisdiction of that municipality.

CASE FROM SAN DIEGO COUNTY.

I. C. 2102.

September 26, 1913.

*Mrs. Lucy B. Long vs. Encanto Mutual Water Company.* Mrs. Long alleged that the Encanto Mutual Water Company had refused to supply water for domestic purposes to her property in or adjoining Encanto.

After considerable correspondence Mrs. Long decided to make formal complaint, which was filed November 14, 1913, and assigned Case No. 505.

DEPOSIT FOR WATER METER: ASSESSMENT OF MINIMUM MONTHLY CHARGE FOR UNTENANTED PREMISES.

I. C. 2106.

*J. O. Wilbanks vs. Pleasant Valley Water Company.* On September 24th J. O. Wilbanks of Coalinga complained of rates charged by the Pleasant Valley Water Company for water distributed in the town of Coalinga.

Mr. Wilbanks was informed that inasmuch as the jurisdiction of this Commission did not extend to rates within the corporate limits of Coalinga, it would be necessary for him to take the matter up directly with the trustees of that municipality for such relief as might be desired.

OVERCHARGE FOR WATER SERVICE.

I. C. 2110.

*A. R. Goodman vs. Mt. Jackson Water and Power Company.* On September 26, 1913, A. R. Goodman of East Oakland complained that the Mt. Jackson Water and Power Company had overcharged him for water supplied at his premises in Rionido; also that supply was muddy and insufficient in quantity.

The matter was taken up with the water company and adjusted on the basis of cancellation of charges for months of August and September, which charges appeared to have been made in error. The company also stated that improvements were being installed which would insure a proper water supply in the future.

CHARGE FOR PIPE CONNECTION AND INCREASED MINIMUM CHARGES.

I. C. 2113.

*W. B. Folger vs. Consolidated Securities Company.* On September 26, 1913, W. B. Folger of San Fernando complained that the Consolidated Securities Company, successor to the McClay Rancho Water Company, assessed a charge of \$9.25 for making a water connection upon his premises, and had also manipulated pipes in such a manner as to force him to pay three minimum charges where he formerly paid but one.

Mr. Folger was advised that charges complained of appeared to be within the jurisdiction of the incorporated town of San Fernando, and was referred to the proper authorities in that municipality for relief.

MINIMUM CHARGE FOR WATER SUPPLY.

I. C. 2114.

*Ida A. Johnson vs. Monterey County Water Works.* On September 26, 1913, Miss Ida A. Johnson of Carmel complained that the Monterey County Water Works had assessed a minimum charge of \$1.25 per month for water supplied at her studio at Carmel during the months of July and August, notwithstanding a very small quantity was ordinarily used, and even at times of greatest consumption not justifying the charge so made.

The water company explained that upon authority from this Commission it had recently purchased the utility theretofore serving the property of Miss Johnson.

whereupon, as is its uniform practice in such cases, a minimum charge of \$1.25 was applied. Complainant was informed that the company appeared to be within its rights in assessing the minimum charge.

#### EXORBITANT CHARGE FOR WATER SUPPLY; CASH DEPOSIT PRIOR TO INSTALLATION OF METER.

##### I. C. 2126.

*Bud Gailbreath vs. Pleasant Valley Water Company.* On September 28, 1913, Bud Gailbreath of Coalinga complained of rates and charges made by the Pleasant Valley Water Company in connection with water supplied in the town of Coalinga.

Complainant was advised that, inasmuch as this service was located within incorporated territory, it would be necessary to look to the trustees of the town of Coalinga for such relief as might be desired.

#### DISCRIMINATORY RATES FOR WATER SERVICE.

##### I. C. 2131.

*E. L. White vs. Santa Fe Improvement Company.* On September 30, 1913, E. L. White of Barstow complained that the Santa Fe Improvement Company charged its employees \$1 per month for water supplied, whereas non-employees were compelled to pay \$3 for the same service.

The matter was taken up with the Santa Fe Railway Company, which company admitted the facts as stated, giving its reasons therefor. Mr. White was informed that, under the Commission's decision in Case No. 293, the company appeared to be within its lawful rights in granting a free or reduced rate to its employees.

#### INADEQUATE SERVICE IN SAN FRANCISCO.

##### I. C. 2134.

October 2, 1913.

*Residents of Richmond District vs. Spring Valley Water Company.* The complaint alleged inadequate service, and that water mains were too small.

After considerable correspondence and several interviews with its superintendent, the Spring Valley Water Company promised that enlargements of water mains would be made and better service given. Complainants were so notified.

#### CONNECTION AND METER CHARGE.

##### I. C. 2142.

October 3, 1913.

*Heard & Painter vs. Consumers Water Company of Taft.* Complaint, protests against a charge of \$10 for connection and meter.

This complaint was referred to the legal department and Heard & Painter were informed of the Commission's action in the Glendale case, and advised that they might file formal complaint. Complainant again wrote requesting the Commission to order Consumers Water Company to make connection.

They were informed that an order would not be issued on informal complaint, and should they wish to carry the matter further, formal complaint could be filed. A copy of Rules of Practice and Procedure was enclosed, for their guidance.

#### CHARGES FOR IRRIGATION WATER NOT DELIVERED AND INSUFFICIENT SUPPLY.

##### I. C. 2147.

*Osmar Abbott vs. Coalinga Consolidated Water Company.* On October 20, 1913, Osmar Abbott of Coalinga complained that the Coalinga Consolidated Water Company had failed to furnish, during the last three years, a sufficient amount of water for the irrigation of his land located in American Colony near Fresno. Because of this general failure and the almost complete lack of water during the season of 1913, Mr. Abbott declined to pay a bill of \$45 rendered by the company.

This complaint was taken up with the company, and several reports were received thereon, defendant insisting that if Mr. Abbott had not received his pro rata of water, it was through no fault of the company, and that it would demand full payment of bill as rendered.

The Commission having had the whole question of service and rates of this company under investigation, and having issued its order, the carrying out of which would assure many improvements and the general betterment of this service, Mr. Abbott was asked to allow the matters to rest pending the time that the Commission's order would go into effect, at which date should individual relief be not forthcoming, the same could again be taken up.

## OVERCHARGE AND INEFFICIENT WATER SERVICE.

I. C. 2165.

*J. N. Litz vs. Mt. Jackson Water and Power Company.* On October 7, 1913, J. M. Litz of 731 Waller street, San Francisco, complained that the Mt. Jackson Water and Power Company of Rionido had overcharged him in the sum of \$1.25 for water delivered during the month of July, 1913; also that water supply was of poor quality and inadequate.

Upon investigation, the shortage of water appeared to be due almost entirely to the extremely dry year, while the quality thereof was attributable to the efforts of the company to increase supply, all of which the company was planning to obviate for the future by completion of improvements then under way. The overcharge of \$1.25 for the month of August was cancelled by the company and definite improvements promised for the future, to the satisfaction of complainant.

## REFUSAL TO EXTEND MAINS.

October 9, 1913.

I. C. 2169.

*H. O. Drexler vs. San Jose Water Company.* The complaint alleged that the San Jose Water Company refused to extend mains and protested against charge for service connection.

Upon inquiry the San Jose Water Company stated that it was willing to extend main upon instruction to that effect from Commission, and that the charge for service connection was fixed by city ordinance.

The San Jose Water Company was informed, that it was presumed the main would be extended without direct instructions from Commission, and complainant was so notified. No further complaint was received.

## EXORBITANT RATES AND REMUNERATION FOR WORK DONE ON PRIVATE DITCHES.

I. C. 2177.

*J. A. Tate vs. ——— Water Company.* On October 7, 1913, J. A. Tate of Susanville complained that a water company supplying water for irrigation purposes, charged him the exorbitant rate of \$5.00 per acre.

Complainant inquired if he should not be allowed remuneration by the water company for work voluntarily done in cleaning and repairing its ditches.

The name of the water company involved not being given, complainant was requested to supply this necessary information and upon his declining to do so, correspondence was closed.

## COMPLAINT FROM ROSS.

October 11, 1913.

I. C. 2184.

*John Storer vs. Marin Water and Power Company.* This complaint alleged that the Marin Water and Power Company has refused to supply complainant with water.

The Marin Water and Power Company stated that Storer had formerly received his supply from sources other than this company's system, and that the company had refused to furnish water to such persons.

The Marin Water and Power Company was informed that in case formal action should be brought before the Commission, it was probable that service to Storer would be ordered, and that the Commission trusted the matter would be arranged amicably. The Marin Water and Power Company replied that their superintendent had been instructed to make connection should Storer still desire service. Mr. Storer was so informed.

## HIGH ELEVATION RESPONSIBLE.

I. C. 2201.

*Mrs. W. C. Heim vs. Marin Water and Power Company.* On October 14, 1913, Mrs. W. C. Heim made complaint against Marin Water and Power Company, alleging inadequate water service and absolute failure to furnish any water at times.

The Marin Water and Power Company replied, stating that the high elevation of Mrs. Heim's house was responsible for poor service, and that the company contemplated improvements which would furnish relief. Mrs. Heim was informed of the company's explanation, and withdrew her complaint, as the company had promised to install larger mains on or before March 1, 1914.

## CHARGE FOR WATER PIPE CONNECTION.

I. C. 2218.

*W. B. Walford vs. Murphy Water, Ice and Light Company.* On October 14, 1913, W. B. Walford of Needles complained that the Monaghan & Murphy Company (Murphy Water, Ice and Light Company) had made an unauthorized charge for 98 feet of pipe extended to his property in G street, Needles; also a charge of \$5.00 for tapping the main.



The matter was taken up with the company, which advised that in making said charges against Mr. Walford, its uniform custom had been followed, and that, under the circumstances, the company could not make an adjustment of said charges except at the risk of discrimination in behalf of Mr. Walford.

Complainant was informed of the stand taken by the company and advised to file a formal complaint should further action in the matter be desired. Complaint was not filed.

#### OVERCHARGE FOR WATER SERVICE.

##### I. C. 2229.

*North Moneta Garden Lands Water Company vs. Hawthorne Electric and Water Company.* On October 16, 1913, the North Moneta Garden Lands Water Company made complaint alleging that the Hawthorne Electric and Water Company had overcharged the former for water delivered during the month of September, 1913, through failure of the last named company to install a meter and make this charge according to rates as fixed by and filed with the Railroad Commission. A flat rate of \$105.00 was charged for nine and one half days' service, whereas complainant alleged similar amounts of water had been used during the year 1912, for which a charge of about \$35.00 per month was made.

The Hawthorne Electric and Water Company estimated that the amount of water used during this period would, under its lawful rates, have been worth about \$75.00. A compromise was effected upon this basis, complainant paying \$75.68 in lieu of the \$105.00 as charged.

#### INABILITY TO SECURE WATER SERVICE.

##### I. C. 2233.

*Mrs. Sarah J. Mann vs. San Carlos Park Syndicate.* On October 16, 1913, Mrs. Sarah J. Mann, through her attorney, Robert L. Mann, complained that the San Carlos Park Syndicate, supplying water in San Carlos Park, had unjustly declined to furnish water upon her premises. In response to the Commission's request for an explanation, the said syndicate stated that while water was being distributed in a small way at San Carlos Park, such distribution was confined to land sold by the syndicate, and no compensation whatever charged therefor. Complainant was advised of the position taken by the syndicate, and asked what further action was desired.

On December 29th Mrs. Mann's attorney reported that upon making proper connection and piping, the syndicate had extended its water service to complainant's property and the difficulty thereby adjusted.

#### UNAUTHORIZED CHARGE FOR WATER SERVICE.

##### I. C. 2234.

*Mrs. R. Cockburn vs. Hugh A. Boyle.* On November 12, 1912, the Commission established a rate of 50 cents per hundred cubic feet for all water supplied by Hugh A. Boyle through meter to consumers in the town of Tiburon, no minimum charge being named. The rate in effect theretofore had been a flat charge of \$1.50 per month for each domestic consumer.

Mrs. R. Cockburn, one of the consumers under this system, complained on October 14, 1913, that in view of the fact of Mr. Boyle's neglecting to install a meter upon her water service and collect rates, as provided in the Commission's order, some adjustment of bills accumulated against her during the ten (10) month period preceding, should be made.

Upon investigation, it appeared that other consumers similarly situated, had paid the minimum charge of \$1.50 per month, theretofore in force, without protest. Furthermore, the Commission in its decision in Application No. 404, rendered subsequent to the filing of this protest, provided for a flat rate of \$1.50 per month, or \$1.00 per month in cases where meters were installed. In view of these facts, Mrs. Cockburn was informed that it would be unfair to other consumers to require an adjustment of her bill upon a rate-basis less than that paid by other consumers receiving water under the same conditions.

#### UNAUTHORIZED DISCONNECTION OF WATER SERVICE.

##### I. C. 2240.

*Mark Roth vs. Peoples Water Company.* On October 18, 1913, Mark Roth, of Oakland, complained that the Peoples Water Company had disconnected his water service at 58 Lawton avenue, Oakland, pending an adjustment of a water bill then due. Upon payment of amount due, the water company again connected the service, and undertook to collect a fee of \$1.00 for turning on the water.

Complainant stated that delay in payment of bill was due to error on the part of the company in failing to mail a statement, as was its custom, whereupon he declined



to pay the \$1.00 charged for re-connecting service. The company admitted the possibility of error, and credited Mr. Roth with the \$1.00 charged, and thus adjusted complaint.

HIGH RATES, METER DEPOSIT, CHARGE FOR SHUTTING OFF WATER SERVICE AND REORGANIZATION.

I. C. 2260.

*E. F. Huggins vs. Coalinga Consolidated Water Company, Pleasant Valley Water Company and Coalinga Domestic Water Company.* On October 21, 1913, E. F. Huggins, of 430 Jensen street, Fresno, wrote the Commission alleging that by a peculiar arrangement of organization and ownership of stock, the Coalinga Consolidated Water Company, the Pleasant Valley Water Company and the Coalinga Domestic Water Company were able to manipulate the business of said companies so as to insure a substantial dividend to certain ones thereof, while another, or the others, returned nothing whatsoever upon investments. Complainant further alleged that a deposit of \$12.50 was required for the installation of meter and that \$1.00 was charged for shutting off water and the same amount for turning it on again. It was also alleged that a reorganization of these companies would do much to improve the water service in Coalinga and at the same time make it possible to reduce rates.

A full report was received from each of the companies involved, giving a history of its organization and tending to justify the companies' stand in each of the matters covered by complainant. A copy of the Coalinga Consolidated Water Company's letter, which covered the situation most fully, was forwarded to complainant with the statement that such further suggestion as he might offer would be given due attention. At the same time, he was advised that rates charged by these water companies within the corporate limits of Coalinga were not subject to adjustment by the Railroad Commission at the present time. No further complaint or suggestion was received from Mr. Huggins.

ERRONEOUS CHARGES AND IRREGULARITY IN MAKING OUT WATER BILLS.

I. C. 2276.

*R. N. Coe vs. Miradero Water Company.* On October 20, 1913, R. N. Coe of Burbank complained that the Miradero Water Company had presented statements for water consumed showing overcharge and other irregularities.

Upon presenting notice from the Commission the water company, admitting its error, sent corrected bills to Mr. Coe and thus adjusted the complaint.

SHUTTING OFF WATER SERVICE.

I. C. 2290.

*Mrs. C. E. Boehm vs. Ben Lomond Water Company.* On October 26, 1913, Mrs. C. E. Boehm of Ben Lomond, through her attorney, L. B. Sowell, made complaint alleging that the Ben Lomond Water Company had disconnected water service on her property, known as the Ben Lomond Hotel, to enforce payment of a back bill for water furnished. The company was directed to restore water service immediately, and report all the circumstances to the Commission, which action was taken and the matter thereby adjusted.

Complainant was informed, however, that the Commission should not be understood as standing between the water company and the collection by it of a just bill due for water supplied.

OVERCHARGE FOR SERVICE.

I. C. 2293.

*W. L. Porterfield vs. Union Hollywood Water Company.* On November 18, 1913, W. L. Porterfield of Los Angeles complained that the Union Hollywood Water Company had assessed against him a penalty for nonpayment of his water bill for November, although complainant had not been presented with bill showing amount due for that month.

Upon having its attention called to the matter, the water company proceeded to credit complainant with amount in dispute, claiming that such charge had been made in error.

MATTER FOR FORMAL COMPLAINT.

I. C. 2294.

*F. S. Phelps et al. vs. North Coast Water Company.* The complainants are residents of Mill Valley and allege that North Coast Water Company seeks to compel them to pay \$15 for service connection and meter, although complainants have been compelled to extend mains at their own expense.

F. S. Phelps was informed by letter that the Commission has in some instances ordered that companies should themselves bear the expense of making connections, but that no definite action can be taken except on formal complaint, and after due hearing. A copy of the Commission's Rules of Procedure was enclosed for guidance, should complainants desire to make formal complaint.

## WASTE IN NEVADA COUNTY.

I. C. 2307.

October 29, 1913.

*W. P. Cline vs. Consumers at Graniteville.* W. P. Cline is the owner of the Cline Water Works supplying the town of Graniteville with water for domestic purposes. Mr. Cline complains that consumers wilfully waste water and asks information regarding meters and rates.

Complainant was informed that the laws of the state give him power to restrain wasteful methods of consumers. It was suggested he formulate a set of rules and regulations for the guidance of consumers. It also suggested to Mr. Cline that the installation of meters would greatly diminish waste. Copy of Rules of Procedure was enclosed for his guidance, should he decide to install meters and desire to have the Commission establish rates.

## CHARGE FOR WATER SERVICE CONNECTION.

I. C. 2320.

*Francis E. White vs. Howard Park Company.* On July 22, 1913, Francis E. White of Los Angeles complained that the Howard Park Company supplying water upon his premises in the "Shoe String Strip," county of Los Angeles, had assessed against him a charge of \$12.00 to cover installation of water service. Mr. White inquired if, under the law, he would be compelled to pay said charge.

Upon having its attention called to the matter, Howard Park Company explained that at the time of making this connection for Mr. White, a charge of \$12.00 was uniformly made for this work which was considered very reasonable. Complainant was thereupon advised that it would be necessary, should he desire to take further action in the matter, to file a formal complaint with the Commission protesting against charge so made. No formal complaint was received.

## INADEQUATE SERVICE.

I. C. 2347.

November 10, 1913.

*H. T. Cramer et al. vs. Claremont Domestic Water Company.* On November 10, 1913, a petition signed by some eighteen or twenty citizens of Claremont was received alleging inadequate service in certain portions of the city, and also complaining of low pressure at certain hours of the day.

The company was requested to inform the Commission fully regarding conditions in Claremont. Informal settlement of these complaints appearing impracticable, they were taken up under formal Application No. 1144.

## DUPLICATE CHARGE FOR WATER SUPPLIED.

I. C. 2348.

*George H. Boke vs. Monterey County Water Works.* On November, 10, 1913, Professor George H. Boke of Berkeley wrote the Commission alleging that the Monterey County Water Works, upon installing a meter on his premises at Carmel, had assessed a double charge for a portion of the month of July, 1913, and upon having its attention called to the matter, declined to make proper refund.

After careful investigation, the contention of complainant was shown to be correct, and reparation ordered on the basis of 12/31 of the sum of \$4.55, the amount in dispute. Refund was accordingly made and complaint closed.

## INCREASE IN RATES.

I. C. 2351.

November 6, 1913.

*Killey & Rouff vs. Coachella Water Company.* Complaint, increase in water rates from \$1.50 per month to \$2.50 per month, beginning March, 1913.

Upon investigation it appears that the rate filed by the water company applicable to complainant's service was in fact \$1.50 per month. The company was directed to restore its rate to that basis, which action was taken and a settlement made to the satisfaction of complainants.

## INSUFFICIENT WATER NEAR KERMAN.

I. C. 2364.

December 17, 1913.

*Charles A. Lee vs. Fresno Canal and Irrigation Company.* Complainant alleged insufficient water service by Fresno Canal and Irrigation Company. It was learned

that he obtains water through an intermediate concern, the Irrigated Farms Company, and that this concern is operated rather upon the mutual plan and is beyond the jurisdiction of the Commission.

The entire question of service rendered by Fresno Canal and Irrigation Company being then under investigation by the Commission, it was thought proper to await a decision in that case which would automatically dispose of the Lee complaint. This was the action taken.

#### LACK OF WATER—SAN DIEGO COUNTY.

I. C. 2372.

*J. F. Escher vs. Encanto Mutual Water Company.* Complaint. Dr. Escher recites that he is unable to secure any supply of water for his property.

Complainant was informed that Mrs. Lucy B. Long had filed a formal complaint against the Encanto Mutual Water Company on grounds similar to his own complaint, and that it might be advisable for him to join in the action brought by Mrs. Long.

On December 17, 1913, Dr. Escher filed a formal complaint covering his contentions. Case No. 521.

#### CHANGE OF BASIS RATES.

I. C. 2380.

November 15, 1913.

*Dr. H. J. Gray vs. W. L. Courtwright.* Location at San Rafael, Marin County: complaint, change of basis for collection of water rates from flat to meter rates: also disconnection of water service.

Complaint was taken up with Mr. Courtwright who explained that tracts supplied by him being above gravity flow, he had found it necessary to make a charge higher than that fixed by city authorities of San Rafael. This flat rate of \$2.00 per month had gone unchallenged by said authorities until an extravagant use of water made it necessary to install meters out of which grew the complaint of Dr. Gray. Shortly after filing above complaint, complainant's premises were vacated until June, 1914, at which time the restoration of water service was requested. Back bills were paid by complainant and water service restored as before. It is understood the controversy was settled satisfactorily to both parties.

#### UNAUTHORIZED CHARGE FOR WATER SERVICE.

I. C. 2405.

*Walter Polman vs. South Los Angeles Water Company.* On November 19, 1913, Walter Polman of Los Angeles complained that the South Los Angeles Water Company had assessed a double minimum charge for water served upon his premises in Ahren's Miramonte tract, for the month of September, although but a single house had been erected upon the lot with a mere shack on the rear thereof.

Upon having its attention called to this complaint, the water company proceeded to correct complainant's water bill and make proper credit for overcharge, stating that the double charge was a clerical error.

#### INADEQUATE SUMMER SUPPLY.

I. C. 2458.

December 3, 1913.

*Garden Grove Improvement Association vs. Home Tract Water Company and Garden Grove Water Company.* Complaint alleged that during the summer months the supply of water was inadequate on both systems.

The companies allege that while their service has not been adequate, they attribute a good deal of the shortage in supply to careless waste upon the part of consumers. The companies were each advised to improve the system and to install a general metered service. The Garden Grove Water Company made application for establishment of rates and the matter of service will also be considered in connection therewith.

#### DISCRIMINATORY RATES FOR WATER SERVICE.

I. C. 2485.

*H. J. Krehbiel vs. Reedley Water Works.* On December 10, 1913, H. J. Krehbiel of Reedley complained that G. H. Blowers, proprietor of Reedley Water Works, was charging him a discriminatory rate for water supplied, in that complainant was compelled to pay a rate ranging from \$2.50 to \$2.75 per month during the summer months, while his neighbor, using practically the same amount of water, paid but \$1.50 per month.

The attention of Mr. Blower was at once called to this complaint, but before a reply was forthcoming, complainant advised that upon consulting the water rate schedule for the town of Reedley, he had discovered that charges were being made



against his premises in accordance with rates as published and filed with this Commission. Complaint was thereupon withdrawn.

#### INCREASE IN RATES.

I. C. 2487.

December 8, 1913.

*D. L. Wood, of East San Diego, vs. Cuyamaca Water Company.* D. L. Wood entered complaint that the Cuyamaca Water Company had increased rates but had not complied with the stipulated conditions as to certain improvements, which would insure delivery of the quantity of water due under contract. He also complained of changes in rates.

It was decided to merge this informal complaint into a new application for rates now in preparation.

#### ROTARY SYSTEM OBJECTED TO.

I. C. 2525.

December 12, 1913.

*John J. Fitch et al. vs. Fresno Canal and Irrigation Company.* Complainants objected to the rotary system of distributing water over their lands, stating that they prefer the present system.

It has been decided in several conferences recently held in Fresno that for some years past rotation has been resorted to in the distribution of water on this company's system, therefore complainants' petition is not rightly worded, as the present system is really under the rotary method.

As no further complaint was received from these petitioners, the informal complaint was closed.

#### CHARGES FOR CONNECTION.

I. C. 2532.

December 15, 1913.

*P. C. Taylor vs. Bakersfield Water Company.* Complainant objects to charges for connections.

The Commission advised complainant that there is no state law which definitely prohibits water companies from assessing charges for such service, but that the Commission has held in a number of cases that such a charge is improper. Complainant was further advised that if he would make a formal complaint the Commission would take the matter up and it would probably be decided that the charge is improper. No further complaint was received.

#### INTERMITTENT SERVICE.

I. C. 2541.

December 16, 1913.

*A. Wiseman vs. Lagunitas Water Company.* Complainant was without water a part of the time last year, 1913, and requested information as to how to proceed in case he is again without water.

Mr. Wiseman was informed that the Commission is very insistent that adequate service be rendered consumers and asked him to advise the Commission if he had any further trouble.

#### PROTEST FROM WESTGATE.

I. C. 2566.

December 20, 1913.

*A. G. Porter vs. Santa Monica Land and Water Company.* Complainant protests the water company charge of \$12.00 for a connection to its system.

Complainant was advised that, while the Commission has made no general ruling to that effect, in a number of cases it has held that the water utility has no right to charge for connections. No further word was received from the complainant.

#### METER AND CONNECTION CHARGES.

I. C. 2567.

December 20, 1913.

*Marin Rock Company vs. Marin Water and Power Company.* Marin Rock Company of San Anselmo made informal complaint that the Marin Water and Power Company of San Rafael charged \$15 for meter and connections to complainant's new building, and a \$4 deposit for meter.

On December 24th the matter was taken up with the Marin Water Company and the Commission was advised that the certain amounts charged for installation of meters and connections were proper "under existing ordinances in the district served."

Considerable correspondence passed between the several parties and the Commission, and finally on February 9th the Commission was advised by the Marin Rock Company that a formal complaint would be filed. A copy of the Commission's Rules of Procedure was sent as a guide to complainant.



## LEAKING PIPE AT CONKLIN.

I. C. 2590.

December 17, 1913.

*R. W. H. Staite vs. Lemon Grove Mutual Water Company.* Complaint alleged that the Lemon Grove Mutual Water Company shut off his entire supply of water, leaving his family without water for domestic purposes.

The matter was taken up with the Lemon Grove Mutual Water Company, which alleged that complainant was always in arrears and that they were tolerant with him for some time. But finally, when he refused to repair a bad leak to the pipe crossing his tract, and which belonged to the tract, it became necessary to cut off his supply until he did repair the pipe. This the company did. Complainant then repaired the leaking pipe and the water was again turned on.

Complainant then wrote that he had "come to a satisfactory arrangement" with the company.

## METER INSTALLATION CHARGE.

I. C. 2597.

*C. Schoenfeldt vs. Vista Grande Water Company.* On December 17, 1913, C. Schoenfeldt made verbal complaint as to a charge of \$7.50 for meter installation by the Vista Grande Water Company of Daly City.

The matter was taken up with the company, the meter removed and Mr. Schoenfeldt placed back on a flat rate.

## ALLEGED CHARGE AT DALY CITY.

I. C. 2598.

December 15, 1913.

*E. H. Hansen vs. City Suburban Investment Company.* Complaint, alleged charge made by the City Suburban Investment Company for installing a meter and connection to serve his property.

The matter was taken up with the company which informed the Commission that no charge would be demanded of the complainant.

## CHARGE FOR CONNECTIONS.

I. C. 2602.

*E. H. Hansen vs. J. W. Bloom.* On December 15, 1913, E. H. Hansen made verbal complaint of a charge for service connections from the water plant of J. W. Bloom, Daly City.

The matter was taken up with Mr. Bloom. Subsequently Daly City voted its control over public utilities to the Commission. Mr. Bloom stated that he would not insist upon a charge until the matter was finally settled by some formal action of the Commission.

## INADEQUATE SUPPLY.

I. C. 2604.

December 24, 1913.

*D. Wilte vs. Peoples Water Company.* Complainant, D. Wilte, stated that Peoples Water Company of Oakland refuse to provide him with an adequate water supply for his apartment house under construction.

The matter was taken up with the Peoples Water Company informally, and Superintendent Wilhelm called on the Commission in regard to the complaint. He stated that the main in the street is 2 inches and the usual size used in such houses is a 1 inch main, and was of opinion that complainant really wished fire protection rather than domestic service. The Peoples Water Company considered itself in no way obligated to furnish such service. However, it was suggested that several connections of one inch be installed throughout the large building.

Complainant was informed of the explanation of the Peoples Water Company and made no further complaint.

## EXORBITANT RATES FOR WATER SERVICE.

I. C. 2606.

*Alexander S. Gardiner vs. Lagunitas Development Company.* On December 24, 1913, Alexander S. Gardiner of 53 Carmelita street, San Francisco, made complaint against water rates as fixed by the Commission for water delivered by the Lagunitas Development Company at the town of Lagunitas, alleging that such rates were exorbitant and out of proportion to those charged at the town of San Geronimo.

Mr. Gardiner was advised of the means taken by the Commission to arrive at all the facts in connection with the water service at Lagunitas, and his attention specifically called to the Commission's opinion and order setting forth such data, and justifying its conclusions in the establishment of rates as fixed.

## INEQUITABLE WATER RATES.

I. C. 2606½.

*V. C. Driffield vs. Lagunitas Development Company.* On December 23, 1913, V. Carus Driffield, of San Francisco, made complaint to the Commission alleging that he had been notified by the Lagunitas Development Company as to certain changes contemplated in its rate schedule, such changes to take effect January 1, 1914. Mr. Driffield considered that proposed rates were inequitable and discriminatory as between users of large and small quantities of water during a given year, expressing the further conviction that the town of San Geronimo being supplied by the same company was enjoying a more liberal rate.

In justification of these rates, which were fixed by the Commission, a statement of the difficulties encountered and investigation necessary, was furnished to complainant, together with a copy of the Commission's opinion and order setting forth in detail, its method of arriving at rates as fixed, and tending to show that rates were not unfair and inequitable, as alleged.

## CHARGES FOR EXTENSION.

I. C. 2607.

*J. C. Kinnie vs. Pomona Consolidated Water Company.* On December 24, 1913, J. C. Kinnie of Pomona requested information concerning charges for extension, by the Pomona Consolidated Water Company.

He was notified of the Commission's action and decisions concerning extensions in other cases.

## CASE AT FRENCH CORRAL.

I. C. 2615.

December 28, 1913.

*C. H. Jones et al. vs. Northern Water and Power Company.* Complaint, alleged that an insufficient water supply was furnished by defendant; that the company has been negligent in the matter of repairs to the system; that at a time when complainants were suffering from lack of water, said defendant was wasting water from its ditch.

This matter was taken up with the company and merged into a formal hearing, Case 642.

## FIRE PROTECTION SERVICE.

I. C. 2639.

January 15, 1914.

*Corte Madera Fire Commission vs. Marin Water and Power Company.* Complaint, alleged refusal to extend service for fire protection.

This matter was settled by informal conference at which a plan for agreement was offered by the Commission's hydraulic engineer.

## AMSTERDAM BOOSTER CLUB COMPLAINT.

I. C. 2654.

December 27, 1913.

*L. O. Graham vs. Crocker-Huffman Land and Water Company.* Complaint, alleged very inadequate service rendered by the defendant company.

The complainant was advised that a hearing would be held before the Commission in reference to service rendered by the company at Merced on February 9th, and that the matters complained of would then be given consideration.

## CHARGE FOR PIPE EXTENSION.

I. C. 2660.

*G. D. Hensell vs. Morgan Hill Municipal Water System.* On January 12, 1914, G. D. Hensell of Morgan Hill stated that the local municipal water system had declined to extend its pipes to his property, and that he found it necessary to lay the same at an expense of nearly \$40. Mr. Hensell requested information as to whether it was not proper for the water companies to bear the expense of necessary extensions.

Upon investigation, it appeared that service complained of was entirely within the municipal limits of the incorporated town of Morgan Hill, and, therefore, within the jurisdiction of that municipality. Complainant was so informed, and referred to the proper authorities there.

## INSTALLATION CHARGE AT ALHAMBRA.

I. C. 2664.

December 30, 1913.

*J. B. Kern and A. W. Witzel vs. — — — — Water Company.* Complaint, regarding charge for installation of main pipes and meters.

The Commission wrote to these parties on January 6th explaining that the Commission had decided in a number of instances that meters would be placed at the

expense of the water utility and not of the individual consumer; that no general order to that effect had been issued by the Commission; and that, judging from complainant's letter, the water utility complained of was a mutual concern and not under the jurisdiction of the Commission.

REFUSAL TO SUPPLY WATER.

I. C. 2666.

*Enos Shirk vs. Conservative Realty Company.* On December 23, 1913, Enos Shirk of Watts reported that he was unable to secure proper water service for his tenants residing at Starks Palm tract, near Watts.

The matter was taken up with the Conservative Realty Company, which reported that lack of service was due to the fact that a balance of \$1.75 charged against this property remained unpaid. However, upon notice, settlement was made, and water supplied as requested, to the satisfaction of complainant.

CANAL DAMAGE AT COLFAX.

I. C. 2675.

January 5, 1914.

*E. C. Wittig vs. Pacific Gas and Electric Company.* Complaint, alleged improper maintenance of a canal crossing his property, and damage from debris thrown out of canal.

The company reported that the canal banks had sloughed under the recent heavy rains, which could not be foreseen or prevented, but that that section would be lined with wood or rock and thereby prevent further sloughing in the future.

REFUSAL TO INSTALL.

I. C. 2679.

January 2, 1914.

*George S. Horton et al. vs. Hermosa Beach Water Company.* Complainants protest against the refusal of the Hermosa Beach Water Company to install connections to their various properties free of cost.

At this time the Commission acted upon an application of the company to establish rules covering the point of controversy and when the decision was issued complainants were referred to it.

LATERAL EXTENSION REFUSED.

I. C. 2682.

January 2, 1914.

*E. Buhler vs. H. H. Hogan and East Side Canal and Irrigation Company.* Location, Stevinson Colony, Merced County. Complainant alleged that he had repeatedly requested that a lateral be extended to his lot, and that the East Side Canal and Irrigation Company had refused to extend same.

Mr. Buhler was advised to await the decision pending in the East Side Canal Company's case.

COST OF INSTALLATION.

I. C. 2686.

January 2, 1914.

*Mrs. Emma J. Armstrong vs. Inglewood Water Company.* Location, Inglewood Rancho. Complaint, request for information as to the cost demanded by water companies for the installation of meters and service connections.

The complainant was advised that it was the general custom for the water company to bear the expense of installing meters and connections, but that no general order had been issued by the Commission to that effect. The complainant, however, was requested to furnish us with the name of the company and inquiries would be made. No further information was supplied by complainant.

CHARGE FOR TURNING ON WATER.

I. C. 2691.

*H. V. Baker vs. Encanto Mutual Water Company.* On January 1, 1914, H. E. Baker requested information concerning the right of the Encanto Mutual Water Company to charge for turning on water.

Mr. Baker was notified that the Commission had made no general ruling regarding such charges.

CHARGE FOR INSTALLING METER.

I. C. 2695.

January 2, 1914.

*Mrs. G. R. Chubbuck vs. Riverbank Water Company.* Complainant objects to paying \$10.00 for installing a meter for water service on her lot.

The matter was taken up with the Riverbank Water Company and a letter was received explaining its attitude in the matter. The company stated it had no intention of removing the pipes, and was perfectly willing to furnish an adequate supply of water upon payment of the usual toll for installation. Complaint was withdrawn.



## CHARGE FOR METER CONNECTION.

I. C. 2699.

*S. N. Enright vs. South Los Angeles Water Company.* On January 6, 1914, S. N. Enright of Huntington Park requested information as to the justice of a charge for meters and service connections from the South Los Angeles Water Company.

Mr. Enright was notified that, while the Commission in a number of cases had demanded that such connections should be made by the company, no general order had been issued.

## CHARGE FOR CONNECTING SERVICE PIPE.

I. C. 2718.

*Mrs. H. Stettin vs. Marin Water and Power Company.* On January 8, 1914, Mrs. H. Stettin of 829 Cole street, San Francisco, presented to the Commission a paid bill, showing that the Marin Water and Power Company had charged her \$12.00 for connecting her property at Schuetzen Park with the water mains of that company. Mrs. Stettin had understood that such charges were unlawful, and requested that the company be instructed to return to her the amount paid.

The company was asked for a report, which showed that this connection was made at a cost of \$12.27, after disconnecting the old service and installing the new at the request of complainant. The charge, it was stated, was that usually made in such cases and barely covered the actual cost of labor and material.

Complainant was advised of these facts, and asked to await the outcome of the so-called Glendale case, then before the supreme court, wherein were involved the same matters, at which time, should conditions warrant, this complaint would be again taken up.

## OVERCHARGE FOR WATER SERVICE.

I. C. 2721.

*J. F. Michaels vs. Peoples Water Company.* On January 12, 1914, J. F. Michaels of 2406 Dana street, Berkeley, made complaint alleging that the Peoples Water Company of Oakland, had charged him \$5.25 for 2,000 cubic feet of water consumed upon premises at 1519 Hearst avenue, Berkeley. Complainant did not deny that meter showed such consumption, nor was it claimed that charge was out of line with such showing, but was of the opinion that the meter itself was absolutely out of order. On two occasions a plumber had inspected complainant's house plumbing and found the same O. K. Inspection of the meter, however, had not been made according to the provisions of the city ordinance of Berkeley fixing rates within that municipality.

The company expressed a willingness to replace Mr. Michael's meter under the conditions named in ordinance, and complainant was so informed. No further complaint was received.

## CONNECTION CHARGES.

I. C. 2746.

January 13, 1914.

*Willits Water and Power Company vs. Consumers.* This was a request on the part of the utility for advice as to the charges for connections, collections of rates, etc.

It was explained that no general order has been issued affecting charges for installing connections, but the attitude of the Commission in certain cases had been that such charges were improper.

On January 23d the company wrote that such payments would not be required for installations in future. It was suggested to the company that their rules and regulations should be revised accordingly.

## EXTENSION AT NATIONAL CITY.

I. C. 2750.

January 15, 1914.

*Blake L. Lawrence vs. Sweetwater Water Company.* Complaint, alleged the refusal of the company to make a service extension to complainant's property line; also that the service was very poor.

The company reported that the estimated return from the extension would not justify the expense necessary if the pipe were extended to complainant's property. An engineer of the Commission concurred in that statement and advised that complainant construct a tank which would fill overnight and thus provide water when the pipes would be empty.

## DISTRIBUTION OF WATER AT SAN GABRIEL.

I. C. 2751.

January 16, 1914.

*E. D. Roath vs. Sunny Slope Water Company.* San Gabriel, California. Complainant alleged that the water company was distributing water to unauthorized persons and by reason thereof he had received an insufficient supply of water and



had been materially damaged; that the company was organized to furnish water upon 1,400 acres, and that water was then sold to considerable acreage outside the original tract. Mr. Roath particularly complained of the rotation schedule established, as it had cost him loss of crops.

The Commission took the matter up with the water company under date of January 16th, but before receiving reply complainant advised that the present directors had agreed to divide his schedule if possible, to make the interval shorter, which would adjust the matter satisfactorily.

#### LARGE METER READINGS.

January 16, 1914.

I. C. 2755.

*Herbert P. Tyson et al. vs. South San Francisco Water Company.* Complainant alleged that the water company was "generally lacking in courtesy and is suspected of dishonesty in dealing with consumers." Particular cause of complaint in this case was that persons residing at 256 and 258 Grand avenue believe the meter readings for December and part of January to be "about four times too large."

An engineer of the Commission inspected the meter that had been used and after testing could only discover a discrepancy of 1.4 per cent in the meter used during the months when the water use was at its maximum.

Mr. Tyson was informed that there had probably been an error in measurement or an extreme use of water on the premises, due to waste or leakage, and that the investigation had disclosed no fault in the meter.

#### REFUSAL AT FRUITVALE.

January 16, 1914.

I. C. 2770.

*Carrie Pratt Elwell vs. Peoples Water Company.* Complaint, alleged that the company refused to furnish water to two dwellings owned by complainant in Park place.

The complaint from this neighborhood took on a greater scope and the demand for extension was decided in connection with the matter then under investigation for Beulah Heights.

#### CHARGE FOR IRRIGATION WATER NOT DELIVERED.

I. C. 2819.

*Mrs. S. M. Goodman vs. Tujunga Water and Power Company.* On February 20, 1914, Mrs. S. M. Goodman of Los Angeles made complaint alleging that the Tujunga Water and Power Company had assessed a charge of \$10.00 per acre upon land sold to her daughter, Sadie Goodman, but that no water had been delivered thereon.

Later it developed that owing to the Commission's decision affecting this water company's service, it would not be possible to deliver water upon the premises covered by this complaint. The water company thereupon waived the charge of \$10.00 and thus adjusted complaint.

#### PIPE EXTENSION AT OAKLAND.

January 23, 1914.

I. C. 2820.

*Mrs. J. G. Deme vs. Peoples Water Company.* Complaint, alleged that the Peoples Water Company demanded \$75.00 for making a pipe extension so as to serve complainant's property.

The water company advised the Commission that 270 feet of 2-inch pipe would be required, but that two other prospective users had convinced it of the necessity of the extension and that the same would be made at the company's expense. The complainant replied at a later date that she paid a service charge only and received the water as desired.

#### EXTENSION OF SYSTEM.

January 19, 1914.

I. C. 2826.

*Mrs. E. G. Crofts et al. vs. Pacific Gas and Electric Company.* Mrs. E. G. Crofts and others in the town of Penryn requested the Commission to assist them in obtaining from the Pacific Gas and Electric Company the installation of a domestic water system covering the town of Penryn.

A field investigation was made of the conditions at Penryn and estimates of cost and income were prepared. Various arrangements were proposed to the company and to the consumers which would place equitably the obligation and risk in installing this water service.

No arrangements satisfactory and equitable to all concerned could be agreed upon, and the matter was therefore closed until such time as the probable demand becomes commensurate with the cost of the system.

## SERVICE AT NEEDLES CRITICISED.

I. C. 2834, 3271, 3265, 3267.

July 10, 1914.

*John D. Shaffer et al. vs. Murphy Water, Light and Ice Company.* Complaint, alleged inadequate service, unjust rates, discrimination in service and rates and refusal to extend service.

A field investigation was made by the hydraulic department and the matter taken up with the company. Nothing could be done informally, and the complaints were merged into a formal hearing, Case No. 579.

## ALLEGED UNJUST DEMAND AT DALY CITY.

I. C. 2876.

February 6, 1914.

*W. F. Hicks vs. J. W. Bloom.* Complaint, alleged unjust demand for payment of \$16.00 for placing a meter and connection, the connection on the property having been previously used for service upon the lot.

The matter was taken up with the water company, and was later settled satisfactorily to both parties.

## STREET MAINS AT SAN FRANCISCO.

I. C. 2877.

January 28, 1914.

*C. M. Myers vs. Spring Valley Water Company.* Complaint, alleged that street mains were insufficient in size and that the company had refused to increase size whether repaid or not, claiming that increased use of water was beyond its power to supply.

This complaint was merged into formal case No. 545—*Roy A. Pratt vs. Spring Valley Water Company.*

## CHARGE FOR WATER SERVICE CONNECTION.

I. C. 2885.

*Mrs. C. H. Weiser vs. Rialto Domestic Water Company.* On January 28, 1914. Mrs. C. H. Weiser of Rialto complained of charges made by the Rialto Domestic Water Company for water service connection, alleging that the company claimed the right to charge \$12.00 for making such installation.

It appeared, upon investigation, that the company made such charge uniformly to all its patrons, and had filed with the Commission a rate schedule showing the same. Complainant was advised that, inasmuch as this question was covered by the Commission's decision in the so-called Glendale case, then before the supreme court on appeal, it would be proper to await a final determination of that case, following which the Commission would probably announce its future course in such matters.

## PURCHASE OF STOCK REQUIRED.

I. C. 2888.

January 30, 1914.

*Miss Metha C. Becker vs. Davis Water Company.* Complaint, alleged refusal of the water company to extend its pipes except upon condition that complainant purchase stock or pay for the necessary pipe and labor.

The Commission took up the matter with the company but was later advised by complainant that she had purchased \$100.00 of stock and that the complaint might be considered closed.

## INEFFICIENCY CHARGED.

I. C. 2889.

January 21, 1914.

*Fair Oaks Water Takers Association vs. The California Corporation.* Complainant requests the Commission to make investigation into the inefficiency of the water distributing system, the inadequacy of supply furnished for irrigation purposes, its unavoidable contamination for domestic use and the sale of water in excess of seller's capacity to comply with the requirements of prior contracts.

The Commission undertook an investigation and learned that the company was in financial straits. Later, at the instance of both bondholders and users, a receiver was appointed and took charge of the property with instructions to make immediate repairs.

No further action was taken by the Commission.

## SERVICE CONNECTIONS AT SAN GABRIEL.

I. C. 2905.

January 26, 1914.

*John C. Ead vs. Van Nuys Water Company.* Complaint, complained informally of charges for service connections from mains to property line, and installation of meters.

Complainant was advised that no general order has been made by the Commission, but that in a number of cases it was decided that expenses named should be borne by

the water utility. Complainant was further advised that redress could probably be had by filing a formal complaint with the Commission, when the matter would be decided at a formal hearing.

## OVERCHARGE FOR WATER SERVICE CONNECTION.

I. C. 2913.

*Mrs. C. C. Toms vs. Union Hollywood Water Company.* On January 19, 1914, Mrs. C. C. Toms of Hollywood complained that the Union Hollywood Water Company had made a charge of \$18.00 for installing a meter upon her premises.

This complaint was laid before the water company, which made an adjustment satisfactory to complainant, refunding amount of overcharge.

## UNLAWFUL ADVANCE IN WATER RATES.

I. C. 2916.

*Water Consumers Adjacent to the Town of Hayward vs. San Lorenzo Water Company.* Patrons of the San Lorenzo Water Company, residing in territory adjacent to the town of Hayward, complained that said company had raised the rates of certain consumers without consulting the Railroad Commission or obtaining other authority.

Upon investigation, it appeared that the water company, in a number of instances in checking over service rendered to certain families, had ascertained that facilities not theretofore known to the company had been installed, and in applying rates set out in ordinance fixing charges within the town of Hayward, had automatically increased bills of consumers in outside territory.

However, the utility voluntarily reimbursed complainants in the sum of \$10.85 for over-collection and filed a proper rate covering service in the district affected.

## DIFFERENCES ADJUSTED.

I. C. 2918.

February 5, 1914.

*R. S. Stearns vs. South Los Angeles Water Company.* Complaint, alleged refusal of the company to make an extension of its pipe system to property owned by complainant.

An investigation was commenced, but complainant later advised that all differences with the company had been settled.

## INCREASED RATE AFTER INSTALLATION OF METER.

I. C. 2927.

*J. J. Riley vs. San Jose Water Company.* On February 5, 1914, J. J. Riley of San Jose complained of the minimum monthly charge of \$1 made by the San Jose Water Company following installation of meter; prior to such installation, 50 cents per month had been charged.

Upon investigation, it was shown that the company had full authority to install a meter, and that charge made was in accordance with lawful schedule of rates as filed with the Commission.

Complainant was so advised.

## BEYOND JURISDICTION AT ALHAMBRA.

I. C. 2928.

February 7, 1914.

*A. H. Krueger vs. Marengo Water Company.* Complaint, alleged an improper charge for installation of service connections and that the water supply has been shut off for non-payment of water bills.

It was found that the water company was a mutual concern, and as such was without the jurisdiction of the Commission.

## ADVANCE DEPOSIT TO COVER MONTHLY RATES.

I. C. 2929.

*W. M. Gibson vs. Peoples Water Company.* On February 5, 1914, W. M. Gibson of Alameda complained that the Peoples Water Company had required a deposit of \$5.00 as a condition upon which water would be served upon his premises in that city. Mr. Gibson had demanded a return of this amount upon learning that the Commission did not approve of such deposits. The company, however, refused to reimburse complainant.

Upon investigation, it appeared that the water company was acting within the provisions of an ordinance duly passed by the trustees of the city of Alameda, which provided that a given deposit might be required under certain conditions. Complainant was advised of these facts, and referred to the proper authorities in the city of Alameda for any relief to which he might be entitled.



## RESERVOIR AT HOLLISTER.

I. C. 2936.

February 4, 1914.

*Gco. W. Jean, District Attorney vs. San Benito Land and Water Company.* Complaint, alleged dangerous site upon which a reservoir is built, making it a menace to life and property.

A field investigation was made by the Commission's engineers, who reported that while the type of construction and present conditions of the reservoir were not entirely approved, there was only about five feet of water standing against the embankment and only two more feet would be added during the season. The company was requested to make every reasonable effort to put the earth embankment in the best condition possible.

## WATER MAINS IN SAN FRANCISCO.

I. C. 2957.

March 20, 1914.

*Weissheim Brothers & Company vs. Spring Valley Water Company.* Complaint, alleged inadequacy of water mains and refusal of company to enlarge the same.

Formal Case No. 545 covering identical matters, being then before the Commission, this complaint was merged therein and disposed of at the same time.

## OVERCHARGE FOR WATER SERVICE.

I. C. 2962.

*M. C. Holman vs. Peoples Water Company.* On February 13, 1914, M. C. Holman, secretary of the Vernon Rock Ridge Improvement Club, complained to the Commission that the Peoples Water Company had charged his club \$3.25 for 200 cubic feet of water used during a period of two months. Complainant protested against the payment of any set minimum charge.

A statement covering two years' water service to the club, was examined to ascertain if specific charge complained of was unauthorized. Same was found to be 25 cents in excess of amount which should have been charged, and the water company was directed to refund that amount, which action was promptly taken.

## SERVICE REFUSED.

I. C. 2992.

February 11, 1914.

*W. W. Shuhaw vs. Davis Water Company.* Complaint, alleged refusal to render service to the complainant unless he made payment for service connections.

The company was informed that it was at liberty to demand this charge although it was not in accordance with previous rulings of this Commission on that point.

## MINIMUM CHARGES.

I. C. 2993.

February 17, 1914.

*Residents of Eagle Rock vs. Eagle Rock Water Company.* Complaint, alleged an unjust collection of minimum charges for water from stores which received water through a common meter.

It was found upon investigation, that the installation of separate services and meters would work a hardship on both the company and the consumer, so the past arrangements were allowed to be continued except in one case, and in that, the extra minimum charge was withdrawn.

## CHARGE AGAINST DAM AT BANGOR.

I. C. 2996.

February 14, 1914.

*John H. Wood vs. Los Verjels Land and Water Company.* Complaint, alleged that the hollow type of dam being constructed on Dry Creek was a menace to life and property.

An investigation was made in the field by the hydraulic engineer of the Commission, who reported no cause for anxiety as to safety of structure.

## METER DEPOSIT OBJECTED TO.

I. C. 3007.

February 20, 1914.

*J. H. Duffy vs. Janss Investment Company.* Location at Belvedere, near Los Angeles. Complaint, alleged refusal of the company to furnish him a metered service without a deposit of \$25.00 being made.

The company agreed to accept a partial deposit on the meter and await payment of the balance, and this was according to complainant's suggestion.



MUTUAL COMPANY AT RUNNELLS.

I. C. 3010.

February 17, 1914.

*H. J. Whittlesey vs. Palo Verde Mutual Water Company.* H. J. Whittlesey appealed to the Commission in regard to rates for water, as charged by Palo Verde Mutual Water Company.

Upon investigation it was found that the company is a strictly mutual concern, not under the jurisdiction of the Commission, and the complainant was so advised.

CHARGE FOR METER.

I. C. 3011.

February 21, 1914.

*J. L. Parsons vs. Cucamonga Water Company.* Complaint, alleged a charge for meter installation and service connection.

Investigation proved that the rates for domestic water were so low as to prohibit the company from installing meters at its own cost. The complainant was advised in this case to pay the charge.

CHARGE FOR CONNECTIONS.

I. C. 3030.

*Inghram Hughes vs. Union Water Company.* Complainant alleged that he had been charged \$10 for service connections by the Union Water Company of Oakland.

This matter was taken up with the company, and it was found that no redress could be had under its present rules and regulations. Complainant was so notified.

AN UNPAID BILL THE CAUSE.

I. C. 3034.

February 4, 1914.

*Mrs. Ella Rees vs. San Dimas Charter Oak Water Company.* Complainant alleged that the San Dimas Charter Oak Domestic Water Company threatened to shut off her supply of water because she refused to pay an old bill, left unpaid, against her property before she bought the place.

The water utility was informed by the Commission that it was unlawful to refuse water service in such cases. It was further suggested that the utility prepare a schedule of rules and regulations and submit same for approval by this Commission.

WATER FOR DOMESTIC USE.

I. C. 3041, 3317.

February 25, 1914.

*Palmdale Lumber Company et al. vs. Palmdale Water Company.* Complaint alleged refusal of the company to furnish water to the residents of Palmdale for domestic purposes; also that the water is unfiltered and not fit for use, and that contract rates were not being adhered to.

The matter was taken up with the water company which stated that it had never undertaken to furnish water to the town of Palmdale or any of the inhabitants thereof for domestic use, but that the Palmdale Water Company furnished irrigation water to land owners who purchased lands from the Palmdale Land Company. The Commission suggested to the company, however, that it furnish the Palmdale Lumber Company with water until the establishment of a domestic water system for the town of Palmdale. In regard to the question of rates, the company stated that no such contract as the complainant mentioned is in existence, but that probably 800 cubic feet of water was furnished at \$1.50 per month by the Palmdale Water Company. They further stated that filters were in operation for purifying the water.

CHARGE AT ALBANY.

I. C. 3063.

March 3, 1914.

*Mrs. John Dunlap vs. Peoples Water Company.* Complaint, alleged charge of 10 cents made by the defendant company for turning on water, although all connections had been previously installed.

Complainant was advised that a definite order restraining the water company from making this charge could only be obtained through formal complaint and public hearing.

ALLEGED REFUSAL AT SAN DIEGO.

I. C. 3064.

March 3, 1914.

*G. A. Miller vs. Sweetwater Water Company.* Complaint, alleged refusal of the Sweetwater Water Company to make an extension of its mains so as to furnish complainant with water.

Complainant was advised that the limit of supply appeared to have been reached by the Sweetwater Water Company, but that his request would be further considered in connection with another case then before the Commission.

## SERVICE CONNECTION.

I. C. 3079.

March 6, 1914.

*Ben S. Casey vs. Rialto Domestic Water Company*, Rialto, San Bernardino County. Complaint, alleged excessive charge of \$12.00 for a service connection.

The matter of the propriety of a charge for service connection being before the state supreme court, on appeal, complainant was advised that the Commission was still without authority to make a general order requiring water companies to bear this expense.

## INSUFFICIENT SUPPLY AT HALFMOON BAY.

I. C. 3082.

March 2, 1914.

*Dr. W. A. Brooke vs. Knapp Water Company*. Complaint, alleged insufficient water supply and excessive charges for the same.

Water company was notified that its facilities should be improved. Complainant was advised that the company would be in error in discontinuing service to force payment of ancient bills, but that advance payment would be demanded in future.

## DAMAGE FROM FLOODS.

I. C. 3085.

March 7, 1914.

*E. A. Rhinesmith vs. Sutter-Butte Canal Company*, Biggs, Butte County. Complaint, alleged improper handling of irrigation water, causing damage to lands by flooding and washing.

The matter was taken up with the company which reported unusual rains had caused the ditches to be used as storm drains instead of distributing channels; and it was from such use that the damage occurred, for which the company disclaimed responsibility.

## PRIVATE WATER SYSTEM.

I. C. 3092.

March 7, 1914.

*A. J. Hoffman vs. Ella D. Webb*, San Francisco. Ella D. Webb, owner of what appeared to be a small private water system, threatened to discontinue service to complainant.

For reasons developed at investigation, this water system was not considered a public utility, and no action was taken.

## MINIMUM CHARGE.

I. C. 3102.

March 9, 1914.

*J. R. Hodges vs. Corina City Water Company*. Complaint, alleged unauthorized minimum charge for water service.

Investigated and found to be out of accord with rates and rules as approved by the Commission in Application No. 417. Adjusted to the satisfaction of complainant, and proper refund made.

## INABILITY TO SECURE WATER METER.

I. C. 3113.

*Ed Thornwaite vs. Long Beach Municipal Water System*. On February 10, 1914, Ed Thornwaite of Long Beach requested the Commission to take such action as would compel the municipal water company at Long Beach to furnish a meter upon his property on conditions named by him.

Mr. Thornwaite was advised that inasmuch as the service referred to appeared to be entirely within the municipality of Long Beach, which city owns and operates its own water system, the Railroad Commission would have no jurisdiction to require a change.

## OVERCHARGE FOR WATER SERVICE CONNECTION.

I. C. 3153.

*Mrs. Fannie Cohn vs. City and Suburban Investment Company*. On March 10, 1914, Mrs. Fannie Cohn of Daly City, complained that J. W. Bloom of the City and Suburban Investment Company had charged \$10.00 for making a service connection upon her property at 219 Mission circle, contrary to the company's rates and rules as filed with the Railroad Commission.

Upon investigation, it appeared that \$5.00 of the amount charged for this connection was in the nature of a meter deposit which would be returned to complainant upon termination of service. The matter was thus explained to the satisfaction of complainant.

## OVERCHARGE FOR WATER SUPPLIED.

I. C. 3160.

*J. Jerome Smith vs. Pacific Gas and Electric Company*. On March 18, 1914, J. Jerome Smith of Oakland complained of overcharge made by the Pacific Gas and Electric Company for water supplied at his premises in the city of Stockton. The

company investigated the complaint, and reported that measurement of premises justified the charge as made, in lieu of which Mr. Smith was offered the alternative of meter rates, which offer was declined.

Complainant was informed of the company's report, and advised to take the matter up with the city authorities of Stockton under whose jurisdiction the service appeared to rest.

#### SEPARATE MINIMUM CHARGES.

##### I. C. 3168.

*Louis Petchner vs. Covina City Water Company.* Complaint was made that the rules of the Covina City Water Company established a separate minimum charge for each of several dwellings on a single lot. Later when the revised rules of the company were approved by the Commission, complaint was received that the rules enabled the company to install separate meters for each of the several houses and thereby collect the several minimum charges as before.

The Covina City Water Company agreed to the collection of a single minimum through one service, partly on account of the small quantity of water used monthly and partly because the investment in three separate metered service connections was not warranted.

#### OVERCHARGE FOR WATER SUPPLIED.

##### I. C. 3174.

*Mrs. F. L. Fine vs. Peoples Water Company.* On March 16, 1914, Mrs. F. L. Fine of East Oakland complained of overcharge made by the Peoples Water Company.

Upon investigation and remeasurement of the premises by the water company it was determined that complaint was well founded and rate was adjusted accordingly.

#### MINIMUM RATES FOR WATER SERVICE IN OAKLAND.

##### I. C. 3204.

*Santa Fe Improvement Association vs. Peoples Water Company.* On March 23, 1914, the Santa Fe Improvement Association of Oakland presented to the Commission the matter of minimum rates charged by the Peoples Water Company, requesting that an investigation be made of the service and rates of that company with a view to establishing fair and equitable rates.

Representatives of complainant and water company were requested to call at the Commission's rooms for the purpose of going over the situation informally, with a view of determining necessary future action. The establishment of a metropolitan water district for the cities east of San Francisco Bay having in the mean time come up for decision by ballot in the various municipalities affected, complainant requested that the entire matter be held in abeyance pending the outcome of such election.

#### CONTRACT FOR WATER IN KERN COUNTY.

##### I. C. 3206.

March 19, 1914.

*C. G. Wilcox vs. Western Water Company.* Complaint, alleged that the water company required a five-year contract for water before commencing service, and that the contract limits the applicant to the use of water that he may develop on his own property.

The matter was taken up by correspondence with the water company, and it was found that the contract did not limit complainant to the use of water that he could develop on his own property. Complainant was advised that there was nothing particularly detrimental in the contract.

#### INTERMITTENT SERVICE.

##### I. C. 3216.

March 26, 1914.

*H. E. Shugrue vs. San Bruno Water Company.* Complaint, alleged insufficient water supply and intermittent service of the San Bruno Water Company.

The manager of the water company reported that the trouble was due to sand-pumping the wells and to accidents, but that the troubles had all been relieved.

#### UNIMPROVED STREET MAINS.

##### I. C. 3222.

March 27, 1914.

*A. Arning et al. vs. Pacific Gas and Electric Company and Petaluma Power and Water Company.* Complaint, alleged refusal of the companies to extend their mains through an unimproved street which had been ordered improved by the city of Petaluma, although an ordinance of the city provided that all public utility corporations shall lay water and gas mains before the streets are improved.

The matter was taken up with the companies which advised that it would be unjust to order them to lay a new main on the street to be improved as the few consumers now being supplied on this street are receiving adequate service and no



complaint has been received. It was the opinion of the water company that desire for domestic service did not give rise to complaint, but that better fire protection was the object sought, and proposed to connect hydrants at specified streets when such hydrant should be installed by the city.

No further complaint was received and it was assumed that the matter was thus settled.

#### MINIMUM RATE FOR WATER SERVICE.

##### I. C. 3230.

*Reubin Kronick vs. Peoples Water Company.* On March 26, 1914, Reubin Kronick of Oakland complained of the charge of \$1.50 per month made by the Peoples Water Company as a minimum for domestic water service, alleging that a consumer should be compelled to pay only for what he consumed.

Complainant was advised that the matters referred to were due to come before the Commission at an early date, at which time a full investigation of the service and rates of the Peoples Water Company would necessarily cover the subject of this complaint. It was suggested that the matter be allowed to rest until such date.

#### OVERCHARGE AT SAN JOSE.

##### I. C. 3249.

May 2, 1914.

*Robinson & Place vs. San Jose Water Company.* Complaint alleged overcharge for water supplied for building purposes.

Upon investigation it was found that an overcharge amounting to \$106.55 had been made, which amount was duly credited to complainants to their entire satisfaction.

Above overcharge resulted by reason of the fact that flat rates were charged, whereas meter should have been installed and rates collected thereunder. A careful check of water used was kept by complainants proving that the company's estimates were entirely too high.

#### DELIVERY OUTSIDE CITY LIMITS.

##### I. C. 3262.

March 28, 1914.

*O. E. Dillon vs. Selma Water Works.* Complaint alleged refusal of the company to extend service to property owners outside the city unless they should bear the expense of laying the pipe, etc.

The Commission suggested that consumers place with the water company a deposit covering the cost of the extension, the same to be returned when the receipts from the extension reached a specified amount.

#### INADEQUATE SUPPLY AND UNJUST RATES AT EAST BAKERSFIELD.

##### I. C. 3268.

April 2, 1914.

*W. R. Lowe et al. vs. Bakersfield Water Company.* Complaint alleged inadequate supply of water by the defendant, unjust rates, impure water, and the application of the same rate in both summer and winter.

The matter was taken up with the water company, and after much correspondence the complainants were informed that it would be advisable for them to file a formal complaint, when the matter would be brought to a hearing and all points of contention thoroughly investigated.

#### ADVANCE IN RATES AT LOS ANGELES.

##### I. C. 3274.

March 28, 1914.

*Thos. H. Fillmore vs. Lawndale Water Company.* Complaint, alleged unjust supply of rates contemplated by the defendant company.

The complainant was informed that no application for a raise in rates had been filed with this Commission, and that he would be notified if any such action were taken by the company.

#### SINGLE RATE FOR ONE FAMILY.

##### I. C. 3283.

May 15, 1914.

*H. C. Moody vs. Baldwin Park Domestic Water Company.* Complaint, alleged that although only one family was living on the premises, the defendant charged more than a single rate.

The matter was taken up with the company which claimed that the complainant had four apartments and store rooms on the premises, and therefore should pay more than one rate. The Commission advised that even under the above conditions if only one family resided in this building, only one rate could be charged.



### MINIMUM CHARGE FOR WATER SUPPLIED TO DOUBLE FLATS THROUGH SINGLE METER.

I. C. 3284.

*S. Hair vs. Peoples Water Company.* On April 7, 1914, S. Hair of Oakland complained of a charge of \$2.40 assessed by the Peoples Water Company as a compromise minimum covering service through a single meter to two flats, one of which is occupied by complainant, the other rented.

Upon investigation, it appeared that under the city ordinance a double minimum amounting to \$3.00 could have been assessed by the Peoples Water Company, but by a rule arbitrarily enforced in such cases, 20 per cent of the double minimum had been waived. Upon having his attention called to the provisions of the ordinance fixing rates within the city of Oakland, and lawfully filed with the Commission, complainant decided to take advantage of the \$2.40 rate as originally charged.

### CHARGE FOR SERVICE CONNECTIONS.

I. C. 3292.

April 6, 1914.

*G. W. McElwain vs. Peninsula Water Company.* Complaint, stated that a charge of \$12.00 for making service connections at San Mateo had been presented to complainant, who asked if the same was considered by the Commission to be a proper charge.

Complainant was advised that a similar case was pending before the court on appeal and that, in the meantime, the company could legally demand the charge for service connection.

### INADEQUATE FIRE PROTECTION.

I. C. 3295.

April 7, 1914.

*W. I. Merrill vs. Campbell Water Company.* Complaint, alleged refusal of the defendant company to provide adequate fire protection.

The complainant was advised that if the defendant company had not obligated itself in any way to render fire protection, it was beyond the jurisdiction of this Commission to order it to do so.

### REFUSAL TO FILL GAP.

I. C. 3309.

April 11, 1914.

*A. W. Hollingsworth vs. Peoples Water Company.* Complaint, alleged refusal of the water company to connect up a "gap" in its distributing system in Oakland.

It appeared upon investigation that there was no existing demand for the extension. One new consumer had subsequently been added, and an extension made for him, so in time the gap may reasonably be expected to be closed.

### PIPE TROUBLES AGREED UPON.

I. C. 3313.

April 11, 1914.

*Lemon Grove Mutual Water Company vs. Cuyamaca Water Company.* Complaint, alleged that disconnecting complainant's water system at a certain point in the town of La Mesa would greatly inconvenience complainant; that certain property of complainant had been displaced by Cuyamaca Water Company, and that rate of \$70.00 per year inch charged by the company should be reduced to \$65.00.

Cuyamaca Water Company stated in answer that pipe had been disconnected owing to its extremely poor condition, and also insufficiency of pressure, adding that the connection was only temporary to permit replacing of old wood structure. It was also agreed that all damage should be made good. Rate was that set by the Commission itself.

### UNPAID BILLS CAUSE OF THREATENED DISCONTINUANCE.

I. C. 3320.

April 10, 1914.

*W. L. Courtright vs. Marin Water and Power Company.* Complaint, alleged that W. L. Courtright of 625 Market street, San Francisco, owned a small tract in San Rafael, supplying sixteen consumers with water received from the Marin Water and Power Company. A tank on Mr. Lulhere's property provided storage. The company had threatened to discontinue service on account of moneys due.

The company was advised that it was illegal to discontinue service on account of non-payment of bills but that rates in advance could be demanded, the refusal of such payment then being sufficient reason to cut off the supply.

It later developed that payments in advance could not be met and several conferences were had with the parties, temporary adjustments being effected.

## CHARGE FOR WATER SUPPLIED AT MARSHALL MONUMENT.

## I. C. 3322.

*Board of Sutter Fort Trustees vs. San Francisco-Oakland Terminal Power Company.* On April 9, 1913, E. M. Lynch, secretary of the Board of Sutter Fort Trustees, forwarded to the Commission a statement showing a charge of \$122.80 made by the San Francisco-Oakland Terminal Power Company for water supplied at Marshall Monument for the season of 1913, the charges for this service having theretofore amounted to but \$60.00 per season. An increased charge was assessed for the year 1912, which, however, was adjusted to correspond with previous years.

A thorough investigation into this matter disclosed the fact that while charges for this service have amounted to only \$60.00 per season, the rate thus collected was not a flat rate, delivery having been made at the company's regular rate of 20 cents per miner's inch for twenty-four hours' run, the fact that the charge amounted to an even \$60.00 in each case being explained by the further fact that a specified quantity of water was ordered for each day's run.

Change of caretakers apparently had the effect of increased hours of usage. After further consideration, complainant decided that under the company's lawfully filed rates it would be necessary to stand the additional expense.

## FULL MINIMUM RATE AT LA MESA.

## I. C. 3325.

April 14, 1914.

*F. M. Oliver vs. Cuyamaca Water Company.* Complaint, alleged demand of full minimum domestic payment when complainant has undertaken a large part of the expense of distribution.

Complaint was covered by a formal hearing then pending.

## POWER BILLS AT SAN RAFAEL.

## I. C. 3340.

*Mrs. Harriett L. B. Norton vs. Chula Vista Water Company.* Complaint, alleged that the Chula Vista Water Company was neglecting to pay its power bills for pumping water and the power supply was cut off, thereby cutting off water service to the district.

The matter was taken up and the power bill was paid.

## SUPPLY FOR NEW TERRITORY.

## I. C. 3355.

April 16, 1914.

*City of Selma vs. San Joaquin Light and Power Corporation.* The board of health of the city of Selma made complaint to this Commission that the San Joaquin Light and Power Corporation of Fresno had refused extension of service into the Booker addition of the town of Selma. This entire tract is provided with sewers and water was desired for flushing these sewers and for domestic purposes.

The matter was taken up with the San Joaquin Light and Power Corporation, which contended that the territory was not profitable, and that it did not have sufficient funds to extend. However, the company agreed to make the extension if the entire cost would be advanced by the consumers, the same to be refunded to the parties making the payment, by furnishing them service until the original amount advanced, together with interest at the rate of 6 per cent, had been refunded. This proposition was laid before complainant and apparently proved satisfactory.

## SERVICE FOR NEW TRACT.

## I. C. 3358.

April 20, 1914.

*E. E. Wilcox vs. Henry C. Jones.* Complaint, alleged illegal rates for water and inadequate service in Alta Vista tract, Oakland.

The investigation proved the plant to be the usual one established by real estate men in opening new tracts. It was not found possible to order the owner of the plant to incur any expense under his contract. The matter of rates was outside the Commission's jurisdiction.

## METER PAYMENT AT LOS ANGELES.

## I. C. 3359.

April 16, 1914.

*David C. Porter vs. Lankershim Water Company.* Complaint, alleged refusal of the company to install a meter and connection unless the complainant made a payment of \$25.00 in advance.

Complainant was informed that it was the general practice of water companies to install meters and connections at their own expense, but that no general order to that effect had been issued by the Commission. He was also informed that it

was beyond the jurisdiction of the Commission to order the company to install the meter and connection at its own expense unless formal complaint was filed and a public hearing held.

#### SCHOOL WITHOUT WATER.

I. C. 3360.

April 21, 1914.

*Manhattan Beach Schools vs. Hermosa Beach Water Company.* Complaint alleged that the school had been without water for a week and probably would have to close if adequate service was not rendered at once by the Hermosa Beach Water Company.

An immediate investigation was made by an engineer of the Commission, who found that the school mentioned was a new building and had only been occupied one week. A service connection, made for construction purposes, had been connected up for domestic use at the school, and no application had been made to the company for its use.

Arrangements were made for a temporary connection from a high tank serving an adjacent portion of the city and the additional pressure thereby secured relieved the complaint.

#### CHARGE FOR METER INSTALLATION.

I. C. 3384.

*G. P. Manchester vs. Peoples Water Company.* On March 16, 1914, G. P. Manchester of San Francisco complained of a charge of \$10.00 made by the Peoples Water Company, covering the installation of a meter upon his premises in Berkeley.

The matter was taken up with the company which advised that in the event of the affirmation of the Commission's decision in the so-called Glendale case, the \$10.00 would be returned to complainant. Mr. Manchester was informed of this statement and expressed entire satisfaction with the plan.

#### INSUFFICIENT DITCH SUPPLY AT FRESNO.

I. C. 3394.

April 11, 1914.

*J. A. Butler et al. vs. Consolidated Canal Company (Davis Ditch).* Complaint, alleged that the consumers on the lower end of the Davis ditch received insufficient water supply due to other consumers on the upper end of the ditch using more than their share. The complainants asked that the canal company maintain and operate its ditch and distribute water pro rata among all consumers, consumers to pay cost of maintenance, operation and replacement.

An investigation in the field and an estimate of the cost of operating, maintaining and repairing the ditch was made and an informal conference between the water company, the consumers and the hydraulic engineer of the Commission was held, and an agreement was reached satisfactory to both consumers and the water company.

#### ALLEGED DISCRIMINATION AT KINGSBURG.

I. C. 3405.

April 28, 1914.

*A. J. Kaiser et al. vs. Consolidated Canal Company.* Complaint, alleged discrimination in the service of water to the users along Cole Slough branch of the Consolidated Canal System.

The company reported that accidents along the line caused the shutting off of water for a few days. Complainants reported on May 25th that they had been receiving their pro rata share of water since April 30th.

#### LOCKING WATER METERS.

I. C. 3412.

*James Walsh vs. Marin Water and Power Company.* On April 28, 1914, James Walsh of Lansdale, Marin County, complained of action on the part of the Marin Water and Power Company in placing its water meters in boxes, and locking the same so as to prevent consumers from keeping record of readings.

This same matter having come to the attention of the Commission on previous occasions, the water company was directed to formulate and file with the Commission a rule guaranteeing to consumers the right of inspection of their meters under reasonable conditions, which rule was filed on February 15, 1914. A copy was forwarded to complainant, with the suggestion that inspection be demanded under its terms.

#### EXCESS CHARGES FOR IRRIGATION.

I. C. 3417.

April 27, 1914.

*C. W. Satterberg vs. Consolidated Canal Company.* Complaint, alleged that complainant was compelled to pay excess charges for water for irrigation at Kingsburg.

At the direction of the Commission, the company proceeded to investigate the charges and to make proper reparation.



# CONVEYANCE OF WATER PRIVATELY OWNED THROUGH MUNICIPALLY OWNED AQUEDUCT.

## I. C. 3421.

*C. E. Bennett vs. Los Angeles Aqueduct.* On April 21, 1914, C. E. Bennett of Independence inquired if the city of Los Angeles could be compelled to accept, at a specified point, convey through its aqueduct and deliver at another given place, private waters to be developed by complainant.

A copy of the Commission's decision in Case No. 304, covering a somewhat similar situation was handed to complainant, who was further advised that the city of Los Angeles was apparently not operating its aqueduct as a public utility, in which case, the power of the Commission would be limited to that extent.

# IMPROPER PRACTICE ALLEGED.

## I. C. 3423.

May 14, 1914.

*Wm. G. Reed vs. North Coast Water Company.* Complaint, alleged improper practice in regard to charges for meters and service connections at Mill Valley.

Complainant was informed that a formal complaint would probably be lodged against the defendant company by the city authorities, asking investigation into the rates and practices of the North Coast Water Company.

# INSTALLATION CHARGES AT SAN DIEGO.

## I. C. 3424.

April 27, 1914.

*Wm. J. Rice vs. Cuyamaca Water Company.* Complaint, alleged that Wm. J. Rice was forced to pay installation charges while his neighbor was not, and asked for information.

Complainant was advised that the Commission's decision affecting this company's rates, etc., requires payment by consumers on and after July 1, 1913.

# ALLEGED OVERCHARGE FOR THREE MONTHS.

## I. C. 3435.

April 30, 1914.

*W. C. Kelly vs. Peoples Water Company.* Complaint, alleged overcharge for water supplied during the months of December, 1913, and January and February, 1914, at Berkeley.

Upon investigation it was found that charges had been assessed in accordance with meter readings for the months shown; the company, however, acting upon the assumption that complainant had received no benefits from increased usage, agreed to refund \$3.50 of the amount charged.

# EXORBITANT DEPOSIT REQUIRED PRIOR TO WATER SERVICE.

## I. C. 3438.

*H. G. Stevens vs. Peoples Water Company.* On January 14, 1914, H. G. Stevens of Richmond made complaint, alleging that the Peoples Water Company demanded a deposit of \$20.00 as a condition precedent to water service to Fair View Hotel, Richmond.

Upon having its attention called to the matter the water company proposed to reduce the amount to \$12.00 (estimated monthly consumption), which proved satisfactory to complainant.

# SERVICE FOR PART OF YEAR.

## I. C. 3440.

May 1, 1914.

*Chas. M. Rhoades vs. Vacaville Water and Light Company.* Complaint, alleged that the company refused to serve an unnamed party for a part of each year and asks if company's action was lawful.

The complainant was advised that the furnishing of water for a part of each year was legal.

# LIMITED ABILITY TO SERVE.

## I. C. 3447.

May 4, 1914.

*C. L. Claffin vs. Bakersfield Water Company.* Complaint, alleged refusal on the part of the water company to furnish water to the complainant, although it has a water main installed about one and one-half blocks distant.

The matter was taken up with the water company and it was found that its ability to serve complainant was very limited and it was requested to take immediate steps to better the condition of its system. Complainant was advised that extension to his proposed residence was not warranted.



DANGER FROM DAM.

I. C. 3449.

April 27, 1914.

*Wallis D. McPherson vs. Mono Lake Company.* Complaint, alleged dangerous condition of dam being constructed on account of which much damage could result as well as loss of life.

Complainant was notified by telegram that personal investigation was impossible at the time, but that if the name of the company constructing the dam was furnished, demand would be made for immediate safeguarding; however, nothing further was heard from the complainant.

CONTAMINATION OF WATER.

I. C. 3450.

May 5, 1914.

*E. H. Armstrong vs. Pacific Gas and Electric Company.* Complaint, alleged improper care to prevent contamination of water at Grass Valley.

The matter being one which is without the jurisdiction of the Commission, complainant's letter was referred to the State Board of Health for investigation.

DAMAGES FROM HIGH WATER.

I. C. 3467.

April 19, 1914.

*Jack McArdle vs. Snow Mountain Water and Power Company.* Location, Potter Valley, Mendocino County. Complaint, alleged damages caused by the water company turning large amounts of high water at times through its power house which caused the flooding of lands belonging to complainant.

The matter was taken up with the company and it was found that the damage was caused by careless handling of the peak loads during the flood seasons. Commission directed that proper safeguards be observed in future.

JURISDICTION AT KING CITY.

I. C. 3477.

May 16, 1914.

*Hubert R. Osburn vs. Local Water Company of King City.* Complaint, requests information as to the Commission's jurisdiction over service or as to service including pressure in hydrants and not including rates.

Mr. Osburn was informed that the Commission has jurisdiction in the matters covered by his inquiry.

RATES IN EFFECT.

I. C. 3478.

*Wm. Wilkinson vs. Encanto Mutual Water Company.* Complaint, request for information as to rates payable by complainant after June 1st.

Mr. Wilkinson was informed that water users under the Encanto system were not affected by the new rates in effect June 1st.

EXTENSION DESIRED.

I. C. 3479.

May 6, 1914.

*H. E. Hallet vs. Bear Gulch Water Company.* Complaint, alleged failure to extend domestic service at Woodside, Redwood City.

The company pleaded an inadequate supply and said that if this extension were made it would further deplete the already insufficient supply for Menlo Park. Due to low rates, it can not develop a further supply. The company was advised to make application to the Commission for an increase in rates; and, until such time as this application is made, it would not be wise to make the desired connection.

TWO MINIMUM RATES.

I. C. 3493.

May 8, 1914.

*Geo. E. H. Satchell vs. Pleasant Valley Water Company.* Complaint, alleged Pleasant Valley Water Company charged two minimum water rates to two houses which were connected to the water company's main through one service and one meter, at Coalinga.

The company was informed that it was not entitled to charge two minimum rates for service through a single connection and meter, but that it might avail itself of the right to charge two minimums by installing separate connections and meters for each of the two houses. It was mutually agreed, however, that the company would allow the present single service connection and meter to remain as it was, and collect the two minimum charges.

## REFUSAL TO EXTEND SERVICE.

I. C. 3502.

May 6, 1914.

*Mrs. Emma Jolley vs. Oro Electric Corporation.* Complaint, alleged refusal of the company to extend service of domestic water to her tract in Oroville, although she has made repeated requests for the same. The company refused to extend to her property on the ground that the returns would not be compensatory.

The matter was taken up with the water company, and the Commission was informed that the extension desired would require an investment of over \$500.00, and that the maximum returns would only amount to \$30.00 per annum, which would not make the extension compensatory.

As a compromise, it was suggested that complainant place a deposit covering the cost of this extension, the same to be returned when the receipts from water sales reached such a sum as to provide reasonable returns upon the investment. The complainant, however, did not seem to care to follow the suggestion.

## INEFFICIENT SERVICE.

I. C. 3503.

February 17, 1914.

*Carmel Civic Center vs. Monterey County Water Works.* Complaint, alleged inefficient service and unjust application of the rates then in effect.

Complainant was informed that this matter would be covered by the Commission's order in Case No. 500, and Application No. 950.

## IMPROPER REGULATIONS AT HENLEYVILLE.

I. C. 3504.

May 10, 1914.

*Jay Mullen vs. The Thomes Creek Colony of Tehama County.* Complaint, alleged improper regulations established for the distribution of the water supply on account of which the complainant and others in the locality were suffering.

Complainant was requested to furnish more specific information in regard to his complaint and to advise as to whether or not the company was a public utility or a mutual concern. Information was not furnished.

## UNPAID BILL STOPPED SERVICE.

I. C. 3506.

May 12, 1914.

*A. G. Metz vs. Monterey County Water Works.* Complaint, alleged that the company refused to commence service until an old bill for water supplied to a farmer, owner of the property, had been paid.

The matter was taken up with the company which stated that it had demanded this payment in accordance with an ordinance of the city of Monterey, which was the only protection against transient tenants. The Commission, however, suggested that it refund the payment made by complainant, and if desired, the matter of rules and regulations could be made the subject of separate correspondence with the Commission.

## NO JURISDICTION.

I. C. 3516.

May 10, 1914.

*H. P. Dwight vs. West Side Canal and Irrigation Company.* Complaint, alleged unjust interest charge made by the company on overdue accounts at Porterville.

Complainant was informed that the Commission had no jurisdiction in matters of that kind.

## NO JURISDICTION.

I. C. 3517.

May 14, 1914.

*P. N. Warner vs. Reedley Water Works.* Complaint, alleged discrimination practiced in meter and flat rates by a municipally owned water utility.

Complainant was advised that the Commission had no jurisdiction over rates within an incorporated city owning its own water system.

## PIPES IN POOR CONDITION.

I. C. 3520.

May 4, 1914.

*C. L. Clafin vs. Bakersfield Water Company.* Complaint, alleged refusal of the company to provide service on a tract of land where complainant was about to erect a residence, within the city limits of Bakersfield and one and a half blocks from the main of the company.

The matter was investigated, and it was found that the water pipes were in such extremely poor condition that any additional pressure would cause damage. The complainant was informed that it would be advisable for him to erect a small storage tank and pump, in order to receive a water supply. However, the company agreed to install new pipe lines wherever advisable.

ADJUSTMENT OF WATER RATES IN SONORA.

I. C. 3522.

*Frank Mallard vs. Sierra and San Francisco Power Company.* On May 10, 1914, Frank Mallard, city clerk for the city of Sonora, wrote the Commission requesting that the matter of regulating water rates in the city of Sonora be taken up.

Mr. Mallard was advised that the city authorities, or other interested citizens, usually took the initiative in matters of this kind. A copy of the Commission's Rules of Procedure was enclosed for guidance in bringing the question before the Commission.

INTEREST CHARGE FOR OVERDUE BILL.

I. C. 3540.

May 13, 1914.

*Mrs. S. E. Goss Malm vs. East Side Canal and Irrigation Company.* Location, Stevinson Colony, Merced County. Complaint, alleged interest charge made by the defendant company on water bill overdue, although she had tendered the money in payment of the bill before the same became due, and same had been refused by the company.

The matter was taken up with the company, which advised that payments were received from consumers subject to the final decision of the Commission in Cases Nos. 298 and 309. Complainant was so informed.

EXTENSION REFUSED.

I. C. 3543.

May 18, 1914.

*A. S. Perry vs. North Coast Water Company.* Complaint, alleged refusal of the defendant company to make extension to his property at Mill Valley unless the complainant would pay \$15.00 for the replacement of three hundred feet of pipe line and a further payment of \$15.00 for the service connection.

The water company was informed that it would be consistent with the ruling of the Commission in such cases if it would make the connection and extension at its own expense. The matter was settled satisfactorily to the complainant.

OVERCHARGE RECTIFIED.

I. C. 3576.

May 16, 1914.

*W. I. Pixley vs. Marin Water and Power Company.* Complaint, alleged that an overcharge had been made for water passing through his meter because rates were collected from others, as well as himself, for the same use of water.

The matter was taken up with the company and the statement of complainant was substantiated. A letter was received from the company stating that they would rectify the overcharge of \$3.05.

ADVANCED PAYMENT FOR METER.

I. C. 3581.

May 20, 1914.

*Mrs. Emily Matthews vs. Inglewood Water Company.* It was alleged that the water company charged \$11.00, payable in advance, for a meter and valve.

Complainant was advised that no general order had been issued by the Commission requiring water companies to install meters at their own expense, although in a few cases such a ruling had been made, and that no relief from this charge could be given her except through a formal complaint and public hearing.

EXCESSIVE RATE ALLEGED.

I. C. 3583.

May 21, 1914.

*Barclay McCowan vs. Western Water Company.* Complaint alleged excessive rate for water supplied in the Great Kern County Oil Fields, near Bakersfield.

Complainant was informed that he should furnish more specific data. This case was later incorporated in a formal complaint.

MUDDY WATER AT EAST AUBURN.

I. C. 3585.

May 20, 1914.

*J. W. Clarke vs. Pacific Gas and Electric Company.* Complaint alleged that water furnished by the company was on several occasions so thick with mud that it would hardly pass through the pipes.

Complainant was informed that the matter complained of would come under the jurisdiction of the State Board of Health.

SERVICE CONNECTIONS AT MILL VALLEY.

I. C. 3639.

May 28, 1914.

*Mrs. L. L. Dobbs vs. North Coast Water Company.* Complaint alleged that North Coast Water Company charged \$15.00, payable in advance, for service connections to complainant's property.



Complainant was advised that she would be required to pay the amount unless she brought the matter before the Commission for formal investigation, in which case the Commission would undoubtedly order the company to discontinue said charge.

#### WATER FOR RICE CROPS.

I. C. 3640.

May 5, 1914.

*W. S. Mawhiney et al. vs. Richvale Land Company.* Complaint, alleged that water was withheld until so late a date that rice crops could not be properly matured, at Biggs, Butte County.

Richvale Land Company not being a public utility, the Commission had no jurisdiction. Complainant was advised either to form a water users' association to maintain and operate Richvale Land Company's ditches or to file a formal complaint asking that this Commission order the Sutter-Butte Canal Company, the parent concern, to maintain and operate the ditches.

#### TWO RATES ALLEGED.

I. C. 3643.

May 28, 1914.

*Mrs. Thomas Rasey vs. Hawthorne Electric and Water Company.* Complaint alleged that Hawthorne Electric and Water Company maintained two sets of rates—one flat, the other metered—notwithstanding the commission's order establishing meter service throughout the entire system. Complainant stated that meters had not been installed as ordered, and that two systems of charges were, in effect, a discrimination.

The water company admitted that, owing to financial straits, it had been unable to install all meters within time limit set by the Commission, but that work was proceeding as rapidly as possible and would be completed as soon as the necessary funds could be raised.

Complainant was informed of the facts and requested to cooperate with the Commission to the end that the company's service might not be injured while completing the installation of full metered service.

#### DISCRIMINATION ALLEGED AT DOS PALOS.

I. C. 3648.

June 16, 1914.

*A. P. Kinser vs. San Joaquin and Kings River Canal and Irrigation Company.* Complaint alleged discrimination in distribution of irrigation water, on account of which crops have suffered.

The matter was taken up with the company which advised that bill for water was not paid by complainant, and further, that he had not done his part in cleaning out the lateral leading to his property, which reasons justified their refusal to supply him. However, complainant is now being furnished with water, with assurance of adequate supply in the future.

#### PRESSURE LACKING.

I. C. 3651.

June 1, 1914.

*Mrs. S. B. Hanton vs. Uroker Land Company.* Complaint alleged inadequate service furnished by the company at Fairfax. At times the pressure was so poor that no water was obtained at all.

The company stated that on account of the few consumers desiring water in the beginning of the summer season, the hill portion of the tract where complainant resides is not served separately but is connected with the whole system, which prevents the water from remaining in the pipes too long; that on the particular date complained of a moving picture company was operating in the vicinity and much water was wasted by them.

However, complainant was advised that her service would be given further consideration at the hearing on the company's application to raise rates.

#### UNJUST CHARGE SETTLED.

I. C. 3653.

June 2, 1913.

*E. K. Carey vs. Consolidated Water Company of Pomona.* Complaint alleged an unjust charge for water used by two parties and passing through one service connection.

An inquiry was instituted, but the company and complainant arrived at a settlement of the difficulty which made further investigation by the Commission unnecessary.



FIVE YEARS OF NONUSE.

I. C. 3676.

June 3, 1914.

*Annie H. Cook vs. South Feather Land and Water Company.* Location at Hurleton, Butte County. Complaint, refusal of the defendant company to deliver water to the complainant after years of nonuse, during which time water was received from another source.

Complainant was advised that her interest would be given consideration along with others when the Commission rendered its decision in the case against the company then pending.

ALLEGED REFUSAL TO DELIVER AT TAFT.

I. C. 3678.

June 4, 1914.

*Phoenix Refining and Manufacturing Company vs. Consumers Water Company.* Complaint, alleged refusal of the company to deliver water to complainant, except upon deposit of \$10.00 for a meter.

Complainant was advised that the charge made by the defendant company appeared to have been authorized.

ERRONEOUS METER READING.

I. C. 3681.

June 6, 1914.

*H. P. Tyson vs. South San Francisco Water Company.* Complaint, alleged that an erroneous recording was made of a meter dial and the charges made for water worked to the hardship of complainant.

The recurring trouble with this meter seemed to warrant a personal investigation which resulted in a recommendation to the company that they install a direct reading dial meter. An adjustment was suggested as to the amount of the bills for water used during the time the meter reading was in dispute.

WATER UNFIT TO DRINK.

I. C. 3723.

June 12, 1914.

*R. L. Thompson vs. California-Michigan Land and Water Company.* Complaint, alleged that water furnished by defendant was unfit for drinking purposes at San Gabriel; also that service was inadequate.

The matter was taken up with the company, which stated that water supplied was used for both irrigation and domestic purposes, but principally for irrigation use. The reservoir was examined and found to be clean; water became stale at times because of nonuse, a condition which the company could not then remedy.

WATER FOR CEMETERY AT ETNA MILLS.

I. C. 3728.

June 10, 1914.

*Etna Lodge of Odd Fellows vs. Etna Development Company.* Complaint, refusal of the company to furnish water to certain persons desiring same for use on lots in the Odd Fellows' cemetery. Requested that rate of \$1.50 in effect at other cemeteries be applied.

The matter was taken up with the company which averred that it did not own the pipe lines in the cemetery. The company requested that the complainants' gate to control the flow of water into the cemetery be ceded to it in lieu of which the company would place a gate of its own connecting up with the system if the same was paid for by the consumers. The Commission informed the company that the water users should not be expected to pay a charge of \$5.00 for 1-inch pipe taps, although the company should not be required to deliver water for more than one customer through a single tap for a single payment.

The complainant was advised to confer with the defendant company in regard to a settlement.

INADEQUATE IRRIGATION SUPPLY.

I. C. 3743.

June 10, 1914.

*W. M. Starling vs. Oro Loma Farms Company.* South Dos Palos. Complaint alleged inadequate water supply for irrigation and failure to deliver water at seasonable time.

The matter was taken up with the complainant. Later it was found that this matter was covered by another action against the Oro Loma Farms Company to which this complaint was transferred.

EXORBITANT RATES.

I. C. 3745.

June 12, 1914.

*C. B. Hurlbut vs. Peoples Water Company.* Complaint alleged exorbitant rates charged by the company at Oakland.

Complainant was advised that formal complaint and public hearing would be necessary to make a complete investigation into the rates of this company, and was furnished a copy of the Rules of Procedure of the Commission, as a guide to filing such complaint.

#### NONUSE AT NEW MONTEREY.

I. C. 3781.

June 13, 1914.

*J. O'Connor vs. Monterey County Water Works.* Complaint, alleged that charge was made by the company when no water was used on the complainant's property; however, complainant had failed to notify the company to turn the water off.

Complainant was informed that the charge made by the water company was a fair one if the company had not been notified in advance of the nonuse of water.

#### SERVICE DISCONTINUED.

I. C. 3787.

June 16, 1914.

*School Board of San Martin vs. J. Frank Jackson* (water corporation). Complaint, discontinuance of water service at the public schoolhouse in the town of San Martin, due to disagreement as to proper rate to be charged.

The water company was ordered to restore service at once, and continue to charge rate of \$18.00 per year as heretofore in force and filed with the Commission. Water service was promptly restored and complainant satisfied.

#### INFORMATION SOUGHT.

I. C. 3790.

June 17, 1914.

*J. H. Strine, Secretary Downey Land and Improvement Association.* J. H. Strine, secretary Downey Land and Improvement Association, inquired as to what method of procedure he should follow in order to advance his water rates, to install meters, and establish a minimum rate thereunder; also to sell or transfer the property of said association.

Inquiries answered and full information furnished.

#### TEN DOLLAR DEPOSIT AT TAFT.

I. C. 3803.

June 16, 1914.

*E. Dugas vs. Consumers Water Company.* Complaint, alleged that water company refused to render service to the complainant unless he made a deposit of \$10.00 for a meter.

This matter was taken up with the company, which admitted that it believed it was unjustly taxing the consumers in demanding the \$10.00 deposit, but that it was following the method in vogue at the time it took over the Taft Public Utilities Company, and that it would welcome a ruling of this Commission which would wipe out this deposit.

The company was advised that an order from the Commission would not be necessary if it desired to abandon this charge.

#### CLOSING OF VALVE.

I. C. 3805.

June 18, 1914.

*Mrs. J. G. Brison vs. Mt. Jackson Water and Power Company.* Complaint, alleged an inadequate supply of water furnished by the company on account of smallness of mains at Rionido.

This complaint was taken up with the water company, and the Commission was advised that larger mains had just been installed but that the trouble was caused by some one closing the valve on the main. An adequate supply was assured in the future.

#### THREATENED DISCONTINUANCE AT LOS ANGELES.

I. C. 3807.

June 1, 1914.

*Mrs. T. H. Young vs. Union Hollywood Water Company.* Complaint, alleged that water company threatened to discontinue service because of unpaid bills against other property of the complainant.

This matter was taken up with the company which was informed that its only legal redress for bills remaining unpaid appeared to be through previous agreement on application for turning on water.

#### CONTAMINATED WATER.

I. C. 3852.

June 20, 1914.

*Consumers vs. McEwen Brothers Water Utility of Richmond.* Complaint, alleged inadequate water supply for domestic purposes, for about 150 consumers. It is also stated that the quality of the water is objectionable.

This matter was taken up with McEwen Brothers and it was found that they obtain most of their supply from wells which have become contaminated.

This case has since been merged into Case No. 626 for further investigation.

UNREASONABLE RATES ALLEGED.

I. C. 3870.

June 22, 1914.

*Lemon Grove Mutual Water Company vs. Cuyamaca Water Company.* Complaint, alleged unreasonable rates charged by the water company.

Complainant was advised that the matters would be given consideration at the time of the hearing of Case No. 631 then pending before the Commission.

MERGED INTO FORMAL COMPLAINT.

I. C. 3875.

June 25, 1914.

*A. D. Shaw vs. Hollister Water Company.* Complaint, alleged unreasonable rates charged by the company for water.

Complainant was provided with a copy of the Rules of Procedure, and a formal complaint was later filed by him.

## GENERAL ORDERS.

The following general orders were approved by the Commission during the fiscal year, June 30, 1913, to June 30, 1914:

	Date approved	Date effective
No. 35 -----	July 30, 1913	July 30, 1913
No. 36 -----	Aug. 7, 1913	Aug. 7, 1913
No. 37 -----	Oct. 8, 1913	Oct. 8, 1913
No. 38 -----	Oct. 18, 1913	Oct. 18, 1913

## GENERAL ORDER No. 35.

*In the matter of refunding of notes.*

Approved July 30, 1913. Effective July 30, 1913.

Whereas, Section 52 of the Public Utilities Act provides in part that "a public utility may issue notes, for proper purposes and not in violation of any provision of this act or any other act, payable at periods of not more than twelve months after the date of the issuance of the same, without the consent of the Commission, but no such note shall, in whole or in part, be refunded by any issue of stocks or stock certificates, or of bonds, notes of any term or character or any other evidence of indebtedness, without the consent of the Commission."

It is hereby ordered that in case a public utility issues its note for a proper purpose and not in violation of any provision of the Public Utilities Act or any other act, payable at a period of not more than twelve months after the date of issuance of the same, the Railroad Commission hereby gives its consent to the renewal or refunding of such note by means of another note or notes, without application having first been made to the Railroad Commission, provided that the combined terms of the original note and the renewal or refunding note or notes shall not exceed the period of twelve months. In each such case the utility must immediately send to the Railroad Commission a written statement showing all the terms, both of the original note and of the renewal or refunding note or notes. As a demand note is payable at any time when demand is made, which time may be more than twelve months after its execution, such note will be considered as being a note payable at a period of more than twelve months after the date of issuance of the same.

RAILROAD COMMISSION OF THE STATE OF CALIFORNIA.

By CHARLES R. DETRICK, Secretary.

## GENERAL ORDER No. 36.

(Cancels General Order No. 30.)

*In the matter of depots, sidings and spur tracks of common carriers.*

Approved August 7, 1913. Effective August 7, 1913.

1. It is hereby ordered by the Railroad Commission of the State of California that whenever a depot is constructed in this state by a railroad corporation at any station, or an agency established at any depot, or a siding, spur, or other track is constructed for the reception and delivery of freight, the Commission shall be immediately supplied with information regarding the same, including the name of the station or agency, and the name, location, and length of such track. The distance to the nearest tenth of mile of such station or track from existing stations on each side shall at the same time be given; provided, however, that this section shall not apply to tracks constructed for temporary purposes.

2. It is further ordered that no railroad corporation shall move or abandon any depot or station building, or abandon an agency at any depot, or take up or discontinue the use of any siding, spur, or other track upon which passengers or freight have been received or discharged, without first having made application to and received the consent of this Commission; provided, however, that this section shall not apply to temporary tracks, nor to the extension or alteration of tracks which shall continue to serve the purposes for which they were constructed, nor to tracks which have been constructed under special contracts, wherein time limits or other conditions affecting their permanency are specified.



3. It is further ordered that when any railroad corporation makes application to move or abandon any depot or station building, abandon an agency at any depot or station building, the following information shall accompany the application:

(a) The name of and the distance to the nearest tenth of a mile of such station from existing agency stations on each side shall be given.

(b) The number of passenger tickets sold during the last preceding twelve months together with the revenue received therefrom shall be given.

(c) The tonnage of freight forwarded and received in carload lots and less than carload lots together with the revenue received therefrom for the last preceding twelve months shall be given.

(d) The tonnage of the principal commodities forwarded and received and the revenue received therefrom for the last preceding twelve months shall be given.

(e) The names and addresses of the principal receivers and shippers of freight who would be affected by the change.

RAILROAD COMMISSION OF THE STATE OF CALIFORNIA.

By CHARLES R. DETRICK, Secretary.

GENERAL ORDER No. 37.

*In the matter of sanitary drinking cups on passenger trains.*

Approved October 8, 1913. Effective October 8, 1913.

It is hereby ordered that all passenger cars of steam railroads and interurban electric railroads in the State of California that constitute a train or part of a train whose schedule time between terminals exceeds one hour and thirty minutes, shall be so provided with sanitary individual drinking cups that passengers on said passenger cars may be able to purchase one or more cups at a price not to exceed one cent each, and the traveling public shall be so notified by means of a poster card notice placed in a conspicuous place at or near the water tank in each passenger car.

RAILROAD COMMISSION OF THE STATE OF CALIFORNIA.

By CHARLES R. DETRICK, Secretary.

GENERAL ORDER No. 38.

*In the matter of requiring all public utilities, including common carriers, to file certain information showing the history of their organization and development.*

Approved October 18, 1913. Effective October 18, 1913.

It is hereby ordered that all public utilities, including common carriers, subject to the jurisdiction of the Railroad Commission of the State of California shall, within three months from the date of this order, file with the Commission the following information:

1. Copy of all annual reports rendered to stockholders from date of organization.
2. Copy of all annual reports rendered to stockholders by affiliated, subsidiary or holding corporations.
3. Copies of all franchises under which the public utility is operating in California.
4. Certified copies of all mortgages, deeds of trust and contracts, original and supplementary, issued to secure any bond, note, certificate, or other indebtedness.
5. Historical review of the organization of the utility and its development up to the present time. This sketch should give a complete history of the life of the utility and should contain all matters of general interest, such as the reasons for the organization of the utility, the field of enterprise it was designed to cover, the personnel of the directorate or management and the manner in which the utility has developed.
6. A copy of books or pamphlets issued descriptive of the utility and its work.

The data herein requested is desired by the Commission as the nucleus of a statistical library on the public utilities of California.

If any of the information herein specified has already been filed with the Commission, a statement of that fact together with a statement of the proceeding in connection with which the information was filed should be given.

RAILROAD COMMISSION OF THE STATE OF CALIFORNIA.

By CHARLES R. DETRICK, Secretary.



# STEAM RAILROADS.

TABLES 1 TO 18, INCLUSIVE.

TABLE

LIST OF OPERATING RAILROADS IN CALIFORNIA

	Amador Central Railroad Company	Arcata and Mad River Railroad Company
Location of general office.....	Martell, Cal.	Arcata
<i>Mileage Owned.</i>		
Miles of main line—single track.....	12	14
Miles of main line—second track.....		
Miles of branches and spurs.....		7.25
Line of proprietary company.....		
Line operated under lease.....		
Line operated under contract.....		
Line operated under trackage rights.....		
Miles of yard track and sidings.....	2.48	6.75
Aggregate track mileage operated.....	14.48	28
New line constructed during year.....		

<sup>1</sup>Leased from Central Pacific Railroad Company and Southern Pacific Company.

TABLE NO. 1

LIST OF OPERATING RAILROADS IN CALIFORNIA

	Camino, Placer- ville and Lake Tahoe Railroad Company	Cement, Tolenas and Tidewater Railroad Company
Location of general office.....	Camino	San Francisco
<i>Mileage Owned.</i>		
Miles of main line—single track.....	8.05	2
Miles of main line—second track.....		
Miles of branches and spurs.....		3
Line of proprietary company.....		
Line operated under lease.....		
Line operated under contract.....		
Line operated under trackage rights.....		
Miles of yard track and sidings.....	.99	1
Aggregate track mileage operated.....	9.04	6
New line constructed during year.....		



## No. 1.

AND THE TRACK MILEAGE ON JUNE 30, 1913.

Atchison, Topeka and Santa Fe Railway Company	Bay Point and Clayton Railroad Company	Boca and Loyalton Railroad Company	Bucksport and Elk River Railroad Company	Butte County Railroad Company <sup>1</sup>	California West- ern Railroad and Navigation Company
Chicago, Ill.	San Francisco	San Francisco	Eureka	Chico	San Francisco
655.77	8.19	42.35	8.16	-----	39.55
39.75	-----	-----	-----	-----	-----
232.22	.55	9.61	.48	-----	3.22
-----	-----	-----	-----	-----	-----
652.53	-----	-----	-----	30.57	-----
-----	-----	-----	-----	-----	-----
106.72	-----	2.75	-----	.93	-----
445.42	-----	9.32	1	1.74	8.54
-----	-----	-----	-----	-----	-----
2,112.41	8.74	64.03	9.64	33.24	51.31
77.06	-----	-----	-----	-----	-----
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—Continued.

AND THE TRACK MILEAGE ON JUNE 30, 1913.

Colusa and Lake Railroad Company	Crescent City Railway	Diamond and Caldor Railroad Company	Holton Interurban Railway Company	Iron Mountain Railway Company	Lake Tahoe Railway and Transportation Company
Colusa	Riverside	Oakland	Redlands	San Francisco	Tahoe
22	6.49	33	10.47	11	14.75
-----	.35	.69	-----	3	1.83
-----	-----	-----	18.74	-----	-----
-----	1.53	-----	-----	-----	-----
4	.11	1	.66	-----	.75
-----	-----	-----	-----	-----	-----
26	8.48	34.69	29.87	14	17.33
-----	-----	-----	-----	-----	-----

TABLE No. 1

LIST OF OPERATING RAILROADS IN CALIFORNIA

	Los Angeles and San Diego Beach Railway Company	McCloud River Railroad Company
Location of general office.....	San Diego	San Francisco
<i>Mileage Owned.</i>		
Miles of main line—single track.....	17.61	49.50
Miles of main line—second track.....		
Miles of branches and spurs.....		32.18
Line of proprietary company.....		
Line operated under lease.....		
Line operated under contract.....		
Line operated under trackage rights.....		
Miles of yard track and sidings.....	3.92	15.66
Aggregate track mileage operated.....	21.54	97.34
New line constructed during year.....		2.58

<sup>1</sup>Leased from Modesto Interurban Railway.<sup>2</sup>Entire line.<sup>3</sup>Third rail.

TABLE No. 1

LIST OF OPERATING RAILROADS IN CALIFORNIA

	Pacific Coast Railway Company	Pajaro Valley Consolidated Railroad Company
Location of general office.....	Seattle, Wash.	San Francisco
<i>Mileage Owned.</i>		
Miles of main line—single track.....	75.99	27.25
Miles of main line—second track.....		
Miles of branches and spurs.....	27.06	14.21
Line of proprietary company.....		
Line operated under lease.....		
Line operated under contract.....		
Line operated under trackage rights.....		
Miles of yard track and sidings.....	12.63	9.65
Aggregate track mileage operated.....	115.68	51.11
New line constructed during year.....		

<sup>1</sup>Leased to Holton Interurban Railway Company, 10.19 miles.

--Continued.

AND THE TRACK MILEAGE ON JUNE 30, 1913.

Mill Valley and Mt. Tamalpais Scenic Railway	Modesto and Empire Traction Company <sup>1</sup>	Nevada-Califor- nia-Oregon Railway Company <sup>2</sup>	Nevada County Narrow Gauge Railroad Company	Northwestern Pacific Railroad Company	Ocean Shore Railroad Company
Mill Valley	Modesto	Reno, Nev.	Grass Valley	San Francisco	San Francisco
8.19	-----	237.85	21.90	303.79	54.76
2.43	-----	.73	<sup>3</sup> 2.80	12.25	1.16
-----	-----	-----	-----	120.33	9.96
-----	5	-----	-----	-----	-----
-----	-----	-----	-----	-----	-----
1	.50	11.10	4.56	90.11	-----
11.62	5.50	249.68	29.26	526.48	65.88
-----	-----	.21	4.49	-----	-----

--Continued.

AND THE TRACK MILEAGE ON JUNE 30, 1913.

Quincy Western Railroad Company	Sacramento Valley and Eastern Railway	San Diego and Southeastern Railway Company	San Diego and Arizona Railway Company <sup>1</sup>	San Joaquin and Eastern Railroad Company	San Pedro, Los Angeles and Salt Lake Rail- road Company
San Francisco	Winthrop	San Diego	San Diego	Los Angeles	Los Angeles
6	15	43.44	24.45	55.92	187.72
-----	-----	30.10	.66	-----	58.69
-----	-----	-----	-----	-----	-----
-----	-----	3.10	-----	-----	155.71
-----	-----	17.67	3.30	4.48	109.98
6	15	94.31	28.41	60.40	512.10
-----	-----	1.12	-----	2.51	-----

TABLE No. 1

LIST OF OPERATING RAILROADS IN CALIFORNIA

	Sierra Railway Company of California	South San Francisco Belt Railway Company
Location of general office.....	Jamestown	San Francisco
<i>Mileage Owned.</i>		
Miles of main line—single track.....	56.65	
Miles of main line—second track.....		
Miles of branches and spurs.....	19.30	
Line of proprietary company.....		
Line operated under lease.....		
Line operated under contract.....		
Line operated under trackage rights.....		
Miles of yard track and sidings.....	8.60	3
Aggregate track mileage operated.....	84.55	3
New line constructed during year.....	.31	

¹Entire line.

TABLE No. 1

LIST OF OPERATING RAILROADS IN CALIFORNIA

	Ventura County Railway Company	Western Pacific Railway Company
Location of general office.....	Oxnard	San Francisco
<i>Mileage Owned.</i>		
Miles of main line—single track.....	5.64	377.10
Miles of main line—second track.....		.39
Miles of branches and spurs.....	15.87	16.54
Line of proprietary company.....		
Line operated under lease.....		
Line operated under contract.....		
Line operated under trackage rights.....		
Miles of yard track and sidings.....	2.69	103.67
Aggregate track mileage operated.....	24.20	497.70
New line constructed during year.....	1.26	1.79



—Continued.

AND THE TRACK MILEAGE ON JUNE 30, 1913.

Southern Pacific Company	Stockton Terminal and Eastern Rail- road Company	Stone Canyon Railroad	Sugar Pine Railroad Company	Sunset Railway Company	Tonopah and Tidewater Railroad Company <sup>1</sup>
San Francisco	Stockton	San Francisco	Sonora	Los Angeles	Oakland
9.84	17.9	21.07	14.15	50.10	166.08
9.84					
31.58	2.2				6.98
5,898.86					
5.19			9.46	27.23	9.53
65.68		.99	2.42	33.11	9.49
6,020.99	20.1	22.06	26.03	110.44	192.08
66.27	2.7			4.99	.04

—Concluded.

AND THE TRACK MILEAGE ON JUNE 30, 1913.

Yosemite Valley Railroad Company	Yreka Railroad Company	Total
Merced	San Francisco	
77.90	7.50	2,801.08
		66.85
1.46		651.82
		706.84
		5,898.86
		322.15
8.84		1,006.82
88.20	7.50	11,454.42
.32		165.65

TABLE

CAPITAL STOCK, MORTGAGE BONDS AND OTHER LIABILITIES

	Amador Central Railroad Company	Arcata and Mad River Railroad Company
Mileage owned in California .....	12	21.25
Capital stock outstanding.....	\$400,000 00	\$187,740 00
Capital stock per mile of road.....	33,333 00	8,835 00
Bonds outstanding .....	300,000 00	-----
Bonds per mile of road.....	25,000 00	-----
Total stock and bonds outstanding.....	700,000 00	187,740 00
Total stock and bonds per mile of road.....	58,333 00	8,835 00
Other liabilities outstanding .....	26,455 00	4,657 00
Other liabilities per mile of road.....	2,205 00	219 00
Total liabilities outstanding.....	726,455 00	192,397 00
Total liabilities per mile of road.....	60,538 00	9,054 00

<sup>1</sup>Capitalization per mile figured on entire line.

<sup>2</sup>Leased from Central Pacific Railroad Company and Southern Pacific Company.

<sup>3</sup>No balance sheet reported.

TABLE No. 2

CAPITAL STOCK, MORTGAGE BONDS AND OTHER LIABILITIES

	Camino, Placer- ville and Lake Tahoe Railroad Company	Cement, Tolenas and Tidewater Railroad Company
Mileage owned in California.....	8.05	3.5
Capital stock outstanding.....	\$100,000 00	\$256,000 00
Capital stock per mile of road.....	12,422 00	73,142 00
Bonds outstanding .....	100,000 00	-----
Bonds per mile of road.....	12,422 00	-----
Total stock and bonds outstanding.....	200,000 00	256,000 00
Total stock and bonds per mile of road.....	24,844 00	73,142 00
Other liabilities outstanding .....	9,805 00	18,511 00
Other liabilities per mile of road.....	1,218 00	5,289 00
Total liabilities outstanding.....	209,805 00	274,511 00
Total liabilities per mile of road.....	26,062 00	78,431 00

<sup>1</sup>Represents investment of \$352,846.00. Road owned by individual.

## No. 2.

## OF CALIFORNIA RAILROADS ON JUNE 30, 1913.

Atchison, Topeka and Santa Fe Railway Company <sup>1</sup>	Bay Point and Clayton Railroad Company	Boca and Loyalton Railroad Company	Bucksport and Elk River Railroad Company	Butte County Railroad Company <sup>2</sup>	California West- ern Railroad and Navigation Company
907.74	8.19	51.96	8.64	33.24	42.77
\$305,080.530 00	\$150,000 00	\$1,200,000 00	\$500,000 00	\$41,800 00	\$1,000,000 00
28,366 00	18,327 00	23,094 00	57,875 00	-----	23,381 00
322,439,045 00	-----	432,000 00	-----	-----	600,000 00
29,980 00	-----	8,314 00	-----	-----	14,029 00
627,519,575 00	150,000 00	1,632,000 00	500,000 00	41,800 00	1,600,000 00
58,346 00	18,327 00	31,408 00	57,875 00	-----	37,410 00
51,227,443 00	s	456,738 00	-----	26,612 00	385,342 00
4,763 00	-----	8,790 00	-----	-----	9,010 00
678,747,018 00	s	2,088,738 00	500,000 00	68,412 00	1,985,342 00
63,109 00	-----	40,198 00	57,875 00	-----	46,420 00

—Continued.

## OF CALIFORNIA RAILROADS ON JUNE 30, 1913.

Colusa and Lake Railroad Company	Crescent City Railway	Diamond and Caldor Railroad Company	Holton Interurban Railway Company	Iron Mountain Railway Company	Lake Tahoe Railway and Transportation Company
22	6.84	33.69	10.47	14	16.58
\$100,500 00	-----	\$240,000 00	\$200,000 00	\$100,000 00	\$500,000 00
4,568 00	-----	7,124 00	19,102 00	7,143 00	30,157 00
50,000 00	-----	225,000 00	100,000 00	-----	500,000 00
2,272 00	-----	6,678 00	9,551 00	-----	30,157 00
150,500 00	-----	465,000 00	300,000 00	100,000 00	1,000,000 00
6,840 00	-----	13,802 00	28,653 00	7,143 00	60,314 00
-----	<sup>1</sup> \$876,269 00	146,575 00	45,633 00	288 00	110,962 00
-----	55,010 00	4,351 00	4,358 00	20 00	6,692 00
150,500 00	376,269 00	611,575 00	345,633 00	100,288 00	1,110,962 00
6,840 00	55,010 00	18,153 00	33,011 00	7,163 00	67,006 00

TABLE No. 2

CAPITAL STOCK, MORTGAGE BONDS AND OTHER LIABILITIES

	Los Angeles and San Diego Beach Railway Company	McCloud River Railroad Company
Mileage owned in California.....	17.61	81.68
Capital stock outstanding.....	\$711,000 00	\$1,200,000 00
Capital stock per mile of road.....	40,375 00	14,691 00
Bonds outstanding.....		1,200,000 00
Bonds per mile of road.....		14,692 00
Total stock and bonds outstanding.....	711,000 00	2,400,000 00
Total stock and bonds per mile of road.....	40,375 00	29,383 00
Other liabilities outstanding.....	171,415 00	185,322 00
Other liabilities per mile of road.....	9,734 00	2,268 00
Total liabilities outstanding.....	882,415 00	2,585,322 00
Total liabilities per mile of road.....	50,109 00	31,651 00

<sup>1</sup>Capitalization per mile of road figured on entire system.

<sup>2</sup>Road leased from Modesto Interurban Railway.

<sup>3</sup>Includes assessment of \$576,058.00.

TABLE No. 2

CAPITAL STOCK, MORTGAGE BONDS AND OTHER LIABILITIES

	Pacific Coast Railway Company	Pajaro Valley Consolidated Railroad Company
Mileage owned in California.....	103.05	41.46
Capital stock outstanding.....	\$1,370,400 00	\$1,100,000 00
Capital stock per mile of road.....	13,299 00	26,532 00
Bonds outstanding.....	1,370,000 00	
Bonds per mile of road.....	13,294 00	
Total stock and bonds outstanding.....	2,740,400 00	1,100,000 00
Total stock and bonds per mile of road.....	26,593 00	26,532 00
Other liabilities outstanding.....	232,122 00	5,000 00
Other liabilities per mile of road.....	2,253 00	120 00
Total liabilities outstanding.....	2,972,522 00	1,105,000 00
Total liabilities per mile of road.....	28,846 00	26,652 00

<sup>1</sup>Capitalization figured on entire line mileage.



—Continued.

## OF CALIFORNIA RAILROADS ON JUNE 30, 1913.

Mill Valley and Mt. Tamalpais Scenic Railway	Modesto and Empire Traction Company <sup>2</sup>	Nevada-Califor- nia-Oregon Railway Company <sup>3</sup>	Nevada County Narrow Gauge Railroad Company	Northwestern Pacific Railroad Company	Ocean Shore Railroad Company
10.62	-----	196.92	24.70	470.41	65.88
\$200,000 00	\$20,000 00	\$2,200,000 00	\$250,200 00	\$35,000,000 00	\$4,796,300 00
18,832 00	-----	9,221 00	10,129 00	74,403 00	72,803 00
90,000 00	-----	1,401,000 00	162,000 00	22,664,000 00	-----
8,474 00	-----	5,872 00	6,559 00	48,179 00	-----
290,000 00	20,000 00	3,601,000 00	412,200 00	57,664,000 00	4,796,300 00
27,306 00	-----	15,093 00	16,688 00	122,582 00	72,803 00
82,222 00	7,620 00	655,031 00	308,584 00	1,872,867 00	386,713 00
7,742 00	-----	2,745 00	12,493 00	3,981 00	13,162 00
372,222 00	27,620 00	4,256,031 00	720,784 00	59,536,867 00	5,663,413 00
35,048 00	-----	17,838 00	29,181 00	126,563 00	85,965 00

—Continued.

## OF CALIFORNIA RAILROADS ON JUNE 30, 1913.

Quincy Western Railway Company	Sacramento Valley and Eastern Railway	San Diego and Arizona Railway Company <sup>1</sup>	San Diego and Southeastern Railway Company	San Joaquin and Eastern Railroad Company	San Pedro, Los Angeles and Salt Lake Rail- road Company <sup>1</sup>
6	15	24.45	73.54	55.92	246.41
\$63,881 00	\$500,000 00	\$2,000,000 00	\$1,650,000 00	\$1,000,000 00	\$24,825,000 00
10,647 00	33,333 00	36,197 00	22,437 00	17,883 00	24,594 00
-----	-----	-----	-----	1,000,000 00	54,768,915 00
63,881 00	500,000 00	2,000,000 00	1,650,000 00	17,882 00	54,258 00
10,647 00	33,333 00	36,197 00	22,437 00	2,000,000 00	79,593,915 00
34,648 00	1,747 00	2,844,818 00	239,271 00	35,765 00	78,852 00
5,775 00	117 00	53,747 00	3,253 00	626,773 00	3,687,773 00
98,529 00	501,747 00	4,844,818 00	1,889,271 00	11,208 00	3,653 00
16,422 00	33,450 00	89,944 00	25,690 00	2,626,773 00	83,281,688 00
-----	-----	-----	-----	46,973 00	82,505 00

TABLE No. 2

CAPITAL STOCK, MORTGAGE BONDS AND OTHER LIABILITIES

	Sierra Railway Company of California <sup>1</sup>	South San Francisco Belt Railway Company <sup>1</sup>
Mileage owned in California.....	75.95	-----
Capital stock outstanding.....	\$3,248,000 00	\$50,000 00
Capital stock per mile of road.....	42,764 00	-----
Bonds outstanding.....	2,098,000 00	-----
Bonds per mile of road.....	27,624 00	-----
Total stock and bonds outstanding.....	5,346,000 00	50,000 00
Total stock and bonds per mile of road.....	70,388 00	-----
Other liabilities outstanding.....	130,952 00	32,087 00
Other liabilities per mile of road.....	1,724 00	-----
Total liabilities outstanding.....	5,476,952 00	82,087 00
Total liabilities per mile of road.....	72,112 00	-----

<sup>1</sup>Switching company only.<sup>2</sup>Represents investment of \$265,636.00. Road owned by individual.<sup>3</sup>Capitalization not segregated to railroads.<sup>4</sup>Capitalization per mile of road figured on entire line.

TABLE No. 2

CAPITAL STOCK, MORTGAGE BONDS AND OTHER LIABILITIES

	Ventura County Railway Company <sup>1</sup>	Western Pacific Railway Company <sup>1</sup>
Mileage owned in California.....	21.51	393.64
Capital stock outstanding.....	\$210,000 00	\$75,000,000 00
Capital stock per mile of road.....	9,763 00	80,045 00
Bonds outstanding.....	105,000 00	75,076,250 00
Bonds per mile of road.....	4,881 00	80,127 00
Total stock and bonds outstanding.....	315,000 00	150,076,250 00
Total stock and bonds per mile of road.....	14,644 00	160,172 00
Other liabilities outstanding.....	4,601 00	21,393,771 00
Other liabilities per mile of road.....	214 00	22,833 00
Total liabilities outstanding.....	319,601 00	171,470,021 00
Total liabilities per mile of road.....	14,858 00	183,005 00

<sup>1</sup>Capitalization per mile of road figured on entire line.

—Continued.

OF CALIFORNIA RAILROADS ON JUNE 30, 1913.

Southern Pacific Company <sup>3</sup>	Stockton Terminal and Eastern Rail- road Company	Stone Canyon Railroad	Sugar Pine Railway Company	Sunset Railway Company	Tonopah and Tidewater Railroad Company <sup>4</sup>
51.26	20.1	21.07	14.15	50.10	144.60
\$272,672,405 00	\$263,900 00	-----	\$1,000,000 00	\$1,000,000 00	\$1,000,000 00
-----	13,129 00	-----	70,671 00	19,959 00	5,778 00
165,581,910 00	150,000 00	-----	180,000 00	606,000 00	3,285,344 00
-----	7,463 00	-----	12,721 00	12,095 00	18,984 00
498,254,315 00	413,900 00	-----	1,180,000 00	1,606,000 00	4,285,344 00
-----	20,592 00	-----	83,892 00	32,054 00	24,762 00
140,400,610 00	42,293 00	<sup>2</sup> \$266,681 00	132,116 00	160,387 00	1,169,285 00
-----	2,104 00	12,657 00	9,337 00	3,201 00	6,756 00
578,654,925 00	456,193 00	266,681 00	1,312,116 00	1,766,387 00	5,454,629 00
-----	22,696 00	12,657 00	92,729 00	35,255 00	31,518 00

—Concluded.

OF CALIFORNIA RAILROADS ON JUNE 30, 1913.

Yosemite Valley Railroad Company	Yreka Railroad Company	Total		
79.17	7.50	3,513.62		
\$5,000,000 00	\$100,000 00	\$746,487,656 00		
63,155 00	13,333 00	1,090,842 00		
5,000,000 00	-----	659,484,464 00		
63,155 00	-----	534,663 00		
10,000,000 00	100,000 00	1,405,972,120 00		
126,310 00	13,333 00	1,625,505 00		
2,147,545 00	33,740 00	230,571,684 00		
27,125 00	4,498 00	324,625 00		
12,147,545 00	133,740 00	1,636,393,804 00		
153,435 00	17,831 00	1,931,803 00		

TABLE

GROSS EARNINGS FROM OPERATION OF CALIFORNIA

	Amador Central Railroad Company	Arcata and Mad River Railroad Company
<i>Passenger Earnings</i>		
Passenger revenue .....	\$14,984 07	\$12,532 30
Excess baggage revenue .....	96 93	-----
Mail revenue .....	801 45	662 36
Express revenue .....	2,351 81	287 40
Other revenue from transportation .....	80 00	-----
Other revenue from operation .....	95	-----
Total passenger earnings .....	\$18,315 21	\$13,482 06
<i>Freight Earnings</i>		
Freight revenue .....	\$71,265 86	\$109,621 52
Other revenue from transportation .....	-----	-----
Other revenue from operation .....	732 92	-----
Total freight earnings .....	\$71,998 78	\$109,621 52
Total miscellaneous earnings from operation .....	1,377 64	426 00
Total gross earnings from operation .....	91,691 63	123,529 58

TABLE No. 3

GROSS EARNINGS FROM OPERATION OF CALIFORNIA

	Camino, Placerville and Lake Tahoe Rail- road Company	Cement, Tolenas and Tidewater Rail- road Company
<i>Passenger Earnings</i>		
Passenger revenue .....	\$631 15	\$871 04
Excess baggage revenue .....	-----	9 64
Mail revenue .....	-----	80 79
Express revenue .....	-----	373 97
Other revenue from transportation .....	-----	120 00
Other revenue from operation .....	-----	-----
Total passenger earnings .....	\$631 15	\$1,455 44
<i>Freight Earnings</i>		
Freight revenue .....	\$9,028 47	\$79,856 83
Other revenue from transportation .....	298 75	2,225 00
Other revenue from operation .....	-----	-----
Total freight earnings .....	\$9,327 22	\$82,081 83
Total miscellaneous earnings from operation .....	50 00	-----
Total gross earnings from operation .....	\$10,008 37	\$83,537 27

From December 26, 1912 to June 30, 1913.



## No. 3.

## RAILROADS DURING THE YEAR ENDING JUNE 30, 1913.

Atchison, Topeka and Santa Fe Rail- way Company	Bay Point and Clayton Railroad Company	Boca and Loyalton Railroad Company	Bucksport and Elk River Railroad Company	Butte County Railroad Company	California Western Rail- road and Navi- gation Company
\$5,925,377 98	\$454 00	\$8,392 63	-----	\$20,245 32	\$60,126 88
60,422 37	-----	128 79	-----	134 05	340 49
246,003 71	-----	2,257 12	-----	1,386 81	2,855 67
385,516 96	-----	1,306 18	-----	1,526 23	601 69
106,980 57	-----	50 00	-----	-----	939 50
44,927 24	-----	39 65	-----	1 05	29 90
\$6,769,228 83	\$454 00	\$12,174 37	-----	\$23,293 46	\$64,894 13
\$12,549,309 60	\$49,063 16	\$78,769 37	\$28,696 02	\$109,190 85	\$191,299 07
404,401 60	-----	490 00	-----	7,246 75	4,492 90
54,420 26	327 00	337 60	-----	249 50	-----
\$13,008,131 46	\$49,390 16	\$79,596 97	\$28,696 02	\$116,687 10	\$195,791 97
250,902 42	-----	663 01	-----	322 10	38,967 85
20,028,262 71	49,844 16	92,434 35	28,696 02	140,302 66	299,653 95

## --Continued.

## RAILROADS DURING THE YEAR ENDING JUNE 30, 1913.

Colusa and Lake Railroad Company	Crescent City Railway <sup>1</sup>	Diamond and Caldor Railroad Company	Holton Interurban Railway Company	Iron Mountain Railway Company	Lake Tahoe Railway and Transportation Company
\$9,745 04	-----	\$1,966 45	\$29,765 45	-----	\$34,555 92
-----	-----	-----	313 93	-----	87 38
995 00	-----	-----	1,080 70	-----	424 24
1,901 91	-----	-----	2,955 68	-----	988 78
-----	-----	-----	110 75	-----	894 27
-----	-----	-----	37 95	-----	-----
\$12,641 95	-----	\$1,966 45	\$34,264 46	-----	\$36,950 59
\$9,453 12	\$59,661 50	\$72,647 50	\$44,648 08	\$37,730 20	\$10,760 43
-----	10,006 89	-----	-----	-----	-----
-----	456 00	-----	67 31	-----	-----
\$9,453 12	\$70,124 39	\$72,647 50	\$44,715 39	\$37,730 20	\$10,760 43
-----	-----	-----	2,019 31	-----	-----
22,095 07	70,124 39	74,613 95	80,999 16	37,730 20	47,711 02

TABLE No. 3

GROSS EARNINGS FROM OPERATION OF CALIFORNIA

	Los Angeles and San Diego Beach Rail- way Company	McCloud River Railroad Company
<i>Passenger Earnings</i>		
Passenger revenue .....	\$73,183 45	\$22,092 35
Excess baggage revenue .....	64 20	273 05
Mail revenue .....	424 80	1,852 34
Express revenue .....	1,931 57	1,244 06
Other revenue from transportation .....	688 40	175 00
Other revenue from operation .....		
Total passenger earnings .....	\$76,292 42	\$25,636 80
<i>Freight Earnings</i>		
Freight revenue .....	\$11,448 60	\$356,487 52
Other revenue from transportation .....	77 50	1,439 00
Other revenue from operation .....	12 00	1,789 85
Total freight earnings .....	\$11,538 10	\$359,716 37
Total miscellaneous earnings from operation .....	62 45	730 31
Total gross earnings from operation .....	\$87,892 97	\$386,083 48

TABLE No. 3

GROSS EARNINGS FROM OPERATION OF CALIFORNIA

	Pacific Coast Railway Company	Pajaro Valley Consolidated Railroad Company
<i>Passenger Earnings</i>		
Passenger earnings .....	\$57,253 28	\$10,929 25
Excess baggage revenue .....	561 79	2 00
Mail revenue .....	5,103 48	220 08
Express revenue .....	4,467 55	232 55
Other revenue from transportation .....	30 00	32 35
Other revenue from operation .....		68 20
Total passenger earnings .....	\$67,416 10	\$11,484 43
<i>Freight Earnings</i>		
Freight revenue .....	\$150,351 57	\$48,088 01
Other revenue from transportation .....	125 00	1,690 00
Other revenue from operation .....		
Total freight earnings .....	\$150,476 57	\$49,778 01
Total miscellaneous earnings from operation .....	8,597 84	166 24
Total gross earnings from operation .....	\$226,490 51	\$61,428 68

—Continued.

RAILROADS DURING THE YEAR ENDING JUNE 30, 1913.

Mill Valley and Mt. Tamalpais Scenic Railway	Modesto and Empire Traction Company	Nevada-Calif- ornia-Oregon Railway Company	Nevada County Narrow Gauge Railroad Company	Northwestern Pacific Railroad Company	Ocean Shore Railroad Company
\$73,018 53	\$5,091 93	\$117,169 16	\$56,850 03	\$2,016,551 67	\$82,996 66
-----	75	1,127 28	1,151 90	5,727 41	10 20
-----	-----	17,599 16	2,007 50	36,762 80	2,485 00
-----	179 33	7,518 80	4,391 22	119,960 96	3,678 89
-----	-----	213 20	112 50	48,082 14	1,724 93
-----	-----	173 97	14 55	14,180 60	365 35
\$73,018 53	\$5,272 01	\$143,801 57	\$64,527 70	\$2,241,265 58	\$91,261 03
\$55 00	\$5,320 99	\$188,484 71	\$64,246 15	\$1,419,768 80	\$180,505 58
-----	-----	-----	68 00	3,003 16	8,087 50
-----	-----	63 53	123 68	3,947 84	1,164 75
\$55 00	\$5,320 99	\$188,548 24	\$64,437 83	\$1,426,719 80	\$189,757 83
-----	-----	612 16	400 16	41,780 49	77 30
73,073 53	10,593 00	332,961 97	129,365 69	3,709,765 87	281,096 16

—Continued.

RAILROADS DURING THE YEAR ENDING JUNE 30, 1913.

Quincy Western Railway Company	Sacramento Valley and Eastern Railway	San Diego and Southeastern Railway Company	San Diego and Arizona Railway Company	San Joaquin and Eastern Railroad Company	San Pedro, Los Angeles and Salt Lake Rail- road Company
\$5,977 24	\$3,327 45	\$171,733 64	\$1,309 55	\$135,084 65	\$1,217,702 44
108 98	-----	47 84	-----	6 80	17,653 75
224 40	624 72	3,827 06	-----	116 67	44,321 44
817 50	384 19	9,338 58	-----	-----	71,848 82
-----	-----	5,573 35	-----	-----	45,006 11
-----	-----	361 95	-----	-----	12,258 68
\$7,128 12	\$4,336 36	\$190,882 42	\$1,309 55	\$135,208 12	\$1,408,791 24
\$3,070 24	\$9,429 73	\$231,363 00	\$4,351 15	\$557,366 06	\$2,330,913 04
-----	-----	4,165 28	282 50	-----	25,130 49
-----	-----	1,092 95	3 00	12,948 09	13,479 62
\$3,070 24	\$9,429 73	\$236,621 23	\$4,636 65	\$570,314 15	\$2,369,523 15
-----	-----	1,190 33	567 50	-----	32,321 90
10,198 36	13,766 09	428,693 98	6,513 70	705,522 27	3,810,636 29

TABLE No. 3

GROSS EARNINGS FROM OPERATION OF CALIFORNIA

	Sierra Railway Company of California	South San Francisco Belt Rail- way Company
<i>Passenger Earnings</i>		
Passenger revenue .....	\$103,518 18	-----
Excess baggage revenue .....	1,086 97	-----
Mail revenue .....	5,770 92	-----
Express revenue .....	11,021 98	-----
Other revenue from transportation .....	-----	-----
Other revenue from operation .....	504 35	-----
Total passenger earnings .....	\$121,902 40	-----
<i>Freight Earnings</i>		
Freight revenue .....	\$300,863 64	-----
Other revenue from transportation .....	380 00	17,647 30
Other revenue from operation .....	628 83	-----
Total freight earnings .....	\$301,872 47	\$17,647 30
Total miscellaneous earnings from operation .....	972 36	-----
Total gross earnings from operation .....	\$424,747 23	\$17,647 30

TABLE No. 3

GROSS EARNINGS FROM OPERATION OF CALIFORNIA

	Ventura County Railway Company	Western Pacific Railway Company
<i>Passenger Earnings</i>		
Passenger revenue .....	\$4,791 70	\$709,009 32
Excess baggage revenue .....	-----	4,616 59
Mail revenue .....	257 78	9,190 26
Express revenue .....	169 10	53,489 99
Other revenue from transportation .....	-----	5,801 12
Other revenue from operation .....	-----	2,422 36
Total passenger earnings .....	\$5,218 58	\$784,529 64
<i>Freight Earnings</i>		
Freight revenue .....	\$30,111 94	\$2,068,439 55
Other revenue from transportation .....	165 00	14,965 50
Other revenue from operation .....	-----	8,304 23
Total freight earnings .....	\$30,276 94	\$2,091,709 28
Total miscellaneous earnings from operation .....	325 90	15,539 33
Total gross earnings from operation .....	35,821 42	2,891,778 25



—Continued.

## RAILROADS DURING THE YEAR ENDING JUNE 30, 1913.

Southern Pacific Company	Stockton Terminal and Eastern Rail- road Company	Stone Canyon Railroad	Sugar Pine Railroad Company	Sunset Railway Company	Tonopah and Tidewater Railroad Company
\$22,546,296 18	\$6,061 95	\$380 75		\$156,326 87	\$36,040 68
288,093 22	1 60			1,614 89	263 23
839,152 83				2,402 86	10,460 23
1,408,220 92	219 69			17,569 54	1,830 91
333,766 98				371 25	
216,283 26				589 78	
\$25,631,813 39	\$6,283 24	\$380 75		\$178,875 19	\$48,595 05
\$34,677,039 98	\$10,965 79	\$6,197 94	\$76,833 56	\$547,422 25	\$246,588 38
805,375 41	85 65			1,147 50	
115,091 42	48 00			5,896 43	27 40
\$35,597,506 81	\$11,099 44	\$6,197 94	\$76,833 56	\$554,466 18	\$246,615 78
307,148 07				2,639 03	2,817 51
61,536,468 27	17,382 68	6,578 69	76,833 56	735,980 40	298,028 34

—Concluded.

## RAILROADS DURING THE YEAR ENDING JUNE 30, 1913.

Yosemite Valley Railroad Company	Yreka Railroad Company	Total	
\$142,104 76	\$13,397 75	\$33,887,847 65	
171 57		334,117 60	
3,759 48	598 69	1,243,710 35	
5,229 17	2,059 19	2,123,615 12	
1,277 50		602,029 92	
303 05		292,562 84	
\$152,845 53	\$16,055 63	\$38,483,883 48	
\$124,264 61	\$9,950 76	\$57,170,930 13	
745 00		1,313,741 68	
367 31		221,579 52	
\$125,376 92	\$9,950 76	\$58,706,251 33	
132 00		710,809 21	
278,354 45	26,006 39	97,900,944 02	

# TABLE OPERATING EXPENSES OF CALIFORNIA RAILROADS FOR

Atchison,  
Topeka and  
Santa Fe Rail-  
way Company

## I. Maintenance of Way and Structure.

Superintendence .....	\$206,430 77
Ballast .....	101,139 53
Ties .....	394,953 15
Rails .....	20,213 96
Other track material.....	188,218 94
Roadway and track.....	1,066,916 71
Removal of snow, sand and ice.....	2,205 48
Tunnels .....	193 23
Bridges, trestles and culverts.....	294,411 42
Over and undergrade crossings.....	1,973 98
Grade crossings, fences, cattle guards and signs.....	43,644 75
Snow and sand fences and snow sheds.....	
Signal and interlocking plants.....	40,183 76
Telegraph and telephone lines.....	35,442 99
Electric power transmissions.....	
Buildings, fixtures and grounds.....	333,018 06
Docks and wharves.....	17,524 42
Roadway, tools and supplies.....	72,308 06
Injuries to persons.....	9,170 92
Stationery and printing.....	7,244 61
Other expenses .....	1,454 35
Maintaining joint tracks, yards and other facilities.....Dr.	78,382 25
Maintaining joint tracks, yards and other facilities.....Cr.	137,123 80

Total maintenance of way and structure.....\$2,877,907 54

## II. Maintenance of Equipment.

Superintendence .....	\$63,129 67
Steam locomotives—repairs .....	1,518,917 29
Steam locomotives—renewals .....	15,481 09
Steam locomotives—depreciation .....	192,618 48
Electric locomotives—repairs .....	
Electric locomotives—renewals .....	
Electric locomotives—depreciation .....	
Passenger train cars—repairs .....	247,616 74
Passenger train cars—renewals .....	120 95
Passenger train cars—depreciation .....	117,823 59
Freight train cars—repairs .....	629,713 35
Freight train cars—renewals .....	14,004 96
Freight train cars—depreciation .....	239,544 29
Electric equipment of cars—repairs .....	
Electric equipment of cars—renewals .....	
Electric equipment of cars—depreciation .....	
Floating equipment—repairs .....	51,115 74
Floating equipment—renewals .....	27,488 30
Floating equipment—depreciation .....	39,906 96
Work equipment—repairs .....	31,199 65
Work equipment—renewals .....	125 73
Work equipment—depreciation .....	3,999 31
Shop machinery and tools.....	55,923 75
Power plant equipment.....	
Injuries to persons.....	8,134 75
Stationery and printing.....	5,333 56
Other expenses .....	5,859 66
Maintaining joint equipment at terminals.....Dr.	4,587 64
Maintaining joint equipment at terminals.....Cr.	130,457 07

Totals .....\$3,242,046 49

<sup>1</sup>Credit.

<sup>2</sup>Entire line.

## No. 4.

FISCAL YEAR ENDING JUNE 30, 1913. (LARGE ROADS.)

Northwestern Pacific Railroad Company	Ocean Shore Railroad Company	San Pedro, Los Angeles and Salt Lake Railroad Company	Southern Pacific Company	Western Pacific Railway Company <sup>2</sup>	Total
\$36,661 20	\$3,989 48	\$30,467 87	\$454,183 85	\$98,059 15	\$829,792 32
1,878 35	-----	70 39	61,035 71	21,425 63	185,549 61
33,771 18	5,443 68	71,699 58	642,690 51	49,631 80	1,198,189 90
13,511 06	182 98	20,920 40	293,036 37	3,505 52	351,370 29
18,245 81	1,089 06	17,392 84	578,708 29	11,462 47	815,117 41
301,340 49	34,931 58	193,044 08	2,619,764 65	414,748 67	4,630,746 18
8 67	5 13	2,635 48	34,207 29	5,554 09	44,616 14
2,608 83	-----	874 39	80,237 71	151,079 83	234,993 99
45,333 51	1,981 70	16,407 18	356,335 67	65,358 10	779,827 58
126 39	757 77	391 72	2,741 04	191 23	6,182 13
17,129 22	215 87	5,229 00	109,480 71	9,386 13	185,085 68
-----	-----	256 45	75,630 99	-----	75,887 44
6,759 89	-----	919 05	275,088 33	7,816 02	330,767 05
4,884 86	259 01	5,363 73	64,982 62	8,139 36	119,072 57
6,037 46	1,066 90	-----	44,065 88	-----	51,170 24
63,939 17	1,175 47	36,924 73	829,846 02	53,045 40	1,317,948 85
31,771 26	-----	2,331 75	66,621 62	12,331 16	130,580 21
10,915 08	455 26	8,677 12	189,022 35	17,591 24	298,969 11
358 92	-----	240 84	27,547 88	5,330 27	42,648 83
1,609 43	80 36	1,048 34	17,396 55	2,287 26	29,666 55
415 97	360 00	114 00	1,343 03	25	3,687 60
286 57	-----	36,480 04	23,348 95	2,490 93	140,938 74
164,654 50	-----	1939 95	184,838 05	1855 73	118,412 03
-----	-----	-----	-----	-----	-----
\$532,888 82	\$51,994 25	\$450,549 03	\$6,762,477 97	\$938,578 78	\$11,614,396 39
-----	-----	-----	-----	-----	-----
\$23,038 55	\$6,497 64	\$25,040 24	\$308,665 26	\$36,737 90	\$463,109 26
128,611 32	20,065 20	384,373 70	4,290,158 19	229,023 87	6,571,149 57
121 60	790 00	-----	297,135 11	-----	313,527 80
16,814 25	3,045 45	19,837 54	-----	25,750 61	258,066 33
-----	4,532 09	-----	-----	-----	4,532 09
-----	-----	-----	-----	-----	-----
-----	1,020 00	-----	-----	-----	1,020 00
76,381 42	3,478 01	45,304 65	868,548 30	28,639 55	1,269,968 67
1,277 35	-----	218 84	208,301 04	-----	209,776 28
16,679 27	3,356 34	5,202 38	-----	-----	143,061 58
67,541 89	6,855 12	116,203 17	2,138,074 20	115,996 64	3,074,384 37
722 78	-----	3,112 73	160,180 52	6,609 62	184,630 61
17,669 34	1,967 44	20,110 47	-----	22,627 10	301,918 64
8,069 37	-----	-----	23,749 85	-----	31,819 22
-----	-----	-----	-----	-----	-----
3,969 95	-----	-----	-----	-----	3,969 95
75,382 81	-----	-----	157,605 29	8,247 31	292,351 15
-----	-----	-----	8,335 80	-----	35,824 10
30,616 12	-----	-----	45,436 00	5,317 80	121,276 88
9,148 22	429 00	8,528 42	153,728 81	18,015 62	221,049 72
130 62	-----	100 80	51,109 72	3,864 80	55,331 67
4,174 42	308 76	2,268 96	-----	8,637 53	19,389 03
11,999 55	1,147 01	19,219 85	254,531 35	5,552 18	348,373 69
6,247 58	-----	-----	8,223 00	-----	14,470 58
597 25	-----	1,239 54	29,825 66	1,402 85	41,200 05
1,039 34	105 81	1,892 41	20,581 21	1,263 76	30,216 09
-----	-----	47 52	17,058 55	162 50	23,128 23
-----	-----	5,282 12	4,153 20	-----	14,022 96
-----	-----	-----	1,065 41	-----	131,522 48
-----	-----	-----	-----	-----	-----
\$500,233 00	\$53,597 87	\$657,983 34	\$9,044,335 65	\$517,849 69	\$14,016,046 04

TABLE No. 4

OPERATING EXPENSES OF CALIFORNIA RAILROADS FOR

	Atchison, Topeka and Santa Fe Rail- way Company
III. <i>Traffic Expenses.</i>	
Superintendence .....	\$79,417 54
Outside agencies .....	182,181 56
Advertising .....	112,770 18
Traffic associations .....	5,590 48
Fast freight lines .....	
Industrial and immigration bureaus .....	18,463 71
Stationery and printing .....	13,913 87
Other expenses .....	174 81
Total traffic expenses .....	\$412,512 15
IV. <i>Transportation Expenses.</i>	
Superintendence .....	\$171,120 70
Despatching trains .....	84,232 12
Station employees .....	1,152,391 27
Weighing and car service associations .....	11,113 84
Coal and ore docks .....	
Station supplies and expenses .....	118,715 41
Yard masters and their clerks .....	62,506 23
Yard conductors and brakemen .....	275,562 49
Yard switch and signal tenders .....	6,177 32
Yard supplies and expenses .....	2,107 81
Yard enginemen .....	143,293 15
Engine house expenses—yard .....	66,488 31
Fuel for yard locomotives .....	149,824 53
Water for yard locomotives .....	16,981 60
Lubricants for yard locomotives .....	2,753 38
Other supplies for yard locomotives .....	2,683 88
Operating joint yards and terminals .....	Dr. 42,299 63
Operating joint yards and terminals .....	Cr. 1123,657 30
Motormen .....	
Road enginemen .....	763,831 87
Enginehouse expenses—road .....	258,562 12
Fuel for road locomotives .....	1,294,688 64
Water for road locomotives .....	153,012 93
Lubricants for road locomotives .....	28,503 63
Other supplies for road locomotives .....	16,472 15
Operating power plants .....	
Purchased power .....	
Road trainmen .....	799,521 15
Train supplies and expenses .....	205,108 42
Interlockers and block and other signals—operation .....	35,356 94
Crossing flagmen and gatemen .....	29,619 11
Drawbridge operation .....	5,071 89
Clearing wrecks .....	16,202 74
Telegraph and telephone operation .....	44,290 94
Operating floating equipment .....	179,852 14
Express service .....	
Stationery and printing .....	44,736 00
Other expenses .....	14,335 56
Loss and damage freight .....	99,011 77
Loss and damage baggage .....	1,134 04
Damage to property .....	14,410 41
Damage to stock on right of way .....	7,258 14
Injuries to persons .....	146,277 51
Operating joint tracks and facilities .....	Dr. 39,884 25
Operating joint tracks and facilities .....	Cr. 180,087 31
Total transportation expenses .....	\$6,301,649 41

<sup>1</sup>Credit.<sup>2</sup>Entire line.



—Continued.

FISCAL YEAR ENDING JUNE 30, 1913. (LARGE ROADS.)

Northwestern Pacific Railroad Company	Ocean Shore Railroad Company	San Pedro, Los Angeles and Salt Lake Railroad Company	Southern Pacific Company	Western Pacific Railway Company <sup>2</sup>	Total
\$18,159 84	\$3,004 57	\$29,046 92	\$453,370 52	\$97,138 53	\$680,137 92
6,377 79	35 90	74,344 44	366,433 74	131,267 50	760,640 93
17,526 07	3,498 45	28,987 55	105,330 60	98,692 91	666,805 76
445 47	-----	4,663 25	57,402 15	17,144 86	85,246 21
71 86	-----	1,452 91	11,759 25	-----	31,747 73
3,069 79	249 13	6,721 85	104,232 01	15,168 71	143,355 36
20 00	-----	275 59	2,117 99	110 55	2,698 94
\$45,670 82	\$6,788 05	\$145,492 51	\$1,400,646 26	\$359,523 06	\$2,370,632 85
\$27,750 81	\$1,711 97	\$24,077 17	\$570,425 78	\$56,661 00	\$851,747 43
12,353 92	1,483 39	7,362 74	230,615 40	35,775 82	371,823 39
216,978 21	13,944 91	126,241 54	2,653,850 76	289,553 13	4,452,959 82
1,888 06	186 84	2,622 42	31,630 85	969 31	48,411 32
64,913 81	1,062 56	9,296 99	239,300 10	24,014 80	457,303 67
3,197 60	1,500 75	10,232 63	280,498 55	11,848 96	369,784 72
24,979 45	4,381 60	28,267 43	768,716 27	54,435 47	1,156,342 71
48 42	-----	582 33	58,187 37	1,121 85	66,117 29
465 47	122 38	563 00	19,538 37	728 75	23,525 78
14,653 60	2 50	18,501 73	393,033 97	32,712 02	602,196 97
2,844 17	-----	15,610 21	169,218 55	4,696 46	258,857 70
14,441 93	406 44	29,068 76	347,094 25	30,504 00	571,339 91
988 80	29 49	1,540 97	62,422 77	3,058 38	85,022 01
212 01	45 57	441 28	6,753 23	642 08	10,847 55
312 24	8 01	1,102 35	9,377 06	358 72	13,842 26
23,567 35	-----	105,237 35	100,487 62	53,998 63	325,590 58
23,291 80	-----	1,115 57	165,270 05	12,755 54	216,090 26
22,556 75	3,842 15	-----	105,490 50	-----	131,889 40
96,394 50	12,459 89	156,021 12	2,295,826 16	302,796 34	3,627,329 88
33,990 38	6,237 69	45,527 32	680,317 88	93,727 81	1,118,363 20
183,412 31	26,179 78	351,629 98	3,314,976 94	678,826 91	5,849,714 56
11,785 16	2,676 00	18,689 23	305,072 05	38,189 58	529,424 95
2,848 35	524 61	4,226 57	68,069 88	15,085 00	119,258 04
3,943 73	370 00	10,378 69	73,782 45	12,537 70	117,484 72
42,300 49	-----	-----	83,388 65	-----	125,689 14
36,703 50	7,637 20	-----	8,791 54	-----	53,132 24
179,768 74	16,504 96	158,107 12	2,733,263 84	295,468 69	4,182,634 50
35,147 44	1,946 02	46,965 89	773,241 64	60,340 35	1,122,749 76
13,258 62	-----	3,021 98	323,574 10	7,074 96	382,286 60
2,608 74	1,165 82	2,666 20	149,617 75	13,741 80	199,419 42
6,789 13	-----	1,101 36	26,863 74	388 36	40,214 48
1,886 96	435 20	5,230 82	54,355 01	17,197 73	95,308 46
-----	56 56	13,529 36	99,539 34	5,146 88	162,563 08
251,589 83	-----	-----	421,316 34	74,500 62	927,258 93
18,276 53	1,652 14	8,835 78	155,713 07	17,374 64	246,588 16
836 23	56 20	318 05	85,333 39	2,114 75	102,994 18
6,581 35	141 14	25,219 40	353,368 57	71,678 47	556,000 70
1,427 51	-----	159 44	5,555 43	66 98	8,343 40
4,090 01	190 30	3,423 83	35,215 51	5,056 40	62,386 46
2,442 96	156 55	2,855 74	18,411 34	4,804 81	35,929 54
15,682 00	-----	10,862 91	180,102 35	25,838 94	378,763 71
-----	-----	31,789 18	11,825 48	9,054 48	92,553 39
-----	-----	1,476 67	175,195 03	11,546 71	158,305 72
\$1,360,625 27	\$107,118 62	\$1,278,716 63	\$18,163,698 77	\$2,347,789 33	\$29,559,598 03

TABLE No. 4

OPERATING EXPENSES OF CALIFORNIA RAILROADS FOR

		Atchison, Topeka and Santa Fe Rail- way Company
<i>V. General Expenses.</i>		
Salaries and expenses of general officers.....		\$59,879 69
Salaries and expenses of clerks and attendants.....		133,076 44
General office supplies and expenses.....		29,137 13
Law expenses .....		56,584 13
Insurance .....		75,122 04
Relief department expenses.....		
Pensions .....		4,159 00
Stationery and printing.....		11,243 93
Other expenses .....		78,652 03
General administration, joint tracks, yards and terminals....Dr.		
General administration, joint tracks, yards and terminals....Cr.		<sup>1</sup> 886 22
Total general expenses.....		\$447,468 17
<i>Recapitulation of Expenses.</i>		
I—Maintenance of way and structures.....		\$2,877,907 54
II—Maintenance of equipment.....		3,242,046 49
III—Traffic expenses .....		412,512 15
IV—Transportation expenses .....		6,301,649 41
V—General expenses .....		447,468 17
Total operating expenses for fiscal year ending June 30, 1913....		\$13,281,583 76
Total operating expenses for fiscal year ending June 30, 1912....		\$11,998,581 08
Increase .....		\$1,283,002 68
Decrease .....		
<i>Ratio of Operating Expenses to Operating Revenues.</i>		
For fiscal year ending June 30, 1913.....		66.31%
For fiscal year ending June 30, 1912.....		63.98%

<sup>1</sup>Credit.<sup>2</sup>Entire line.<sup>3</sup>Six months' figures only.

-Continued.

FISCAL YEAR ENDING JUNE 30, 1913. (LARGE ROADS.)

Northwestern Pacific Railroad Company	Ocean Shore Railroad Company	San Pedro, Los Angeles and Salt Lake Railroad Company	Southern Pacific Company	Western Pacific Railway Company <sup>2</sup>	Total
\$14,007 24	\$4,158 95	\$12,577 55	\$132,204 61	\$68,569 23	\$291,397 27
44,786 40	6,668 92	34,341 99	820,532 00	107,152 81	1,146,558 56
8,677 24	526 73	4,918 94	125,711 75	12,309 59	181,281 38
11,815 38	4,195 40	12,131 57	196,080 25	84,810 31	365,617 04
34,611 46	5,516 33	11,249 86	179,410 68	22,891 53	328,801 90
-----	-----	-----	2,514 07	-----	2,514 07
1,299 15	-----	67 52	157,087 34	-----	162,613 01
3,067 25	477 60	3,019 72	66,227 05	9,646 83	93,682 38
37,162 51	3,318 30	8,421 76	102,532 53	9,660 86	239,747 99
-----	-----	1,227 80	1,022 10	53 04	2,302 94
-----	-----	113 85	-----	-----	1400 07
\$155,426 63	\$24,862 23	\$87,942 86	\$1,783,322 38	\$315,094 20	\$2,814,116 47
\$532,888 82	\$51,994 25	\$450,549 03	\$6,762,477 97	\$938,578 78	\$11,614,396 39
500,233 00	53,597 87	657,983 34	9,044,335 65	517,849 69	\$14,016,046 04
45,670 82	6,788 05	145,492 51	1,400,646 26	359,523 06	2,370,632 85
1,360,625 27	107,118 62	1,278,716 63	\$18,163,698 77	2,347,789 33	29,559,598 03
155,426 63	24,862 23	87,942 86	1,783,322 38	315,094 20	2,814,116 47
\$2,594,844 54	\$244,361 02	\$2,620,684 37	\$37,154,481 03	\$4,478,835 06	\$60,374,789 78
2,563,618 29	<sup>3</sup> 125,673 03	<sup>2</sup> 7,245,539 80	35,542,014 34	<sup>2</sup> 4,229,864 55	61,705,291 09
\$31,226 25	-----	-----	\$1,612,466 69	\$248,970 51	-----
-----	-----	-----	-----	-----	-----
69.95%	86.93%	68.77%	60.38%	72.55%	
73.26%	93.88%	79.41%	60.14%	80.44%	

TABLE No. 4

OPERATING EXPENSES OF CALIFORNIA RAILROADS FOR

	Amador Central Railroad Company
<i>I. Maintenance of Way and Structures.</i>	
Superintendence .....	\$34 73
Maintenance of roadway and track .....	7,183 66
Maintenance of track structures .....	2,716 23
Maintenance of buildings, docks and wharves .....	1,520 32
Injuries to persons .....	
Other maintenance of way and structure expenses .....	417 21
Maintaining joint tracks, yards and other facilities.....Dr.	
Maintaining joint tracks, yards and other facilities.....Cr.	
Total maintenance of way and structures .....	\$11,872 15
<i>II. Maintenance of Equipment.</i>	
Superintendence .....	\$492 05
Locomotive—repairs .....	4,104 28
Car—repairs .....	409 74
Floating equipment—repairs .....	
Work equipment—repairs .....	9 17
Equipment—renewals .....	
Equipment—depreciation .....	2,544 60
Injuries to persons .....	
Other maintenance of equipment expenses .....	100 50
Maintaining joint equipment at terminals.....Dr.	
Maintaining joint equipment at terminals.....Cr.	
Total maintenance of equipment .....	\$7,660 34
<i>III. Traffic Expenses.</i>	
Traffic expenses .....	\$160 53
<i>IV. Transportation Expenses.</i>	
Superintendence and dispatching trains .....	\$1,200 00
Station service .....	8,310 71
Yard enginemen .....	
Other yard employees .....	
Fuel for yard locomotives .....	
All other yard expenses .....	
Operating joint yards and terminals.....Dr.	
Operating joint yards and terminals.....Cr.	
Road enginemen and motormen .....	2,453 85
Fuel for road locomotives .....	3,788 64
Other road locomotive supplies and expenses .....	634 44
Road trainmen .....	2,093 41
Train supplies and expenses .....	515 11
Injuries to persons .....	
Loss and damage .....	99 30
Other casualties .....	129 40
All other transportation expenses .....	326 92
Operating joint tracks and facilities.....Dr.	
Operating joint tracks and facilities.....Cr.	
Total transportation expenses .....	\$19,551 78

Expenses not segregated.



—Continued.

FISCAL YEAR ENDING JUNE 30, 1913. (SMALL ROADS.)

Artesia and Mud River Railroad Company	Bay Point and Clayton Railroad Company <sup>1</sup>	Bucksport and Elk River Railroad Company	Butte County Railroad Company	Boca and Loyalton Railroad Company	California Western Rail- road and Navi- gation Company
\$3,558 25		\$400 00	\$2,407 60	\$2,421 49	\$1,709 07
15,020 60		4,161 13	12,796 41	11,292 27	51,777 50
14,395 08			4,669 15	1,955 54	14,006 53
1,099 62			768 41	698 08	1,295 07
					85 50
			197 56	680 25	963 65
			566 44	43 25	
\$34,073 55	\$2,957 82	\$4,561 13	\$21,405 57	\$17,090 88	\$72,837 32
		\$400 00	\$2,430 00	\$1,625 06	\$1,263 94
\$4,312 86		589 20	8,313 15	4,403 19	17,286 56
6,673 66		264 49	5,925 00	1,944 52	19,950 05
408 70				57 85	1,297 58
				3,063 66	
1,244 53			32 75	6,270 18	99 25
\$12,639 75	\$1,279 92	\$1,253 69	\$16,700 90	\$17,364 40	\$39,897 38
			\$1,481 45	\$493 03	\$1,752 45
\$1,500 00		\$410 00	\$1,808 80	\$1,833 80	\$1,868 18
10,641 75			7,056 27	5,002 81	4,206 37
4,198 60			1,839 45	1,385 56	4,831 90
2,213 40			1,885 05	1,673 06	7,181 13
			2,873 99	3,179 88	6,856 34
			1,045 64	490 37	2,774 26
				780 00	1,200 00
4,414 94		900 00	3,595 65	3,152 93	7,169 89
7,309 97		840 94	8,623 42	7,548 83	17,832 42
717 79		139 07	1,592 74	1,349 41	2,813 34
1,331 29		1,024 84	5,304 49	3,893 10	8,372 72
363 80			217 86	88 17	731 79
					947 15
27 78		92 50	29 27	118 17	63 29
80 00			206 90	115 74	37 04
412 75		9 70	508 93	678 77	1,087 35
\$33,212 07		\$3,417 05	\$36,588 46	\$31,290 60	\$67,973 17

TABLE No. 4

OPERATING EXPENSES OF CALIFORNIA RAILROADS FOR

	Amador Central Railroad Company
<i>V. General Expenses.</i>	
Administration .....	\$3,888 51
Insurance .....	
Other general expenses.....	391 82
General administration joint tracks, yards and terminals.....Dr.	
General administration joint tracks, yards and terminals.....Cr.	
Total general expenses.....	\$4,280 33
<i>Recapitulation Expenses.</i>	
I. Maintenance of way and structures.....	\$11,872 15
II. Maintenance of equipment.....	7,660 24
III. Traffic expenses .....	160 53
IV. Transportation expenses .....	19,551 78
V. General expenses .....	4,280 33
Total operating expenses for fiscal year ending June 30, 1913....	\$43,525 13
Total operating expenses for fiscal year ending June 30, 1912....	49,369 66
Increase .....	
Decrease .....	5,844 53
<i>Ratio of Operating Expenses to Operating Revenues.</i>	
For fiscal year ending June 30, 1913.....	47.47%
For fiscal year ending June 30, 1912.....	

<sup>1</sup>Expenses not segregated.

—Continued.

FISCAL YEAR ENDING JUNE 30, 1913. (SMALL ROADS.)

Arcata and Mad River Railroad Company	Bay Point and Clayton Railroad Company <sup>1</sup>	Bucksport and Elk River Railroad Company	Butte County Railroad Company	Boca and Loyalton Railroad Company	California Western Rail- road and Navi- gation Company
		\$707 80	\$3,433 31	\$4,649 31	\$5,521 87
\$2,025 70			2,181 03	409 30	730 29
792 59		1 50	303 04	188 35	1,255 86
\$2,818 29	\$14,027 67	\$709 30	\$5,917 38	\$5,246 96	\$7,508 02
\$34,073 55	\$2,957 82	\$4,561 13	\$21,405 57	\$17,090 88	\$72,837 32
12,639 75	1,279 92	1,253 69	16,700 90	17,364 40	39,897 38
			1,481 45	493 03	1,752 45
33,212 07		3,417 05	36,588 46	31,290 60	67,973 17
2,818 29	14,027 67	709 30	5,917 38	5,246 96	7,508 02
\$82,743 66	\$18,265 41	\$9,941 17	\$82,093 76	\$71,485 87	\$189,968 34
90,071 60	25,744 72	11,560 28	102,663 30	77,427 76	102,860 15
					87,108 19
7,327 94	7,479 31	1,619 11	20,569 54	5,941 89	
67%	36.6%	32.3%	58.51%	77.34%	63%
65%		47.3%	60.88%	76.62%	49%

TABLE No. 4  
OPERATING EXPENSES OF CALIFORNIA RAILROADS FORCamino, Placer-  
ville and Lake  
Tahoe Rail-  
road CompanyI. *Maintenance of Way and Structures.*

Superintendence .....	
Maintenance of roadway and track .....	\$7,503 03
Maintenance of track structures .....	1,984 53
Maintenance of buildings, docks and wharves .....	
Injuries to persons .....	
Other maintenance of way and structure expenses .....	180 00
Maintaining joint tracks, yards and other facilities .....	Dr.
Maintaining joint tracks, yards and other facilities .....	Cr.
Total maintenance of way and structures .....	\$9,667 56

II. *Maintenance of Equipment.*

Superintendence .....	
Locomotive—repairs .....	\$183 04
Car—repairs .....	
Floating equipment—repairs .....	
Work equipment—repairs .....	
Equipment—renewals .....	
Equipment—depreciation .....	
Injuries to persons .....	
Other maintenance of equipment expenses .....	
Maintaining joint equipment at terminals .....	Dr.
Maintaining joint equipment at terminals .....	Cr.
Total maintenance of equipment .....	\$183 04

III. *Traffic Expenses.*

Traffic expenses .....	
------------------------	--

IV. *Transportation Expenses.*

Superintendence and dispatching trains .....	\$600 00
Station service .....	
Yard enginemen .....	
Other yard employees .....	
Fuel for yard locomotives .....	
All other yard expenses .....	
Operating joint yards and terminals .....	Dr.
Operating joint yards and terminals .....	Cr.
Road enginemen and motormen .....	1,200 00
Fuel for road locomotives .....	1,480 13
Other road locomotive supplies and expenses .....	17 42
Road trainmen .....	2,047 35
Train supplies and expenses .....	
Injuries to persons .....	
Loss and damage .....	
Other casualties .....	
All other transportation expenses .....	552 05
Operating joint tracks and facilities .....	Dr.
Operating joint tracks and facilities .....	Cr.
Total transportation expenses .....	\$5,896 95

<sup>1</sup>From December 26, 1912 to June 30, 1913.<sup>2</sup>Expenses not segregated.



—Continued.

FISCAL YEAR ENDING JUNE 30, 1913. (SMALL ROADS.)

Cement, Tolenas and Tidewater Rail- road Company	Colusa and Lake Railroad Company <sup>2</sup>	Crescent City Railway <sup>1</sup>	Diamond and Caldor Railroad Company	Holton Interurban Railway Company	Iron Mountain Railway Company <sup>2</sup>
\$2,510 45 -----		\$893 68	\$653 67	\$805 40 -----	
3,453 20 -----		2,780 90	11,002 97	4,181 69 -----	
23 19 -----		33 68	4,407 01	169 58 -----	
634 26 -----		1 10	37 00	661 96 -----	
				50 -----	
295 67 -----		11 39	472 21	194 25 -----	
		326 96		110 00 -----	
\$6,916 77 -----		\$4,047 71	\$16,572 86	\$6,123 38 -----	
\$525 00 -----			\$353 66	\$500 45 -----	
7,739 65 -----		\$836 04	2,369 29	7,248 18 -----	
739 70 -----		120 16	2,060 72	2,596 47 -----	
				3 20 -----	
2 04 -----					
3,070 30 -----		828 00		2,487 57 -----	
150 00 -----				216 00 -----	
			30 52	63 54 -----	
\$12,226 69 -----		\$1,784 20	\$4,814 19	\$13,115 41	\$37,741 69
\$2,206 99 -----			\$1,575 00	\$494 74 -----	
\$1,985 00 -----		\$838 57	\$2,708 67	\$1,626 31 -----	
1,283 51 -----		1,846 60	902 19	4,108 44 -----	
506 55 -----		102 80			
331 55 -----		185 43			
2,021 69 -----					
1,272 08 -----					
				3,077 88 -----	
2,010 67 -----		1,834 38	1,797 70	4,029 13 -----	
4,422 34 -----		2,308 34	6,255 69	5,614 25 -----	
689 79 -----		1,005 64	521 89	1,865 68 -----	
2,678 23 -----		2,334 04	3,168 00	2,507 50 -----	
58 35 -----		75	781 74	309 43 -----	
				50 00 -----	
76 04 -----			1 40	298 57 -----	
405 46 -----			50 00	162 30 -----	
18 87 -----		264 14		851 53 -----	
\$17,760 13 -----		\$10,720 69	\$16,187 28	\$24,501 02	\$33,799 99

TABLE No. 4

OPERATING EXPENSES OF CALIFORNIA RAILROADS FOR

	Camino, Placer- ville and Lake Tahoe Rail- road Company
<i>V. General Expenses.</i>	
Administration .....	\$20 00
Insurance .....	12 50
Other general expenses.....	961 78
General administration joint tracks, yards and terminals.....Dr.	-----
General administration joint tracks, yards and terminals.....Cr.	-----
Total general expenses.....	\$994 28
<i>Recapitulation Expenses.</i>	
I. Maintenance of way and structures.....	\$9,667 56
II. Maintenance of equipment.....	183 04
III. Traffic expenses .....	-----
IV. Transportation expenses .....	5,896 95
V. General expenses .....	994 28
Total operating expenses for fiscal year ending June 30, 1913.....	\$16,741 83
Total operating expenses for fiscal year ending June 30, 1912.....	4,140 13
Increase .....	12,601 70
Decrease .....	-----
<i>Ratio of Operating Expenses to Operating Revenues.</i>	
For fiscal year ending June 30, 1913.....	167.27%
For fiscal year ending June 30, 1912.....	-----

<sup>1</sup>From December 26, 1912 to June 30, 1913.

<sup>2</sup>Expenses not segregated.

—Continued.

FISCAL YEAR ENDING JUNE 30, 1913. (SMALL ROADS.)

Cement. Tolenas and Tidewater Rail- road Company	Colusa and Lake Railroad Company <sup>2</sup>	Crescent City Railway <sup>1</sup>	Diamond and Caldor Railroad Company	Holton Interurban Railway Company	Iron Mountain Railway Company <sup>2</sup>
\$9,436 24	-----	\$982 68	\$4,193 61	\$5,307 62	-----
314 34	-----	-----	68 40	457 24	\$358 60
46 49	-----	94 11	1,138 13	113 41	86 99
-----	-----	-----	-----	-----	-----
\$9,797 07	-----	\$1,076 79	\$5,400 14	\$5,878 27	\$445 59
-----	-----	-----	-----	-----	-----
\$6,916 77	-----	\$4,047 71	\$16,572 86	\$6,123 38	-----
12,226 69	-----	1,784 20	4,814 19	13,115 41	\$37,741 69
2,206 99	-----	-----	1,575 00	494 74	-----
17,760 13	-----	10,720 69	16,187 28	24,501 02	33,799 99
9,797 07	-----	1,076 79	5,400 14	5,878 27	445 59
-----	-----	-----	-----	-----	-----
\$48,907 65	\$19,761 84	\$17,629 39	\$44,549 47	\$50,112 82	\$71,987 27
24,983 16	20,617 54	-----	54,733 65	38,898 23	63,053 55
23,924 49	-----	-----	-----	11,214 59	8,928 72
-----	855 70	-----	10,184 18	-----	-----
-----	-----	-----	-----	-----	-----
58.55%	89.4%	24.34%	59.71%	61.87%	190.8%
63.4%	-----	-----	65.87%	59.27%	-----

TABLE No. 4

OPERATING EXPENSES OF CALIFORNIA RAILROADS FOR

	Lake Tahoe Railway and Transportation Company
<i>I. Maintenance of Way and Structures.</i>	
Superintendence .....	\$1,423 34
Maintenance of roadway and track .....	9,290 44
Maintenance of track structures .....	687 41
Maintenance of buildings, docks and wharves .....	988 74
Injuries to persons .....	
Other maintenance of way and structure expenses .....	308 54
Maintaining joint tracks, yards and other facilities .....	Dr. ....
Maintaining joint tracks, yards and other facilities .....	Cr. ....
Total maintenance of way and structures .....	\$12,698 47
<i>II. Maintenance of Equipment.</i>	
Superintendence .....	\$689 55
Locomotive—repairs .....	1,138 71
Car—repairs .....	2,490 76
Floating equipment—repairs .....	
Work equipment—repairs .....	85 19
Equipment—renewals .....	
Equipment—depreciation .....	1,000 00
Injuries to persons .....	
Other maintenance of equipment expenses .....	480 02
Maintaining joint equipment at terminals .....	Dr. ....
Maintaining joint equipment at terminals .....	Cr. ....
Total maintenance of equipment .....	\$5,884 23
<i>III. Traffic Expenses.</i>	
Traffic expenses .....	\$3,652 34
<i>IV. Transportation Expenses.</i>	
Superintendence and dispatching trains .....	\$2,038 54
Station service .....	3,607 21
Yard enginemen .....	
Other yard employees .....	
Fuel for yard locomotives .....	
All other yard expenses .....	
Operating joint yards and terminals .....	Dr. ....
Operating joint yards and terminals .....	Cr. ....
Road enginemen and motormen .....	2,418 19
Fuel for road locomotives .....	3,316 61
Other road locomotive supplies and expenses .....	1,203 97
Road trainmen .....	2,270 52
Train supplies and expenses .....	385 80
Injuries to persons .....	
Loss and damage .....	131 12
Other casualties .....	
All other transportation expenses .....	1 20
Operating joint tracks and facilities .....	Dr. ....
Operating joint tracks and facilities .....	Cr. ....
Total transportation expenses .....	\$15,373 16

<sup>1</sup>Credit item.<sup>2</sup>Expenses not segregated.



(Continued.)

FISCAL YEAR ENDING JUNE 30, 1913. (SMALL ROADS.)

Los Angeles and San Diego Beach Rail- way Company	McCloud River Railroad Company	Mill Valley and Mt. Tamalpais Scenic Railway <sup>2</sup>	Modesto and Empire Traction Company	Nevada-Calif- ornia-Oregon Railway Company	Nevada County Narrow Gauge Railroad Company
	\$2,265 15		\$180 00	\$5,914 89	
\$10,080 90	46,723 61		1,223 70	63,471 48	\$15,254 26
1,353 81	2,276 26			2,623 26	7,486 21
202 48	2,233 10		9 65	2,167 14	1,227 49
97 40	1434 87			565 01	66 61
\$11,734 59	\$53,063 25	\$9,604 72	\$1,413 35	\$74,741 78	\$24,034 60
	\$3,494 15		\$300 00	\$1,813 06	\$747 85
\$10,512 51	13,825 98			11,442 54	4,216 74
2,133 56	19,467 42		2,404 98	10,876 76	4,129 19
8 46	585 30			1,110 64	48 50
	6,132 13				
	28,448 89			11,881 12	4,290 00
					4 50
702 87	815 20			707 01	755 55
\$13,357 40	\$72,769 07	\$9,121 97	\$2,704 98	\$37,831 13	\$14,192 33
\$3,011 70	\$252 83	\$6,979 40		\$7,762 42	\$905 73
	\$7,354 52		\$720 00	\$3,379 53	
\$3,647 83	5,194 70			11,717 69	\$8,078 52
	2,036 69				
	2,999 95				
	4,967 99				
	735 97				
	1,200 00				
7,323 04	11,745 24			12,710 21	5,706 05
9,130 98	33,239 23		1,759 14	38,082 82	15,917 53
3,602 77	4,408 80			2,799 39	2,143 45
6,708 02	15,597 25		3,307 44	8,767 76	4,779 93
312 78	509 45		607 14	1,644 02	1,285 49
473 75	151 12			125 00	41 00
47 41	37 00		25 78	3,017 03	230 15
130 13	914 47			1,635 96	61 27
567 18	788 39		853 97	1,630 97	948 44
\$31,943 89	\$91,880 77	\$17,278 15	\$7,273 47	\$85,510 38	\$39,191 83

TABLE No. 4

OPERATING EXPENSES OF CALIFORNIA RAILROADS FOR

Lake Tahoe  
Railway and  
Transportation  
Company

<i>V. General Expenses.</i>	
Administration .....	\$5,283 85
Insurance .....	1,292 90
Other general expenses.....	1,022 59
General administration joint tracks, yards and terminals.....Dr.	-----
General administration joint tracks, yards and terminals.....Cr.	-----
Total general expenses.....	\$7,599 34
<i>Recapitulation Expenses.</i>	
I. Maintenance of way and structures.....	\$12,698 47
II. Maintenance of equipment.....	5,884 23
III. Traffic expenses .....	3,652 34
IV. Transportation expenses .....	15,373 16
V. General expenses .....	7,599 34
Total operating expenses for fiscal year ending June 30, 1913....	\$45,207 54
Total operating expenses for fiscal year ending June 30, 1912....	36,180 45
Increase .....	9,027 09
Decrease .....	-----
<i>Ratio of Operating Expenses to Operating Revenues.</i>	
For fiscal year ending June 30, 1913.....	94.7%
For fiscal year ending June 30, 1912.....	83.04%

<sup>1</sup>No statistics reported.

<sup>2</sup>Expenses not segregated.

—Continued.

FISCAL YEAR ENDING JUNE 30, 1913. (SMALL ROADS.)

Los Angeles and San Diego Beach Rail- way Company	McCloud River Railroad Company	Mill Valley and Mt. Tamalpais Scenic Railway <sup>2</sup>	Modesto and Empire Traction Company	Nevada-Cal- ifornia-Oregon Railway Company	Nevada County Narrow Gauge Railroad Company
\$7,110 94	\$25,281 74	\$7,954 39	-----	\$20,137 13	\$10,716 68
167 01	2,281 47	1,016 24	\$240 23	980 98	1,844 54
955 47	1,024 28	-----	1,866 76	862 60	7,249 82
-----	-----	-----	-----	-----	-----
\$8,233 42	\$28,587 49	\$8,970 63	\$2,106 99	\$21,980 71	\$19,811 04
\$11,734 59	\$53,063 25	\$9,604 72	\$1,413 35	\$74,741 78	\$24,034 60
13,357 40	72,769 07	9,121 97	2,704 98	37,831 13	14,192 33
3,011 70	252 83	6,979 40	-----	7,762 42	905 73
31,943 89	91,880 77	17,278 15	7,273 47	85,510 38	39,191 83
8,233 42	28,587 49	8,970 63	2,106 99	21,980 71	19,811 04
\$68,281 00	\$246,553 41	\$51,954 87	\$13,498 79	\$227,826 42	\$98,135 53
56,420 71	232,035 50	48,702 90	-----	217,737 40	91,766 04
11,860 29	14,517 91	3,251 97	-----	10,089 02	6,369 49
-----	-----	-----	-----	-----	-----
77.71%	63.86%	71.1%	127.4%	68.42%	75.86%
73.28%	62.54%	-----	-----	67.03%	75.17%

TABLE No. 4

OPERATING EXPENSES OF CALIFORNIA RAILROADS FOR

Pacific  
Coast  
Railway  
Company

<i>I. Maintenance of Way and Structures.</i>	
Superintendence .....	\$2,848 33
Maintenance of roadway and track .....	37,263 44
Maintenance of track structures .....	9,087 05
Maintenance of buildings, docks and wharves .....	1,463 32
Injuries to persons .....	3,250 00
Other maintenance of way and structure expenses .....	623 00
Maintaining joint tracks, yards and other facilities.....Dr. ....	-----
Maintaining joint tracks, yards and other facilities.....Cr. ....	-----
Total maintenance of way and structures .....	\$54,535 14
<i>II. Maintenance of Equipment.</i>	
Superintendence .....	\$2,457 75
Locomotive—repairs .....	13,566 07
Car—repairs .....	5,951 87
Floating equipment—repairs .....	-----
Work equipment—repairs .....	501 16
Equipment—renewals .....	4,128 16
Equipment—depreciation .....	8,459 38
Injuries to persons .....	-----
Other maintenance of equipment expenses .....	1,111 60
Maintaining joint equipment at terminals.....Dr. ....	-----
Maintaining joint equipment at terminals.....Cr. ....	-----
Total maintenance of equipment .....	\$36,175 99
<i>III. Traffic Expenses.</i>	
Traffic expenses .....	\$1,714 08
<i>IV. Transportation Expenses.</i>	
Superintendence and dispatching trains .....	\$2,449 48
Station service .....	13,476 98
Yard enginemen .....	-----
Other yard employees .....	-----
Fuel for yard locomotives .....	-----
All other yard expenses .....	-----
Operating joint yards and terminals.....Dr. ....	-----
Operating joint yards and terminals.....Cr. ....	-----
Road enginemen and motormen .....	9,484 00
Fuel for road locomotives .....	8,464 60
Other road locomotive supplies and expenses .....	8,080 82
Road trainmen .....	12,830 35
Train supplies and expenses .....	3,209 94
Injuries to persons .....	2,501 00
Loss and damage .....	1,113 43
Other casualties .....	152 60
All other transportation expenses .....	2,961 54
Operating joint tracks and facilities.....Dr. ....	-----
Operating joint tracks and facilities.....Cr. ....	-----
Total transportation expenses .....	\$64,724 74

<sup>1</sup>Credit item.



—Continued.

FISCAL YEAR ENDING JUNE 30, 1913. (SMALL ROADS.)

Pajaro Valley Consolidated Railroad Company	Quincy Western Railway Company	Sacramento Valley and Eastern Railway	San Diego and Southeastern Railway Company	San Diego and Arizona Railway Company	San Joaquin and Eastern Railroad Company
\$227 88	\$360 00	-----	\$2,984 73	\$202 09	\$4,151 33
13,431 56	1,424 98	\$3,076 48	71,495 12	1,818 03	73,937 53
3,410 83	-----	-----	5,700 76	24 05	3,611 22
186 81	-----	199 20	3,003 25	27 42	4,844 25
-----	-----	-----	717 62	-----	151 67
318 55	-----	81 73	2,488 45	133 07	4,877 14
-----	149 92	-----	713 71	-----	-----
-----	-----	-----	106 50	-----	-----
\$17,575 13	\$1,934 90	\$3,357 41	\$86,997 14	\$2,204 66	\$91,573 14
-----	\$180 00	-----	\$1,435 24	\$10 42	\$3,947 90
\$12,750 37	925 98	\$3,150 34	21,400 21	237 78	29,088 83
4,553 06	67 13	699 38	34,229 37	867 34	10,738 48
-----	73 47	-----	51 96	-----	81 14
-----	123 24	-----	664 49	-----	-----
5,109 21	690 44	-----	16,695 30	-----	5,525 48
-----	-----	-----	17 00	-----	140 16
-----	-----	-----	670 28	3 20	3,459 74
-----	-----	87 96	-----	-----	-----
-----	-----	-----	-----	-----	-----
\$22,412 64	\$2,060 26	\$3,937 68	\$75,163 85	\$1,118 74	\$52,981 73
\$244 15	-----	-----	\$7,404 08	\$84 80	\$3,408 57
-----	-----	-----	-----	-----	-----
\$463 66	\$120 00	-----	\$2,872 53	\$1,381 03	\$6,891 03
2,181 79	2,094 07	\$693 81	24,301 81	653 85	11,656 65
-----	-----	-----	2,167 14	-----	2,755 12
-----	-----	-----	3,029 17	-----	3,671 94
-----	-----	-----	1,578 19	-----	4,278 50
-----	142 50	-----	531 53	-----	57 74
-----	-----	204 84	-----	-----	-----
5,867 96	2,126 81	3,184 55	27,270 03	1,356 26	16,520 10
5,803 04	2,135 44	866 82	31,190 36	1,698 01	25,739 93
2,253 48	151 63	257 89	24,812 93	1,015 19	9,098 12
5,372 95	600 00	2,466 65	31,224 13	1,681 81	17,951 88
797 30	57 91	-----	6,848 50	64 67	876 82
-----	-----	-----	12,755 00	-----	1,002 48
64	-----	331 50	811 49	1 57	515 70
216 71	75 00	-----	1,900 43	5 00	2,489 69
134 25	98 10	1,633 44	6,345 38	143 51	1,664 95
-----	-----	-----	465 26	-----	2,173 06
-----	-----	-----	-----	-----	145 60
\$23,096 78	\$7,601 46	\$9,639 50	\$178,103 88	\$8,000 90	\$107,298 11

TABLE No. 4

OPERATING EXPENSES OF CALIFORNIA RAILROADS FOR

	Pacific Coast Railway Company
<i>V. General Expenses.</i>	
Administration .....	\$13,967 87
Insurance .....	884 07
Other general expenses.....	421 05
General administration joint tracks, yards and terminals.....Dr.	-----
General administration joint tracks, yards and terminals..... Cr.	-----
Total general expenses.....	\$15,272 99
<i>Recapitulation Expenses.</i>	
I. Maintenance of way and structures.....	\$54,535 14
II. Maintenance of equipment.....	36,175 99
III. Traffic expenses .....	1,714 08
IV. Transportation expenses .....	64,724 74
V. General expenses .....	15,272 99
Total operating expenses for fiscal year ending June 30, 1913....	\$172,422 94
Total operating expenses for fiscal year ending June 30, 1912....	203,325 47
Increase .....	-----
Decrease .....	30,902 53
<i>Ratio of Operating Expenses to Operating Revenues.</i>	
For fiscal year ending June 30, 1913.....	76.17%
For fiscal year ending June 30, 1912.....	82.10%

<sup>1</sup>No statistics reported.

—(Continued.)

FISCAL YEAR ENDING JUNE 30, 1913. (SMALL ROADS.)

Pajaro Valley Consolidated Railroad Company	Quincy Western Railway Company	Sacramento Valley and Eastern Railway	San Diego and Southeastern Railway Company	San Diego and Arizona Railway Company	San Joaquin and Eastern Railroad Company
\$14,111 51	\$199 61	\$5,099 94	\$23,275 35	\$1,885 15	\$9,752 52
1,413 75	72 00		2,806 95	14 25	
222 23	-----	144 80	4,068 72	114 21	766 90
-----		-----	-----	-----	-----
\$15,747 49	\$271 61	\$5,244 74	\$30,151 02	\$2,013 61	\$10,519 42
\$17,575 13	\$1,934 90	\$3,357 41	\$86,997 14	\$2,204 66	\$91,573 14
22,412 64	2,060 26	3,937 68	75,163 85	1,118 74	52,981 73
244 15			7,404 08	84 80	3,408 57
23,096 78	7,601 46	9,639 50	178,103 88	8,000 90	107,298 11
15,747 49	271 61	5,244 74	30,151 02	2,013 61	10,519 42
\$79,076 19	\$11,868 23	\$22,179 33	\$377,819 97	\$13,422 71	\$265,780 97
89,781 99	1	19,700 79	105,173 71		
		2,478 54	272,646 26		
10,705 80	-----	-----	-----	-----	-----
128.73%	116.37%	161.11%	88.13%	206.06%	37.37%
103.96%	-----	195.21%	80.60%	-----	-----

TABLE No. 4

OPERATING EXPENSES OF CALIFORNIA RAILROADS FOR

Sierra  
Railway  
Company of  
California

<i>I. Maintenance of Way and Structures.</i>	
Superintendence .....	\$8,010 37
Maintenance of roadway and track .....	72,153 11
Maintenance of track structures .....	8,254 06
Maintenance of buildings, docks and wharves .....	5,983 32
Injuries to persons .....	54 50
Other maintenance of way and structure expenses .....	1,364 30
Maintaining joint tracks, yards and other facilities .....	Dr. 230 62
Maintaining joint tracks, yards and other facilities .....	Cr. 1,278 00
Total maintenance of way and structures .....	\$94,772 28
<i>II. Maintenance of Equipment.</i>	
Superintendence .....	\$2,898 25
Locomotive—repairs .....	20,059 96
Car—repairs .....	4,307 41
Floating equipment—repairs .....	.....
Work equipment—repairs .....	2,192 48
Equipment—renewals .....	.....
Equipment—depreciation .....	5,156 52
Injuries to persons .....	1,621 15
Other maintenance of equipment expenses .....	2,912 95
Maintaining joint equipment at terminals .....	Dr. ....
Maintaining joint equipment at terminals .....	Cr. ....
Total maintenance of equipment .....	\$39,148 72
<i>III. Traffic Expenses.</i>	
Traffic expenses .....	\$3,669 10
<i>IV. Transportation Expenses.</i>	
Superintendence and dispatching trains .....	\$6,817 41
Station service .....	14,904 78
Yard enginemen .....	.....
Other yard employees .....	.....
Fuel for yard locomotives .....	.....
All other yard expenses .....	.....
Operating joint yards and terminals .....	Dr. 202 59
Operating joint yards and terminals .....	Cr. ....
Road enginemen and motormen .....	12,735 78
Fuel for road locomotives .....	25,633 15
Other road locomotive supplies and expenses .....	4,215 09
Road trainmen .....	12,293 40
Train supplies and expenses .....	1,249 22
Injuries to persons .....	34 25
Loss and damage .....	249 51
Other casualties .....	1,127 94
All other transportation expenses .....	3,717 45
Operating joint tracks and facilities .....	Dr. ....
Operating joint tracks and facilities .....	Cr. 1356 38
Total transportation expenses .....	\$82,824 19

1Credit item.



—Continued.

FISCAL YEAR ENDING JUNE 30, 1913. (SMALL ROADS.)

South San Francisco Belt Railway Company	Stockton Terminal and Eastern Railroad Company	Stone Canyon Railroad Company	Sugar Pine Railway Company	Sunset Railway Company	Tonopah and Tidewater Railroad Company
	\$432 42	\$797 97	\$961 80	\$6,437 62	\$4,332 04
\$2,930 68	828 74	4,704 43	9,938 73	65,812 44	29,921 41
	4 75	191 95	191 87	8,235 31	4,571 79
	4 25	266 42	34 91	4,164 07	1,612 40
		16 00	22 16		5 72
2,839 20	10 02	563 54	300 68	4,542 91	1,565 53
				11,306 24	317 48
					16 82
\$5,769 88	\$1,280 18	\$6,540 31	\$11,450 15	\$100,498 59	\$42,319 55
	\$432 42	\$437 15		\$1,195 61	\$3,047 06
\$118 50	3,447 57	3,938 83	\$6,285 86	858 72	9,113 10
	50 33	80 36	1,397 02	8,155 58	3,183 81
			222 90	56 20	629 32
					3,971 54
1,831 44		8 00	1,946 05		4,658 33
	14 00				167 21
	11 90	165 60	75 29	35 49	1,339 95
				2,132 51	
\$1,949 94	\$3,942 42	\$4,629 94	\$9,927 12	\$12,434 11	\$26,110 32
	\$301 63	\$244 85	\$10 00	\$14,012 51	\$16,880 33
	\$651 27	\$1,067 79	\$963 11	\$9,881 06	\$3,977 43
	811 42		1,658 00	32,155 85	10,925 36
\$2,510 00					
1,739 75					
2,156 00					
				33,912 46	
	1,517 43	2,952 20	4,577 30	30,254 08	6,913 00
	2,605 53	2,471 27	12,030 53	37,083 07	15,571 98
	575 91	966 48	2,895 77	15,764 70	8,752 00
	1,399 47	1,520 55	5,204 90	42,863 37	8,629 65
	92 06	27 02	1,420 64	9,693 57	2,874 47
	533 40	49 00		12,293 93	8 91
	26 22			2,712 62	163 77
	43 15	20 00	373 59	3,012 20	4 08
	130 89	416 79	590 77	4,427 84	3,253 88
				1,934 54	
\$6,405 75	\$3,386 80	\$9,491 10	\$29,714 61	\$235,994 29	\$61,074 53

TABLE No. 4

OPERATING EXPENSES OF CALIFORNIA RAILROADS FOR

	Sierra Railway Company of California
<i>V. General Expenses.</i>	
Administration .....	\$15,792 49
Insurance .....	
Other general expenses.....	2,078 48
General administration joint tracks, yards and terminals.....Dr.	
General administration joint tracks, yards and terminals.....Cr.	
<b>Total general expenses.....</b>	<b>\$17,870 97</b>
<i>Recapitulation Expenses.</i>	
I. Maintenance of way and structures.....	\$94,772 28
II. Maintenance of equipment.....	39,148 72
III. Traffic expenses .....	3,669 10
IV. Transportation expenses .....	82,824 19
V. General expenses .....	17,870 97
<b>Total operating expenses for fiscal year ending June 30, 1913...</b>	<b>\$238,285 26</b>
<b>Total operating expenses for fiscal year ending June 30, 1912...</b>	<b>237,221 51</b>
<b>Increase .....</b>	<b>1,063 75</b>
<b>Decrease .....</b>	
<i>Ratio of Operating Expenses to Operating Revenues.</i>	
For fiscal year ending June 30, 1913.....	56.10%
For fiscal year ending June 30, 1912.....	55.70%

<sup>1</sup>Credit item.

—Continued.

FISCAL YEAR ENDING JUNE 30, 1913. (SMALL ROADS.)

South San Francisco Belt Railway Company	Stockton Terminal and Eastern Railroad Company	Stone Canyon Railroad Company	Sugar Pine Railway Company	Sunset Railway Company	Tonopah and Tidewater Railroad Company
-----	\$2,761 13	\$537 50	\$6,028 45	\$10,034 88	\$7,272 54
\$12 47	168 00	992 75	200 00	54 54	1,396 39
5,287 29	70 75	49 61	52 15	264 25	763 11
-----	-----	-----	-----	149 92	13 10
-----	-----	-----	-----	-----	-----
\$5,299 76	\$2,999 88	\$1,579 86	\$6,280 60	\$10,503 59	\$9,445 14
-----	-----	-----	-----	-----	-----
\$5,769 88	\$1,280 18	\$6,540 31	\$11,450 15	\$100,498 59	\$42,319 55
1,949 94	3,942 42	4,629 94	9,927 12	12,434 11	26,110 32
-----	301 63	244 85	10 00	14,012 51	16,880 33
6,405 75	8,386 80	9,491 10	29,714 61	235,994 29	61,074 53
5,299 76	2,999 88	1,579 86	6,280 60	10,503 59	9,445 14
-----	-----	-----	-----	-----	-----
\$19,425 33	\$16,910 91	\$22,486 06	\$57,382 48	\$373,443 09	\$155,829 87
14,649 93	20,952 93	-----	47,328 84	522,741 39	157,907 02
4,775 40	-----	-----	10,053 64	-----	-----
-----	4,042 02	-----	-----	149,298 30	2,077 15
-----	-----	-----	-----	-----	-----
110.00%	97.28%	341.8%	74.68%	50.74%	52.29%
-----	135.64%	-----	72.25%	56.44%	61.24%
-----	-----	-----	-----	-----	-----

TABLE No. 4

OPERATING EXPENSES OF CALIFORNIA RAILROADS FOR

	Ventura County Railway Company
<i>I. Maintenance of Way and Structures.</i>	
Superintendence .....	\$2,412 25
Maintenance of roadway and track.....	25,398 53
Maintenance of track structures.....	1,003 60
Maintenance of buildings, docks and wharves.....	521 77
Injuries to persons.....	
Other maintenance of way and structure expenses.....	1,850 32
Maintaining joint tracks, yards and other facilities.....Dr.	
Maintaining joint tracks, yards and other facilities.....Cr.	
Total maintenance of way and structures.....	\$31,186 47
<i>II. Maintenance of Equipment.</i>	
Superintendence .....	\$1,747 60
Locomotive—repairs .....	3,819 56
Car—repairs .....	4,050 05
Floating equipment—repairs .....	
Work equipment—repairs .....	
Equipment—renewals .....	
Equipment—depreciation .....	4,202 62
Injuries to persons.....	
Other maintenance of equipment expenses.....	1,756 69
Maintaining joint equipment at terminals.....Dr.	
Maintaining joint equipment at terminals.....Cr.	
Total maintenance of equipment.....	\$15,576 52
<i>III. Traffic Expenses.</i>	
Traffic expenses .....	\$468 99
<i>IV. Transportation Expenses.</i>	
Superintendence and dispatching trains.....	\$710 31
Station service .....	908 08
Yard enginemen .....	
Other yard employees.....	
Fuel for yard locomotives.....	
All other yard expenses.....	
Operating joint yards and terminals.....Dr.	
Operating joint yards and terminals.....Cr.	
Road enginemen and motormen.....	2,710 83
Fuel for road locomotives.....	3,898 07
Other road locomotive supplies and expenses.....	539 32
Road trainmen .....	2,332 14
Train supplies and expenses.....	78 32
Injuries to persons.....	64 35
Loss and damage.....	
Other casualties .....	41 96
All other transportation expenses.....	682 78
Operating joint tracks and facilities.....Dr.	
Operating joint tracks and facilities.....Cr.	
Total transportation expenses.....	\$11,966 10

<sup>1</sup>Credit item.

<sup>2</sup>Mill Valley and Mt. Tamalpais Scenic Railway Company expenses of \$9,604.72, Bay Point and Clayton Railroad Company expenses of \$2,957.82 not segregated.

<sup>3</sup>Mill Valley and Mt. Tamalpais Scenic Railway Company expenses of \$9,121.97 and Iron Mountain Railway Company expenses of \$37,741.69 and Bay Point and Clayton Railroad Company expenses of \$1,279.92 not segregated.

<sup>4</sup>Iron Mountain Railway Company expenses of \$33,799.99 and Mill Valley and Mt. Tamalpais Scenic Railway Company expenses of \$17,278.15 not segregated.



—Continued.

FISCAL YEAR ENDING JUNE 30, 1913. (SMALL ROADS.)

Yosemite Valley Railroad Company	Yreka Railroad Company	Total
\$1,434 50		\$63,770 55
25,247 43	\$3,513 01	720,093 40
2,229 01	54 08	105,357 80
1,127 96	156 94	37,140 71
14 50		4,318 17
843 08	45 15	26,461 58
		13,764 62
		<sup>1</sup> 1,391 32
\$20,896 48	\$3,769 18	<sup>2</sup> \$982,078 05
\$3,131 14		\$35,555 25
6,240 53	\$1,290 99	234,815 12
4,167 52	1,410 19	166,096 08
6 96		7,430 18
		15,021 60
7,245 12		119,142 03
		2,330 02
447 88	1 67	23,280 36
		2,220 47
\$21,239 15	\$2,702 85	<sup>3</sup> \$654,034 69
\$11,966 03	\$161 82	\$91,299 55
\$3,235 39	\$2,214 00	\$73,572 42
8,685 55	2,114 25	202,826 85
		22,333 81
		24,910 43
	2,730 25	30,642 83
	165 71	7,215 80
		40,577 77
7,960 55	2,183 86	210,076 61
15,689 50		358,352 63
3,378 94	186 50	108,450 36
10,365 53	1,065 24	233,987 91
3,729 76	60 50	38,892 38
217 85		31,253 19
47 12		10,268 38
1,395 70		14,786 66
1,505 30	746 85	37,954 88
		4,572 86
		<sup>4</sup> 401 98
\$56,211 19	\$11,467 16	<sup>4</sup> \$1,501,351 93

TABLE No. 4

OPERATING EXPENSES OF CALIFORNIA RAILROADS FOR

	Ventura County Railway Company
<i>V. General Expenses.</i>	
Administration .....	\$1,874 21
Insurance .....	
Other general expenses.....	906 94
General administration joint tracks, yards and terminals.....Dr.	
General administration joint tracks, yards and terminals.....Cr.	
Total general expenses.....	\$2,781 15
<i>Recapitulation Expenses.</i>	
I. Maintenance of way and structures.....	\$31,186 47
II. Maintenance of equipment.....	15,576 52
III. Traffic expenses .....	468 99
IV. Transportation expenses .....	11,966 10
V. General expenses .....	2,781 15
Total operating expenses for fiscal year ending June 30, 1913...	\$61,979 23
Total operating expenses for fiscal year ending June 30, 1912...	45,429 67
Increase .....	16,549 56
Decrease .....	
<i>Ratio of Operating Expenses to Operating Revenues.</i>	
For fiscal year ending June 30, 1913.....	173.02%
For fiscal year ending June 30, 1912.....	121.31%

<sup>1</sup>Bay Point and Clayton Railroad Company expenses of \$14,027.67 not segregated.  
<sup>2</sup>Colusa and Lake Railroad Company expenses of \$19,761.84 not segregated.

—Concluded.

FISCAL YEAR ENDING JUNE 30, 1913. (SMALL ROADS.)

Yosemite Valley Railroad Company	Yreka Railroad Company	Total	
\$5,433 94	\$204 70	\$232,857 47	
640 15	295 50	23,331 59	
1,216 94	-----	31,788 02	
-----	-----	163 02	
-----	-----	-----	
\$7,291 03	\$500 20	<sup>1</sup> \$305,162 77	
\$30,896 48	\$3,769 18	\$982,078 05	
21,239 15	2,702 85	654,034 69	
11,966 03	161 82	91,299 55	
56,211 19	11,467 16	1,501,351 93	
7,291 03	500 20	305,162 77	
-----	-----	-----	
\$127,603 88	\$18,601 21	<sup>2</sup> \$3,553,688 83	
121,451 53	20,965 34	2,955,601 85	
6,152 35	-----		
-----	2,364 13		
45.84%	71.52%		
44.90%	69.49%		

TABLE

COMPARISON OF FREIGHT, PASSENGER AND OTHER EARNINGS, GROSS  
CALIFORNIA RAILROADS FOR THE

	Amador Central Railroad Company	Arcata and Mad River Railroad Company
<i>Freight Earnings.</i>		
Year ending June 30, 1912.....	\$75,677 58	\$119,449 03
Year ending June 30, 1913.....	71,998 78	109,621 52
Increase .....		
Decrease .....	\$3,678 80	\$9,827 51
<i>Passenger Earnings.</i>		
Year ending June 30, 1912.....	\$28,617 36	\$15,532 69
Year ending June 30, 1913.....	18,315 21	13,482 06
Increase .....		
Decrease .....	\$10,302 15	\$2,050 63
<i>Other Earnings.</i>		
Year ending June 30, 1912.....	\$558 84	\$2,862 00
Year ending June 30, 1913.....	1,377 64	426 00
Increase .....	\$818 80	
Decrease .....		\$2,436 00
<i>Gross Earnings from Operation—All Sources.</i>		
Year ending June 30, 1912.....	\$104,853 78	\$137,843 72
Year ending June 30, 1913.....	91,691 63	123,529 58
Increase .....		
Decrease .....	\$13,162 15	\$14,314 14
<i>Operating Expenses.</i>		
Year ending June 30, 1912.....	\$49,369 66	\$90,071 60
Year ending June 30, 1913.....	43,525 13	82,743 66
Increase .....		
Decrease .....	\$5,844 53	\$7,327 94
<i>Results from Operation.</i>		
Year ending June 30, 1912—Income.....	\$55,484 12	\$47,772 12
Year ending June 30, 1912—Deficit.....		
Year ending June 30, 1913—Income.....	\$48,166 50	\$40,785 92
Year ending June 30, 1913—Deficit.....		



No. 5.

EARNINGS, OPERATING EXPENSES AND INCOME FROM OPERATION OF  
YEARS ENDING JUNE 30, 1912 AND 1913.

Atchison, Topeka and Santa Fe Railway Company	Bay Point and Clayton Railroad Company	Boea and Loyalton Railroad Company	Bucksport and Elk River Railroad Company	Butte County Railroad Company	California Western Railroad and Navigation Company
\$12,357,243 45	\$45,489 70	\$87,548 64	\$24,440 94	\$142,598 99	\$149,694 34
13,008,131 46	49,390 16	79,596 97	28,696 02	116,687 10	195,791 97
\$650,888 01	\$3,900 46	-----	\$4,255 08	-----	\$46,097 63
-----	-----	\$7,951 67	-----	\$25,911 89	-----
\$6,166,695 15	\$529 00	\$13,027 80	-----	\$25,450 12	\$37,422 90
6,769,228 83	454 00	12,174 37	-----	23,293 46	64,894 13
\$602,533 68	-----	-----	-----	-----	\$27,471 23
-----	\$75 00	\$853 43	-----	\$2,156 66	-----
\$228,650 18	-----	\$482 31	\$2,616 22	\$565 58	\$21,255 42
250,902 42	-----	663 01	-----	322 10	38,967 85
\$22,252 24	-----	\$180 70	-----	-----	\$17,712 43
-----	-----	-----	\$2,616 22	\$243 48	-----
\$18,752,588 78	\$46,018 70	\$101,058 75	\$27,057 16	\$168,614 69	\$208,372 66
20,028,262 71	49,844 16	92,434 35	28,696 02	140,302 66	299,653 95
\$1,275,673 93	\$3,825 46	-----	\$1,638 86	-----	\$91,281 29
-----	-----	\$8,624 40	-----	\$28,312 03	-----
\$11,998,581 08	\$25,744 72	\$77,427 76	\$11,560 28	\$102,663 30	\$102,860 15
13,281,583 76	18,265 41	71,485 87	9,941 17	82,093 76	189,968 34
\$1,283,002 68	-----	-----	-----	-----	\$87,108 19
-----	\$7,479 31	\$5,941 89	\$1,619 11	\$20,569 54	-----
\$6,754,007 70	\$20,273 98	\$23,630 99	\$15,496 88	\$65,951 39	\$105,512 51
-----	-----	-----	-----	-----	-----
\$6,746,678 95	\$31,578 75	\$20,948 48	\$18,754 85	\$58,208 90	\$109,685 61
-----	-----	-----	-----	-----	-----

TABLE No. 5

COMPARISON OF FREIGHT, PASSENGER AND OTHER EARNINGS, GROSS  
CALIFORNIA RAILROADS FOR THE

	Camino, Placerville and Lake Tahoe Railroad Company	Cement, Tolamas and Tidewater Railroad Company
<i>Freight Earnings.</i>		
Year ending June 30, 1912-----	\$970 88	\$38,835 99
Year ending June 30, 1913-----	9,327 22	82,081 83
Increase -----	\$8,356 34	\$43,245 84
Decrease -----		
<i>Passenger Earnings.</i>		
Year ending June 30, 1912-----	\$88 00	\$488 93
Year ending June 30, 1913-----	631 15	1,455 44
Increase -----	\$543 15	\$966 51
Decrease -----		
<i>Other Earnings.</i>		
Year ending June 30, 1912-----	\$10 00	\$62 67
Year ending June 30, 1913-----	50 00	
Increase -----	\$40 00	
Decrease -----		\$62 67
<i>Gross Earnings from Operation—All Sources.</i>		
Year ending June 30, 1912-----	\$1,068 88	\$39,387 59
Year ending June 30, 1913-----	10,008 37	83,537 27
Increase -----	\$8,939 49	\$44,149 68
Decrease -----		
<i>Operating Expenses.</i>		
Year ending June 30, 1912-----	\$4,140 13	\$24,983 16
Year ending June 30, 1913-----	16,741 83	48,907 65
Increase -----	\$12,601 70	\$23,924 49
Decrease -----		
<i>Results from Operation.</i>		
Year ending June 30, 1912—Income-----		\$14,404 43
Year ending June 30, 1912—Deficit-----	\$3,071 25	
Year ending June 30, 1913—Income-----		\$34,629 62
Year ending June 30, 1913—Deficit-----	\$6,733 46	

<sup>1</sup>From December 26, 1912, to June 30, 1913.

—Continued.

EARNINGS, OPERATING EXPENSES AND INCOME FROM OPERATION OF  
YEARS ENDING JUNE 30, 1912 AND 1913.

Colusa and Lake Railroad Company	Crescent City Railway <sup>1</sup>	Diamond and Caldor Railroad Company	Holton Interurban Railway Company	Iron Mountain Railway Company	Lake Tahoe Railway and Transportation Company
\$10,304 24	-----	\$80,990 58	\$40,261 20	\$36,127 75	\$10,279 37
9,453 12	\$70,124 39	72,647 50	44,715 39	37,730 20	10,760 43
-----	\$70,124 39	-----	\$4,454 19	\$1,602 45	\$481 06
\$851 12	-----	\$8,343 08	-----	-----	-----
\$15,423 54	-----	\$2,098 75	\$23,390 17	-----	\$33,021 13
12,641 95	-----	1,966 45	34,264 46	-----	36,950 59
-----	-----	-----	\$10,874 29	-----	\$3,929 46
\$2,781 59	-----	\$132 30	-----	-----	-----
-----	-----	-----	\$1,976 30	-----	\$268 96
-----	-----	-----	2,019 31	-----	-----
-----	-----	-----	\$43 01	-----	-----
-----	-----	-----	-----	-----	\$268 96
\$25,727 78	-----	\$83,089 33	\$65,627 67	\$36,127 75	\$43,569 46
22,095 07	\$70,124 39	74,613 95	80,999 16	37,730 20	47,711 02
-----	\$70,124 39	-----	\$15,371 49	\$1,602 45	\$4,141 56
\$3,632 71	-----	\$8,475 38	-----	-----	-----
\$20,617 54	-----	\$54,733 65	\$38,898 23	\$63,058 55	\$36,180 45
19,761 84	\$17,629 39	44,549 47	50,112 82	71,987 27	45,207 54
-----	\$17,629 39	-----	\$11,214 59	\$8,928 72	\$9,027 09
\$855 70	-----	\$10,184 18	-----	-----	-----
\$5,110 24	-----	\$28,355 68	\$26,729 44	-----	\$7,389 01
-----	-----	-----	-----	\$26,930 80	-----
\$2,333 23	\$52,495 00	\$30,064 48	\$30,886 34	-----	\$2,503 48
-----	-----	-----	-----	\$34,257 07	-----

TABLE No. 5

COMPARISON OF FREIGHT, PASSENGER AND OTHER EARNINGS, GROSS  
CALIFORNIA RAILROADS FOR THE

	Los Angeles and San Diego Beach Railway Company	McCloud River Railroad Company
<i>Freight Earnings.</i>		
Year ending June 30, 1912-----	\$11,122 75	\$346,250 62
Year ending June 30, 1913-----	11,538 10	359,716 37
Increase -----	\$415 35	\$13,465 75
Decrease -----		
<i>Passenger Earnings.</i>		
Year ending June 30, 1912-----	\$65,810 49	\$24,344 50
Year ending June 30, 1913-----	76,292 42	25,636 80
Increase -----	\$10,481 93	\$1,292 30
Decrease -----		
<i>Other Earnings.</i>		
Year ending June 30, 1912-----	\$51 27	\$429 52
Year ending June 30, 1913-----	62 45	730 31
Increase -----	\$11 18	\$300 79
Decrease -----		
<i>Gross Earnings from Operation—All Sources.</i>		
Year ending June 30, 1912-----	\$76,984 51	\$371,024 64
Year ending June 30, 1913-----	87,892 97	386,083 48
Increase -----	\$10,908 46	\$15,058 84
Decrease -----		
<i>Operating Expenses.</i>		
Year ending June 30, 1912-----	\$56,420 71	\$232,035 50
Year ending June 30, 1913-----	68,281 00	246,553 41
Increase -----	\$11,860 29	\$14,517 91
Decrease -----		
<i>Results from Operation.</i>		
Year ending June 30, 1912—Income-----	\$20,563 80	\$138,989 14
Year ending June 30, 1912—Deficit-----		
Year ending June 30, 1913—Income-----	\$19,611 97	\$139,530 07
Year ending June 30, 1913—Deficit-----		

<sup>1</sup>Credit item.

<sup>2</sup>Operating expenses for six months only



--Continued.

EARNINGS, OPERATING EXPENSES AND INCOME FROM OPERATION OF  
YEARS ENDING JUNE 30, 1912 AND 1913.

Mill Valley and Mt. Tamalpais Scenic Railway	Modesto and Empire Traction Company	Nevada-California-Oregon Railroad Company	Nevada County Narrow Gauge Railroad Company	Northwestern Pacific Railroad Company	Ocean Shore Railroad Company
\$606,25		\$178,440 57	\$58,712 93	\$1,352,648 85	\$86,789 61
55 00	\$5,320 99	188,548 24	64,437 83	1,426,719 80	189,757 83
	\$5,320 99	\$10,107 67	\$5,724 90	\$74,070 95	\$102,968 22
\$551 25					
\$74,543 27		\$144,432 61	\$62,825 64	\$2,108,565 66	\$47,084 76
73,018 53	\$5,272 01	143,801 57	64,527 70	2,241,265 58	91,261 03
	\$5,272 01		\$1,702 06	\$132,699 92	\$44,176 27
\$1,524 74		\$631 04			
\$1,122 94		\$1,955 32	\$532 44	\$37,885 44	\$4 98
		612 16	400 16	41,780 49	77 30
				\$3,895 05	\$82 28
\$1,122 94		\$1,343 16	\$132 28		
\$76,272 46		\$324,828 50	\$122,071 01	\$3,499,099 95	\$133,869 39
73,073 53	\$10,593 00	332,961 97	129,365 69	3,709,765 87	281,096 16
	\$10,593 00	\$8,133 47	\$7,294 68	\$210,665 92	\$147,226 77
\$3,198 93					
\$48,702 90		\$217,737 40	\$91,766 04	\$2,563,618 29	\$125,673 03
51,954 87	\$13,498 79	227,826 42	98,135 53	2,594,844 54	244,361 02
\$3,251 97	\$13,498 79	\$10,089 02	\$6,369 49	\$31,226 25	
\$27,569 56		\$107,091 10	\$30,304 97	\$935,481 66	\$8,196 36
\$21,118 66		\$105,135 55	\$31,230 16	\$1,114,921 33	\$36,735 14
	\$2,905 79				

TABLE No. 5

COMPARISON OF FREIGHT, PASSENGER AND OTHER EARNINGS, GROSS  
CALIFORNIA RAILROADS FOR THE

	Pacific Coast Railway Company	Pajaro Valley Consolidated Railroad Company
<i>Freight Earnings.</i>		
Year ending June 30, 1912.....	\$174,430 29	\$72,500 61
Year ending June 30, 1913.....	150,476 57	49,778 01
Increase .....		
Decrease .....	\$23,953 72	\$22,722 60
<i>Passenger Earnings.</i>		
Year ending June 30, 1912.....	\$71,970 83	\$13,698 55
Year ending June 30, 1913.....	67,416 10	11,484 43
Increase .....		
Decrease .....	\$4,554 73	\$2,214 12
<i>Other Earnings.</i>		
Year ending June 30, 1912.....	\$1,318 93	\$162 36
Year ending June 30, 1913.....	8,597 84	166 24
Increase .....		
Decrease .....	\$7,278 91	\$3 88
<i>Gross Earnings from Operation—All Sources.</i>		
Year ending June 30, 1912.....	\$247,720 05	\$86,361 52
Year ending June 30, 1913.....	226,490 51	61,428 68
Increase .....		
Decrease .....	\$21,229 54	\$24,932 84
<i>Operating Expenses.</i>		
Year ending June 30, 1912.....	\$203,325 47	\$89,781 99
Year ending June 30, 1913.....	172,422 94	79,076 19
Increase .....		
Decrease .....	\$30,902 53	\$10,705 80
<i>Results from Operation.</i>		
Year ending June 30, 1912—Income.....	\$44,394 58	
Year ending June 30, 1912—Deficit.....		\$3,420 47
Year ending June 30, 1913—Income.....	\$54,067 57	
Year ending June 30, 1913—Deficit.....		\$17,647 51

<sup>1</sup>No statistics.<sup>2</sup>Figures for 1912 are for entire line.

—Continued.

EARNINGS, OPERATING EXPENSES AND INCOME FROM OPERATION OF  
YEARS ENDING JUNE 30, 1912 AND 1913.

Quincy Western Railroad Company	Sacramento Valley and Eastern Railway Company	San Diego and Southeastern Railway Company	San Diego and Arizona Railway Company	San Joaquin and Eastern Railroad Company	San Pedro, Los Angeles and Salt Lake Railroad Company
\$2,343 78	\$6,381 04	\$63,321 06	\$10,517 21		\$5,593,847 61
3,070 24	9,429 73	236,621 23	4,636 65	\$570,314 15	2,369,523 15
\$726 46	\$3,048 69	\$173,300 17		\$570,314 15	
			\$5,880 56		
\$7,410 65	\$3,711 02	\$66,878 57	\$1,961 92		\$3,464,613 45
7,128 12	4,336 36	190,882 42	1,309 55	\$135,208 12	1,408,791 24
	\$625 34	\$124,003 85		\$135,208 12	
\$282 53			\$652 37		
		\$293 70			\$66,013 29
		1,190 33	\$567 50		32,321 90
		\$896 63	\$567 50		
\$9,754 43	\$10,092 06	\$130,493 33	\$12,479 13		\$9,124,474 35
10,198 36	13,766 09	428,693 98	6,513 70	\$705,522 27	3,810,636 29
\$443 93	\$3,674 03	\$298,200 65		\$705,522 27	
			\$5,965 43		
<sup>1</sup>	\$19,700 79	\$105,173 71	\$13,972 13		\$7,245,539 80
\$11,868 23	22,179 33	377,819 97	13,422 71	\$265,780 97	2,620,684 37
	\$2,478 54	\$272,646 26		\$265,780 97	
			\$549 42		
		\$25,319 62			\$1,878,934 55
	\$9,608 75		\$1,493 00		
		\$50,874 01		\$439,741 30	\$1,189,951 92
\$1,669 87	\$8,413 24		\$6,909 01		

TABLE No. 5

COMPARISON OF FREIGHT, PASSENGER AND OTHER EARNINGS, GROSS  
CALIFORNIA RAILROADS FOR THE

	Sierra Railway Company of California	South San Francisco Belt Railway Company
<i>Freight Earnings.</i>		
Year ending June 30, 1912.....	\$298,167 88	\$14,891 00
Year ending June 30, 1913.....	301,872 47	17,647 30
Increase .....	\$3,704 59	\$2,756 30
Decrease .....		
<i>Passenger Earnings.</i>		
Year ending June 30, 1912.....	\$126,536 67	-----
Year ending June 30, 1913.....	121,902 40	-----
Increase .....		
Decrease .....	\$4,634 27	-----
<i>Other Earnings.</i>		
Year ending June 30, 1912.....	\$1,164 18	\$699 00
Year ending June 30, 1913.....	972 36	-----
Increase .....		
Decrease .....	\$191 82	\$699 00
<i>Gross Earnings from Operation—All Sources.</i>		
Year ending June 30, 1912.....	\$425,868 73	\$15,590 00
Year ending June 30, 1913.....	424,747 23	17,647 30
Increase .....		\$2,057 30
Decrease .....	\$1,121 50	-----
<i>Operating Expenses.</i>		
Year ending June 30, 1912.....	\$237,221 51	\$14,649 93
Year ending June 30, 1913.....	238,285 26	19,425 33
Increase .....	\$1,063 75	\$4,775 40
Decrease .....		
<i>Results from Operation.</i>		
Year ending June 30, 1912—Income.....	\$188,647 22	\$940 07
Year ending June 30, 1912—Deficit.....		-----
Year ending June 30, 1913—Income.....	\$186,461 97	-----
Year ending June 30, 1913—Deficit.....		\$1,778 03



—Continued.

EARNINGS, OPERATING EXPENSES AND INCOME FROM OPERATION OF  
YEARS ENDING JUNE 30, 1912 AND 1913.

Southern Pacific Company	Stockton Terminal and Eastern Railroad Company	Stone Canyon Railroad	Sugar Pine Railway Company	Sunset Railway Company	Tonopah and Tidewater Railroad Company
\$33,967,689 42	\$9,245 19	-----	\$65,548 15	\$705,744 69	\$205,680 97
35,597,506 81	11,099 44	\$6,197 94	76,833 56	554,466 18	246,615 78
\$1,629,817 39	\$1,854 25	\$6,197 94	\$11,285 41	-----	\$40,934 81
-----	-----	-----	-----	\$151,278 51	-----
\$24,753,149 48	\$6,201 91	-----	-----	\$214,098 08	\$49,731 26
25,631,813 39	6,283 24	\$380 75	-----	178,875 19	48,595 05
\$878,663 91	\$81 33	\$380 75	-----	-----	-----
-----	-----	-----	-----	\$35,222 89	\$1,136 21
\$378,145 13	-----	-----	-----	\$6,269 55	\$2,439 63
307,148 07	-----	-----	-----	2,639 03	2,817 51
-----	-----	-----	-----	-----	\$377 88
\$70,997 06	-----	-----	-----	\$3,630 52	-----
\$59,098,984 03	\$15,447 10	-----	\$65,548 15	\$926,112 32	\$257,851 86
61,536,468 27	17,382 68	\$6,578 69	76,833 56	735,980 40	298,028 34
\$2,437,484 24	\$1,935 58	\$6,578 69	\$11,285 41	-----	\$40,176 48
-----	-----	-----	-----	\$190,131 92	-----
\$35,542,014 34	\$20,952 93	-----	\$47,328 84	\$522,741 39	\$157,907 02
37,154,481 03	16,910 91	\$22,486 06	57,382 48	373,443 09	155,829 87
\$1,612,466 69	-----	\$22,486 06	\$10,053 64	-----	-----
-----	\$4,042 02	-----	-----	\$149,298 30	\$2,077 15
\$23,556,969 69	-----	-----	\$18,219 31	\$403,370 93	\$99,944 84
-----	\$5,505 83	-----	-----	-----	-----
\$24,381,987 24	\$471 77	-----	\$19,451 08	\$362,537 31	\$142,198 47
-----	-----	\$15,907 37	-----	-----	-----

TABLE No. 5

COMPARISON OF FREIGHT, PASSENGER AND OTHER EARNINGS, GROSS  
CALIFORNIA RAILROADS FOR THE

	Ventura County Railway Company	Western Pacific Railway Company <sup>1</sup>
<i>Freight Earnings.</i>		
Year ending June 30, 1912.....	\$32,973 72	\$1,745,402 02
Year ending June 30, 1913.....	30,276 94	2,091,709 28
Increase .....		\$346,307 26
Decrease .....	\$2,696 78	
<i>Passenger Earnings.</i>		
Year ending June 30, 1912.....	\$4,471 80	\$704,739 71
Year ending June 30, 1913.....	5,218 58	784,529 64
Increase .....	\$746 78	\$79,789 93
Decrease .....		
<i>Other Earnings.</i>		
Year ending June 30, 1912.....	\$4 49	\$16,933 88
Year ending June 30, 1913.....	325 90	15,539 33
Increase .....	\$321 41	
Decrease .....		\$1,394 55
<i>Gross Earnings from Operation—All Sources.</i>		
Year ending June 30, 1912.....	\$37,450 01	\$2,467,075 61
Year ending June 30, 1913.....	35,821 42	2,891,778 25
Increase .....		\$424,702 64
Decrease .....	\$1,628 59	
<i>Operating Expenses.</i>		
Year ending June 30, 1912.....	\$45,429 67	\$4,229,864 55
Year ending June 30, 1913.....	61,979 23	4,478,835 06
Increase .....	\$16,549 56	\$248,970 51
Decrease .....		
<i>Results from Operation.</i>		
Year ending June 30, 1912—Income.....		
Year ending June 30, 1912—Deficit.....	\$7,979 66	
Year ending June 30, 1913—Income.....		\$1,694,793 23
Year ending June 30, 1913—Deficit.....	\$26,157 81	

<sup>1</sup>Operating expenses not segregated to California.

<sup>2</sup>Entire line.

<sup>3</sup>Entire line figures used for San Pedro, Los Angeles and Salt Lake Railroad Company for 1912, therefore no comparison shown.

—Concluded.

EARNINGS, OPERATING EXPENSES AND INCOME FROM OPERATION OF  
YEARS ENDING JUNE 30, 1912 AND 1913.

Yosemite Valley Railroad Company	Yreka Railroad Company	Total
\$109,337 45	\$11,664 37	\$58,344,170 72
125,376 92	9,950 76	58,706,251 33
\$16,039 47		
	\$1,713 61	
\$159,921 01	\$18,439 66	\$38,556,927 04
152,845 53	16,055 63	38,483,883 48
\$7,075 48	\$2,384 03	
\$1,220 38	\$62 93	\$776,007 88
132 00		710,809 21
\$1,088 38	\$62,93	
\$270,478 84	\$30,166 96	\$97,677,105 64
278,354 45	26,006 39	97,900,944 02
\$7,875 61		
	\$4,160 57	
\$121,451 53	\$20,965 34	\$64,674,865 07
127,603 88	18,601 21	63,928,478 61
\$6,152 35		
	\$2,364 13	
\$149,027 31	\$9,201 62	\$34,755,275 06
\$150,750 57	\$7,405 18	\$37,254,315 45

TABLE

STATEMENT PER MILE OF ROAD OF FREIGHT EARNINGS, GROSS EARNINGS  
FROM OPERATION OF THE RAILROADS OF CALI

	Amador Central Railroad Company	Atchison, Topeka and Santa Fe Rail- way Company
Average mileage operated during year-----	12	1,402.84
Freight earnings per mile of road-----	\$5,938 82	\$8,945 65
Passenger, mail and express earnings per mile of road -----	1,519 52	4,783 88
Miscellaneous earnings per mile of road-----	182 63	547 41
Gross earnings from all sources per mile of road.	\$7,640 97	\$14,276 94
Operating expenses per mile of road-----	\$3,627 09	\$9,467 64
Income from operation per mile of road-----	4,013 88	4,809 30
Deficit from operation per mile of road-----		

TABLE NO. 6

STATEMENT PER MILE OF ROAD OF FREIGHT EARNINGS, GROSS EARNINGS  
FROM OPERATION OF THE RAILROADS OF CALI

	Crescent City Railway <sup>1</sup>	Diamond and Caldor Railroad Company
Average mileage operated during year-----	8.37	33
Freight earnings per mile of road-----	\$7,128 01	\$2,201 44
Passenger, mail and express earnings per mile of road -----		59 59
Miscellaneous earnings per mile of road-----	1,250 04	
Gross earnings from all sources per mile of road.	\$8,378 05	\$2,261 03
Operating expenses per mile of road-----	\$2,106 25	\$1,349 98
Income from operation per mile of road-----	6,271 80	911 05
Deficit from operation per mile of road-----		

<sup>1</sup>From December 26, 1912, to June 30, 1913.

TABLE NO. 6

STATEMENT PER MILE OF ROAD OF FREIGHT EARNINGS, GROSS EARNINGS  
FROM OPERATION OF THE RAILROADS OF CALI

	Nevada- California- Oregon Rail- way Company	Nevada County Narrow Gauge Railroad Company
Average mileage operated during year-----	196.92	20.50
Freight earnings per mile of road-----	\$957 16	\$3,133 96
Passenger, mail and express earnings per mile of road -----	728 73	3,141 50
Miscellaneous earnings per mile of road-----	4 96	35 06
Gross earnings from all sources per mile of road.	\$1,690 85	\$6,310 52
Operating expenses per mile of road-----	\$1,156 95	\$4,787 10
Income from operation per mile of road-----	533 90	1,523 42
Deficit from operation per mile of road-----		



No. 6.  
FROM ALL SOURCES, OPERATING EXPENSES AND INCOME OR DEFICIT  
FORNIA FOR THE YEAR ENDING JUNE 30, 1913.

Boca and Loyalton Railroad Company	Bucksport and Elk River Railroad Company	Butte County Railroad Company	Camino, Placer- ville and Lake Tahoe Rail- road Company	Cement, Tolenas and Tidewater Railroad Company	Colusa and Lake Railroad Company
45.10	8	31.50	8	2	22
\$1,746 55	\$3,587 00	\$3,466 38	\$1,128 55	\$39,928 41	\$429 69
267 95	-----	739 44	78 40	727 72	574 63
35 04	-----	248 23	44 09	1,112 50	-----
\$2,049 54	\$3,587 00	\$4,454 05	\$1,251 04	\$41,768 63	\$1,004 32
\$1,585 05	\$1,242 65	\$2,606 15	\$2,092 72	\$24,453 82	\$898 26
464 49	2,344 35	1,847 90	-----	17,314 81	106 06
-----	-----	-----	841 68	-----	-----

—Continued.

FROM ALL SOURCES, OPERATING EXPENSES AND INCOME OR DEFICIT  
FORNIA FOR THE YEAR ENDING JUNE 30, 1913.

Holton Interurban Railway Company	Iron Mountain Railway Company	Lake Tahoe Railway and Transportation Company	Los Angeles and San Diego Beach Rail- way Company	McCloud River Railroad Company	Modesto and Empire Traction Company
29.21	14	16.58	17.61	72.38	5
\$1,528 52	\$2,695 01	\$649 00	\$650 11	\$4,925 22	\$1,064 20
1,168 66	-----	2,228 38	4,331 58	351 78	1,054 40
75 81	-----	-----	9 39	57 12	-----
\$2,772 99	\$2,695 01	\$2,877 38	\$4,991 08	\$5,334 12	\$2,118 60
\$1,715 60	\$5,141 94	\$2,726 63	\$3,877 40	\$3,406 38	\$2,699 76
1,057 39	-----	150 75	1,113 68	1,927 74	-----
-----	2,446 93	-----	-----	-----	581 16

—Continued.

FROM ALL SOURCES, OPERATING EXPENSES AND INCOME OR DEFICIT  
FORNIA FOR THE YEAR ENDING JUNE 30, 1913.

Northwestern Pacific Railroad Company	Ocean Shore Railroad Company	Pacific Coast Railway Company	Pajaro Valley Consolidated Railroad Company	Quincy Western Railway Company	Sacramento Valley and Eastern Railway
400.86	53.50	103.05	41.46	6	15
\$3,541 81	\$3,373 93	\$1,459 02	\$1,159 86	\$511 70	\$628 65
5,552 14	1,698 51	653 92	275 35	1,188 02	289 09
160 57	181 69	84 93	46 42	-----	-----
\$9,254 52	\$5,254 13	\$2,197 87	\$1,481 63	\$1,699 72	\$917 74
\$6,473 19	\$4,567 56	\$1,673 20	\$1,907 29	\$1,978 04	\$1,478 62
2,781 33	686 63	524 67	-----	-----	-----
-----	-----	-----	425 66	278 32	560 88

TABLE No. 6

STATEMENT PER MILE OF ROAD OF FREIGHT EARNINGS, GROSS EARNINGS  
FROM OPERATION OF THE RAILROADS OF CALI

	San Diego and South- eastern Rail- way Company	San Diego and Arizona Railway Company
Average mileage operated during year.....	75.09	14.26
Freight earnings per mile of road.....	\$3,081 14	\$305 13
Passenger, mail and express earnings per mile of road .....	2,521 37	91 83
Miscellaneous earnings per mile of road.....	106 56	59 82
Gross earnings from all sources per mile of road.....	\$5,709 07	\$456 78
Operating expenses per mile of road.....	\$5,031 56	\$941 28
Income from operation per mile of road.....	677 51	
Deficit from operation per mile of road.....		484 50

<sup>1</sup>Entire line.

TABLE No. 6

STATEMENT PER MILE OF ROAD OF FREIGHT EARNINGS, GROSS EARNINGS  
FROM OPERATION OF THE RAILROADS OF CALI

	Sugar Pine Railway Company	Sunset Railway Company
Average mileage operated during year.....	23.61	60.93
Freight earnings per mile of road.....	\$3,254 28	\$8,984 45
Passenger, mail and express earnings per mile of road .....		2,926 06
Miscellaneous earnings per mile of road.....		168 60
Gross earnings from all sources per mile of road.....	\$3,254 28	\$12,079 11
Operating expenses per mile of road.....	\$2,430 43	\$6,129 05
Income from operation per mile of road.....	823 85	5,950 06
Deficit from operation per mile of road.....		

NOTE.—No statistics reported for Arcata and Mad River Railroad Company, Mill Valley and Mt. Tamalpais Scenic Railway, South San Francisco Belt Railway Company, California Western Railroad and Navigation Company and Bay Point and Clayton Railroad Company.

Continued.

FROM ALL SOURCES, OPERATING EXPENSES AND INCOME OR DEFICIT  
FORNIA FOR THE YEAR ENDING JUNE 30, 1913.

San Joaquin and Eastern Railroad Company	San Pedro, Los Angeles and Salt Lake Rail- road Company <sup>1</sup>	Sierra Railway Company of California	Southern Pacific Company	Stockton Terminal and Eastern Rail- road Company	Stone Canyon Railroad
55.92	1,134.38	75.95	3,891.35	17.9	21
\$9,967 20	\$5,590 28	\$3,961 20	\$8,707 79	\$612 61	\$295 14
2,417 88	3,249 59	1,598 35	6,346 60	338 66	18 13
281 55	185 37	32 90	367 32	19 83	-----
\$12,616 63	\$9,025 24	\$5,592 45	\$15,421 71	\$971 10	\$313 27
\$4,752 88	\$6,003 73	\$3,137 39	\$9,327 72	\$944 74	\$1,070 76
7,863 75	3,021 51	2,455 06	6,093 99	26 36	-----
-----	-----	-----	-----	-----	757 49

—Concluded.

FROM ALL SOURCES, OPERATING EXPENSES AND INCOME OR DEFICIT  
FORNIA FOR THE YEAR ENDING JUNE 30, 1913.

Tonopah and Tidewater Railroad Company	Ventura County Railway Company	Western Pacific Railway Company	Yosemite Valley Railroad Company	Yreka Railroad Company	Total
144.60	21.51	393.64	79.17	7.50	-----
\$1,705 31	\$1,399 90	\$5,254 64	\$1,569 59	\$1,326 77	\$156,794 08
336 07	242 61	1,812 99	1,924 78	2,140 75	57,378 86
19 67	22 83	278 62	21 54	-----	5,590 50
\$2,061 05	\$1,665 34	\$7,346 25	\$3,515 91	\$3,467 52	\$219,763 44
\$1,077 66	\$2,881 41	\$4,664 98	\$1,611 77	\$2,480 16	\$145,504 73
983 35	-----	2,681 27	1,904 14	987 36	74,258 71
-----	1,216 07	-----	-----	-----	-----

TABLE

STATEMENT OF TOTAL COST OF CONSTRUCTION AND

	Amador Central Railroad Company	Arcata and Mad River Railroad Company
Total cost to June 30, 1912.....	\$713,620 56	\$398,961 55
Charged during the year ending June 30, 1913.....	10,767 13	905 94
Total cost to June 30, 1913.....	\$724,387 69	\$399,867 49

<sup>1</sup>Leased from Central Pacific Railroad Company and Southern Pacific Company.  
\$41,800.00 represents franchise.

<sup>2</sup>Entire line.

<sup>3</sup>Credit item.

TABLE No. 7

STATEMENT OF TOTAL COST OF CONSTRUCTION AND

	Camino, Placerville and Lake Tahoe Railroad Company	Cement, Tolenas and Tidewater Rail- road Company
Total cost to June 30, 1912.....	\$200,000 00	\$250,993 36
Charged during the year ending June 30, 1913.....		3,149 83
Total cost to June 30, 1913.....	\$200,000 00	\$254,143 19

<sup>1</sup>Credit item.

TABLE No. 7

STATEMENT OF TOTAL COST OF CONSTRUCTION AND

	Los Angeles and San Diego Beach Railway Company	McCloud River Railroad Company
Total cost to June 30, 1912.....	\$845,239 56	\$2,795,677 09
Charged during the year ending June 30, 1913.....	13,144 62	48,923 38
Total cost to June 30, 1913.....	\$858,384 18	\$2,844,600 47

<sup>1</sup>Credit item.



No. 7.

## EQUIPMENT OF CALIFORNIA RAILROADS TO JUNE 30, 1913.

Athlison, Topeka and Santa Fe Rail- way Company <sup>2</sup>	Bay Point and Clayton Railroad Company	Boca and Loyalton Railroad Company	Bucksport and Elk River Railroad Company	Butte County Railroad Company <sup>1</sup>	California Western Railroad and Navigation Company
\$610,767,436 80 21,686,987 95	\$223,095 60	\$1,905,541 81 35,452 86	\$214,810 00 60 97	\$41,800 00	\$1,733,817 44 195,566 46
\$632,454,424 75	\$223,095 60	\$1,900,088 95	\$214,870 97	\$41,800 00	\$1,929,383 90

—Continued.

## EQUIPMENT OF CALIFORNIA RAILROADS TO JUNE 30, 1913.

Colusa and Lake Railroad Company	Crecent City Railway	Diamond and Calder Railroad Company	Holton Interurban Railway Company	Iron Mountain Railway Company	Lake Tahoe Railway and Transportation Company
\$217,332 10	\$384,846 10 14,491 58	\$498,041 79 12,304 57	\$316,597 75 20,325 67	\$100,000 00	\$1,158,815 17 5,179 83
\$217,332 10	\$399,337 68	\$495,737 22	\$336,923 42	\$100,000 00	\$1,163,995 00

—Continued.

## EQUIPMENT OF CALIFORNIA RAILROADS TO JUNE 30, 1913

Mill Valley and Mt. Tamalpais Scenic Railway	Nevada- California- Oregon Rail- way Company	Nevada County Narrow Gauge Railroad Company	Northwestern Pacific Railroad Company	Ocean Shore Railroad Company	Pacific Coast Railway Company
\$417,793 67 12,147 81	\$2,924,827 92 74,791 84	\$715,735 55 47,913 95	\$54,485,779 42 2,944,925 71	\$5,271,548 05 167,708 16	\$2,797,351 79 14,809 00
\$405,645 86	\$2,999,619 76	\$763,649 50	\$57,430,705 13	\$5,439,256 21	\$2,792,542 79

TABLE No. 7

STATEMENT OF TOTAL COST OF CONSTRUCTION AND

	Pajaro Valley Consolidated Railroad Company	Quincy Western Railway Company
Total cost to June 30, 1912.....	\$601,602 15	\$75,424 40
Charged during the year ending June 30, 1913.....		960 56
Total cost to June 30, 1913.....	\$601,602 15	\$76,384 96

<sup>1</sup>Entire line.

TABLE No. 7

STATEMENT OF TOTAL COST OF CONSTRUCTION AND

	South San Francisco Belt Railway Company	Southern Pacific Company
Total cost to June 30, 1912.....	\$89,027 74	\$23,877,203 88
Charged during the year ending June 30, 1913.....	<sup>2</sup> 6 03	<sup>2</sup> 4,537 72
Total cost to June 30, 1913.....	\$89,021 71	\$23,872,666 16

<sup>1</sup>Difference of \$249.20 can not account for.<sup>2</sup>Credit item.

TABLE No. 7

STATEMENT OF TOTAL COST OF CONSTRUCTION AND

	Western Pacific Railway Company <sup>1</sup>	Yosemite Valley Railroad Company
Total cost to June 30, 1912.....	\$161,406,678 70	\$9,213,191 32
Charged during the year ending June 30, 1913.....	<sup>2</sup> 5,699,290 11	92,065 52
Total cost to June 30, 1913.....	\$155,707,388 59	\$9,305,256 84

<sup>1</sup>Entire line.<sup>2</sup>Credit item.<sup>3</sup>Difference of \$249.20. See Tonopah and Tidewater Railroad Company.

—Continued.

## EQUIPMENT OF CALIFORNIA RAILROADS TO JUNE 30, 1913.

Sacramento Valley and Eastern Railway	San Diego and Southeastern Railway Company	San Diego and Arizona Railway Company <sup>1</sup>	San Joaquin and Eastern Railroad Company	San Pedro, Los Angeles and Salt Lake Railroad Company <sup>1</sup>	Sierra Railway Company of California
\$547,504 57	\$1,638,790 70	\$4,062,116 04	\$891,807 62	\$71,142,339 80	\$5,621,611 75
-----	193,339 68	371,941 32	312,559 53	4,648,225 25	-----
\$547,504 57	\$1,832,130 38	\$4,434,057 36	\$1,204,367 15	\$75,790,565 05	\$5,621,611 75

—Continued.

## EQUIPMENT OF CALIFORNIA RAILROADS TO JUNE 30, 1913.

Stockton Terminal and Eastern Railroad Company	Stone Canyon Railroad	Sugar Pine Railway Company	Sunset Railway Company	Tonopah and Tidewater Railroad Company	Ventura County Railway Company
\$301,536 38	\$228,008 98	\$1,259,193 58	\$1,618,796 35	\$3,573,922 87	\$233,547 46
24,474 33	3,153 01	43,623 18	38,021 95	9,565 62	50,483 11
\$326,010 71	\$231,161 99	\$1,302,816 76	\$1,656,818 30	\$3,583,488 49	\$284,030 57

—Concluded.

## EQUIPMENT OF CALIFORNIA RAILROADS TO JUNE 30, 1913.

Yreka Railroad Company	Total				
\$130,674 36	\$975,892,641 73				
1,083 68	25,276,660 42				
\$131,758 04	\$1,001,169,052 95				

TABLE

ABSTRACT OF INCOME ACCOUNTS OF CALIFORNIA RAILROAD

	Amador Central Railroad Company	Arcata and Mad River Railroad Company
Net operating revenue.....	\$48,166 50	\$40,785 92
Net operating deficit.....		
Taxes accrued .....	4,500 00	7,303 56
Net operating revenue less taxes.....	\$43,666 50	\$33,482 36
Net operating deficit plus taxes.....		
Net revenue from outside operation.....		
Net deficit from outside operation.....		
<i>Other Income.</i>		
Rent from lease of road.....		
Rent from joint facilities.....		
Miscellaneous rent .....		
Hire of equipment.....		
Income from other sources.....	\$874 66	\$888 31
Total other income.....	\$874 66	\$888 31
Gross corporate income for year.....	\$44,541 16	\$34,370 67
Gross corporate loss for year.....		
<i>Deductions from Gross Corporate Income.</i>		
Rent for lease of road.....		
Rent for joint facilities.....		
Miscellaneous rent .....		
Hire of equipment.....	\$2,633 26	
Interest accrued on funded debt.....	15,000 00	
Other deductions .....	688 80	
Total deductions from gross corporate income..	\$18,322 06	
Net corporate income for year.....	\$26,219 10	\$34,370 67
Net corporate loss for year.....		
Dividends .....		65,709 00
Additions and betterments charged through income.	10,957 13	
Miscellaneous charges to income.....		30,539 80
Additions for the year to profit and loss.....		
Deductions for the year to profit and loss.....	176 15	
Surplus on June 30, 1912.....	26,633 66	47,811 34
Deficit on June 30, 1912.....		
Surplus on June 30, 1913.....	41,719 48	
Deficit on June 30, 1913.....		14,066 79

<sup>1</sup>Entire line.



## No. 8.

COMPANIES FOR THE FISCAL YEAR ENDING JUNE 30, 1913.

Aitchison, Topeka and Santa Fe Rail- way Company <sup>1</sup>	Bay Point and Clayton Railroad Company	Boca and Loyalton Railroad Company	Bucksport and Elk River Railroad Company	Butte County Railroad Company	California Western Rail- road and Navi- gation Company
\$34,260,071 68	\$31,578 75	\$20,948 48	\$18,754 85	\$58,208 90	\$109,685 61
4,067,431 90	2,068 55	4,612 60	1,910 38	6,609 60	16,860 30
\$30,192,639 78	\$29,510 20	\$16,335 88	\$16,844 47	\$51,599 30	\$92,825 31
					\$2,497 05
\$327,633 99			\$1,537 51		
41,994 06					\$1,200 00
869,926 86			140 00		
6,245,304 43			399 05		20,082 07
\$7,487,859 34			\$2,076 56		\$21,282 07
\$37,680,499 12	\$29,510 20	\$16,335 88	\$18,921 03	\$51,599 30	\$116,604 43
\$1,238,133 00				\$52,081 00	
558,617 61				525 09	
92,482 76	\$5,627 25	\$1,530 62		1,474 13	\$1,385 65
13,523,102 51		25,970 00			34,375 00
125,154 50		827 02			22,193 80
\$15,537,490 38	\$5,627 25	\$28,327 64		\$54,080 22	\$57,954 45
\$22,143,008 74	\$23,882 95	\$11,991 76	\$18,921 03	\$2,480 92	\$58,649 98
16,107,470 00			15,000 00		100,000 00
5,574,433 63		30,000 00			
461,105 11	41,305 96	519 62	714 50		2,287 51
99,684 82		5,449 43	1,065 50		1,862 09
20,470,115 99	17,423 01	91,721 97	38,319 50	11,557 60	157,049 70
20,569,800 81			41,889 53		116,125 10
		138,643 54		14,038 52	

TABLE NO. 8

ABSTRACT OF INCOME ACCOUNTS OF CALIFORNIA RAILROAD

	Camino, Placerville and Lake Tahoe Railroad Company	Cement, Tolamas and Tidewater Rail- road Company
Net operating revenue.....		\$34,629 62
Net operating deficit.....	\$6,733 46	
Taxes accrued.....		5,460 64
Net operating revenue less taxes.....		\$29,168 98
Net operating deficit plus taxes.....	\$6,733 46	
Net revenue from outside operation.....		
Net deficit from outside operation.....		
<i>Other Income.</i>		
Rent from lease of road.....		
Rent from joint facilities.....		
Miscellaneous rent.....		
Hire of equipment.....		\$2,191 75
Income from other sources.....		12 15
Total other income.....		\$2,203 90
Gross corporate income for year.....		\$31,372 88
Gross corporate loss for year.....	\$6,733 46	
<i>Deductions from Gross Corporate Income.</i>		
Rent for lease of road.....		
Rent for joint facilities.....		
Miscellaneous rent.....		
Hire of equipment.....		
Interest accrued on funded debt.....		
Other deductions.....		\$60 38
Total deductions from gross corporate income.....		\$60 38
Net corporate income for year.....		\$31,312 50
Net corporate loss for year.....	\$6,733 46	
Dividends.....		15,360 00
Additions and betterments charged through income.....		
Miscellaneous charges to income.....		7,500 00
Additions for the year to profit and loss.....		
Deductions for the year to profit and loss.....		
Surplus on June 30, 1912.....		6,746 56
Deficit on June 30, 1912.....	3,071 25	
Surplus on June 30, 1913.....		15,199 06
Deficit on June 30, 1913.....	9,804 71	

<sup>1</sup>From December 26, 1912, to June 30, 1913.

<sup>2</sup>Entire debit assumed by Mountain Copper Company, Limited.

—Continued.

COMPANIES FOR THE FISCAL YEAR ENDING JUNE 30, 1913.

Colusa and Lake Railroad Company	Crescent City Railway <sup>1</sup>	Diamond and Cador Railroad Company	Holton Interurban Railway Company	Iron Mountain Railway Company	Lake Tahoe Railway and Transportation Company
\$2,333 23	\$52,495 00	\$30,064 48	\$30,886 34		\$2,503 48
1,158 99	46 87	3,580 90	2,436 68	\$34,257 07 1,445 78	2,823 73
\$1,174 24	\$52,448 13	\$26,483 58	\$28,449 66		
				\$35,702 85	\$320 25 42,895 95
	\$2,303 41				
		\$3,428 48			
	\$2,303 41	\$3,428 48			
\$1,174 24	\$54,751 51	\$29,912 06	\$28,449 66	\$35,702 85	\$42,575 70
			\$11,732 09 300 96		\$5 00 11 00 10 00
	\$1,298 20		2,177 20		25,000 00 611 44
\$3,000 00 250 40		\$6,600 00 5,308 19	6,000 00 1,842 77		
\$3,250 40	\$1,298 20	\$11,908 19	\$22,053 02		\$25,637 44
	\$53,453 34	\$18,003 87	\$6,396 64		\$16,938 26
\$2,076 16		12,000 00		\$35,702 85	
					6,375 00
		303 97 3,874 18	3 22 60 00	\$2,212 09	29 25
75,111 01		898 69	9,196 66	46,509 24	175,428 08
73,034 85	53,453 34	1,534 97	2,856 80		185,962 09

TABLE NO. 8

ABSTRACT OF INCOME ACCOUNTS OF CALIFORNIA RAILROAD

	Los Angeles and San Diego Beach Railway Company	McCloud River Railroad Company
Net operating revenue.....	\$19,611 97	\$139,530 07
Net operating deficit.....		
Taxes accrued .....		16,578 74
Net operating revenue less taxes.....	\$19,611 97	\$122,951 33
Net operating deficit plus taxes.....		
Net revenue from outside operation.....		
Net deficit from outside operation.....		
<i>Other Income.</i>		
Rent from lease of road.....		
Rent from joint facilities.....		
Miscellaneous rent .....		
Hire of equipment.....		
Income from other sources.....		
Total other income.....		
Gross corporate income for year.....	\$19,611 97	\$122,951 33
Gross corporate loss for year.....		
<i>Deductions from Gross Corporate Income.</i>		
Rent for lease of road.....		
Rent for joint facilities.....		
Miscellaneous rent .....	\$1,033 24	
Hire of equipment.....	1,275 60	\$809 80
Interest accrued on funded debt.....	10,233 69	60,000 00
Other deductions .....	3,174 69	98 65
Total deductions from gross corporate income..	\$15,717 22	\$60,908 45
Net corporate income for year.....	\$3,894 75	\$62,042 88
Net corporate loss for year.....		
Dividends .....		
Additions and betterments charged through income.....		
Miscellaneous charges to income.....		
Additions for the year to profit and loss.....		1,130 00
Deductions for the year to profit and loss.....		280 49
Surplus on June 30, 1912.....		232,836 74
Deficit on June 30, 1912.....	6,308 23	
Surplus on June 30, 1913.....		295,729 13
Deficit on June 30, 1913.....	2,413 48	

<sup>1</sup>Entire line.



—Continued.

COMPANIES FOR THE FISCAL YEAR ENDING JUNE 30, 1913.

Mill Valley and Mt. Tamalpais Scenic Railway	Modesto and Empire Traction Company	Nevada- California- Oregon Rail- way Company <sup>1</sup>	Nevada County Narrow Gauge Railroad Company	Northwestern Pacific Railroad Company	Ocean Shore Railroad Company
\$21,118 66		\$120,346 70	\$31,230 16	\$1,114,921 33	\$36,735 14
3,680 22	\$2,905 79	18,841 32	6,360 00	152,647 00	10,967 95
\$17,438 44		\$101,505 38	\$24,870 16	\$962,274 33	\$25,767 19
	\$2,905 79				
\$330 07		\$359 40			
				\$107,047 98	
\$1,321 20		\$2,175 50			\$2,065 46
		500 49			
2,137 97		766 44	\$104 00	1,099 44	190 23
\$3,459 17		\$3,442 43	\$104 00	\$108,147 42	\$2,255 69
\$21,227 68		\$104,588 41	\$24,974 10	\$1,070,421 75	\$28,022 88
	\$2,905 79				
	\$1,150 00				
		\$214 00		\$1,928 18	\$13,787 24
				8,442 32	7,852 20
\$8,374 47		48,047 23	\$11,655 00	572,828 40	
	58 34	6,243 60	391 32	19,065 00	1,070 71
\$8,374 47	\$1,208 34	\$54,504 83	\$12,046 32	\$602,263 90	\$22,710 15
\$12,853 21		\$50,083 58	\$12,927 84	\$468,157 85	\$5,312 73
	\$4,114 13				
10,000 00		15,000 00	12,510 00		
		14,080 00		39,765 00	
				3,049 26	
8,539 07		35,154 54		48,098 83	225 56
120,744 75		273,254 92	80,902 81	1,746,906 12	839,160 39
	1,675 52				
115,058 89		259,103 96	81,320 65	2,130,249 40	844,247 56
	5,789 65				

TABLE NO. 8

ABSTRACT OF INCOME ACCOUNTS OF CALIFORNIA RAILROAD

	Pacific Coast Railway Company	Pajaro Valley Con- solidated Rail- road Company
Net operating revenue.....	\$54,067 57	
Net operating deficit.....		\$17,647 51
Taxes accrued .....	10,846 28	3,643 40
Net operating revenue less taxes.....	\$43,221 29	
Net operating deficit plus taxes.....		\$21,290 91
Net revenue from outside operation.....	79,648 88	167 93
Net deficit from outside operation.....		
<i>Other Income.</i>		
Rent from lease of road.....		
Rent from joint facilities.....		
Miscellaneous rent .....	\$4,168 72	\$60 00
Hire of equipment.....		89 16
Income from other sources.....	35 65	1,393 92
Total other income.....	\$4,204 37	\$1,543 02
Gross corporate income for year.....	\$127,074 54	
Gross corporate loss for year.....		\$19,579 96
<i>Deductions from Gross Corporate Income.</i>		
Rent for lease of road.....		
Rent for joint facilities.....		
Miscellaneous rent .....	\$385 17	\$412 01
Hire of equipment.....		
Interest accrued on funded debt.....	82,200 00	
Other deductions .....		
Total deductions from gross corporate income....	\$82,585 17	\$412 01
Net corporate income for year.....	\$44,489 37	
Net corporate loss for year.....		\$19,991 97
Dividends .....	61,080 30	
Additions and betterments charged through income.....		
Miscellaneous charges to income.....		
Additions for the year to profit and loss.....	13 80	
Deductions for year to profit and loss.....		
Surplus on June 30, 1912.....	89,946 00	106,862 37
Deficit on June 30, 1912.....		
Surplus on June 30, 1913.....	73,368 87	86,870 40
Deficit on June 30, 1913.....		

<sup>1</sup>Entire line.

--Continued.

COMPANIES FOR THE FISCAL YEAR ENDING JUNE 30, 1913.

Quincy Western Railroad Company	Sacramento Valley and Eastern Railway	San Diego and South- eastern Rail- way Company	San Diego and Arizona Railway Company	San Joaquin and Eastern Railroad Company	San Pedro, Los Angeles and Salt Lake Rail- road Company <sup>1</sup>
		\$50,874 01		\$439,741 30	\$3,427,538 98
\$1,669 87	\$8,413 24		\$6,909 01		
376 66	673 55	16,500 00	764 28	3,654 39	437,596 17
		\$34,374 01		\$436,086 91	\$2,989,942 81
\$2,046 53	\$9,086 79		\$7,673 29		
					\$20,071 64
			\$18 65		
		\$319 50			\$1,032 36
			200 00		
			5,928 89		
					45,365 13
		\$319 50	\$6,147 54		\$46,397 49
		\$34,693 51		\$436,086 91	\$3,016,268 66
\$2,046 53	\$9,086 79		\$1,525 75		
		\$2,017 80			\$190,987 80
		66 00			25 00
\$389 29		3,154 42		\$11,127 45	151,997 20
1,469 49		5,972 06		45,833 32	2,206,200 00
				31,424 72	126,876 30
\$1,858 78		\$11,210 28		\$88,385 49	\$2,676,086 30
		23,483 23		347,701 42	340,182 36
3,905 31	\$9,086 79		\$1,525 75		
				182,356 65	
		53 98			27,277 01
88 98		3,673 11			13,420 16
	18,454 64	19,327 32			
12,123 51			2,741 88		4,034,748 69
	9,367 85	39,191 42		165,344 77	
16,117 80			4,267 63		3,680,709 48

TABLE No. 8

ABSTRACT OF INCOME ACCOUNTS OF CALIFORNIA RAILROAD

	Sierra Railway Company of California	South San Francisco Belt Rail- way Company
Net operating revenue.....	\$186,461 97	-----
Net operating deficit.....	-----	\$1,778 03
Taxes accrued .....	20,681 32	-----
Net operating revenue less taxes.....	\$165,780 65	-----
Net operating deficit plus taxes.....	-----	\$1,778 03
Net revenue from outside operation.....	-----	-----
Net deficit from outside operation.....	-----	-----
<i>Other Income.</i>		
Rent from lease of road.....	-----	-----
Rent from joint facilities.....	-----	-----
Miscellaneous rent .....	-----	-----
Hire of equipment.....	-----	-----
Income from other sources.....	-----	-----
Total other income.....	-----	-----
Gross corporate income for year.....	\$165,780 65	-----
Gross corporate loss for year.....	-----	\$1,778 03
<i>Deductions from Gross Corporate Income.</i>		
Rent for lease of road.....	-----	-----
Rent for joint facilities.....	-----	-----
Miscellaneous rent .....	-----	-----
Hire of equipment.....	\$11,290 53	-----
Interest accrued on funded debt.....	117,192 06	-----
Other deductions .....	15,017 99	-----
Total deductions from gross corporate income...	\$143,500 58	-----
Net corporate income for year.....	\$22,280 07	-----
Net corporate loss for year.....	-----	\$1,778 03
Dividends .....	-----	-----
Additions and betterments charged through income.....	-----	-----
Miscellaneous charges to income.....	-----	-----
Additions for the year to profit and loss.....	1,500 00	-----
Deductions for the year to profit and loss.....	2,700 00	-----
Surplus on June 30, 1912.....	505,279 68	3,669 73
Deficit on June 30, 1912.....	-----	-----
Surplus on June 30, 1913.....	526,359 75	1,891 70
Deficit on June 30, 1913.....	-----	-----

<sup>1</sup>Entire line.



—Continued.

COMPANIES FOR THE FISCAL YEAR ENDING JUNE 30, 1913.

Southern Pacific Company	Stockton Terminal and Eastern Rail- road Company	Stone Canyon Railroad	Sugar Pine Railway Company	Sunset Railway Company	Tonopah and Tidewater Railroad Company <sup>1</sup>
\$40,663,821 18	\$471 77		\$19,451 08	\$362,537 31	\$136,549 10
186,523 12	1,555 94	\$15,907 37 606 10	2,671 84	44,749 09	15,482 42
\$40,477,298 06			\$16,779 24	\$317,788 22	\$121,066 68
	\$1,084 17	\$16,513 47			
\$1,502,185 79					
\$1,193,834 66					
		\$186 55			
30,464,769 94				\$2,893 55	\$20,059 96
\$31,658,604 60		\$186 55		\$2,893 55	\$20,059 96
\$73,638,088 45			\$16,779 24	\$320,681 77	\$141,126 64
	\$1,084 17	\$16,326 92			
\$39,552,133 74					
		\$112 95	\$2,615 00	\$4,181 09	\$5,674 18
423,014 98					
	\$768 73	134 10	1,492 00	208,568 77	6,704 88
5,656,188 76		12,288 78	9,000 00	27,400 00	152,181 24
1,781,488 35			84 42	2,706 31	1,707 23
\$47,412,825 83	\$768 73	\$12,535 83	\$13,191 42	\$242,856 17	\$166,267 53
\$26,225,262 62			\$3,587 82	\$77,825 60	
	\$1,852 90	\$28,862 75			\$25,140 89
16,360,344 32				100,000 00	
5,000 00				7,782 56	
519,596 76	232 73		70 00		
1,270,521 03			305 75		325 56
66,839,709 32				78,161 63	
	11,385 56		16,739 87		276,729 30
75,948,703 35				48,204 67	
	13,005 73	28,862 75	13,387 80		302,195 75

TABLE NO. 8

ABSTRACT OF INCOME ACCOUNTS OF CALIFORNIA RAILROAD

	Ventura County Railway Company	Western Pacific Railway Company <sup>1</sup>
Net operating revenue.....		\$1,694,793 23
Net operating deficit.....	\$26,157 81	
Taxes accrued .....	828 75	278,096 13
Net operating revenue less taxes.....		\$1,416,697 10
Net operating deficit plus taxes.....	\$26,986 56	
Net revenue from outside operation.....		
Net deficit from outside operation.....		11,635 28
<i>Other Income.</i>		
Rent from lease of road.....		
Rent from joint facilities.....		\$83 28
Miscellaneous rent .....		23,447 34
Hire of equipment.....		
Income from other sources.....	\$29 93	26,504 73
Total other income.....	\$29 93	\$50,035 35
Gross corporate income for year.....		\$1,455,097 17
Gross corporate loss for year.....	\$26,956 63	
<i>Deductions from Gross Corporate Income.</i>		
Rent for lease of road.....		
Rent for joint facilities.....		\$57,093 03
Miscellaneous rent .....		47,778 60
Hire of equipment.....	\$242 93	302,281 67
Interest accrued on funded debt.....	5,931 34	3,752,281 25
Other deductions .....		684,116 83
Total deductions from gross corporate income..	\$6,174 27	\$4,843,551 38
Net corporate income for year.....		
Net corporate loss for year.....	\$33,130 90	\$3,388,454 21
Dividends .....		
Additions and betterments charged through income.....		
Miscellaneous charges to income.....		
Additions for the year to profit and loss.....	722 69	54,901 13
Deductions for the year to profit and loss.....		47,196 18
Surplus on June 30, 1912.....		
Deficit on June 30, 1912.....	16,740 52	3,281,972 87
Surplus on June 30, 1913.....		
Deficit on June 30, 1913.....	49,148 73	6,662,722 13

<sup>1</sup>Entire line.

—Continued.

COMPANIES FOR THE FISCAL YEAR ENDING JUNE 30, 1913.

Yosemite Valley Railroad Company	Yreka Railroad Company	Total
\$150,750 57	\$7,405 18	\$83,296,690 96
11,994 63	1,113 58	5,375,683 36
\$138,755 94	\$6,291 60	\$77,921,007 60
		\$1,595,659 35
		\$1,193,853 31
		440,144 58
\$617 52		80,249 80
		882,205 57
386 85		36,833,298 41
\$1,004 37		\$39,429,751 67
\$139,760 31	\$6,291 60	\$118,946,418 62
		\$40,855,229 83
		822,130 51
\$1,000 00		582,138 18
4,293 60		736,961 80
150,000 00	\$2,094 39	26,576,418 99
84,740 06		2,915,201 82
\$240,033 66	\$2,094 39	\$72,488,081 13
	\$4 197 21	\$46,458,337 49
\$100,273 35		32,874,473 62
		5,767,747 41
		643,453 43
1,900 84		796,173 93
923 03		1,443,968 89
	8,505 26	83,535,120 81
619,118 36		
	12,702 47	90,059,988 88
718,413 90		

TABLE No. 8

ABSTRACT OF INCOME ACCOUNTS OF LEASED

	The California, Arizona and Santa Fe Rail- way Company <sup>2</sup>	Central Pacific Railway Company <sup>1</sup>
Gross income from lease of road.....	\$1,188,133 00	\$14,141,294 86
Salaries and maintenance of organization.....		
Taxes accrued .....		1,812,322 78
Total taxes, salaries, etc.....		1,812,322 78
Net income from lease of road.....	\$1,188,133 00	\$12,328,972 08
<i>Other Income.</i>		
Miscellaneous rents receivable.....		\$120,591 50
Other properties—net income.....		
Dividends declared on stock owned or controlled.....		
Interest accrued on funded debt owned or controlled.....		8,150 00
Interest on other securities, loans and accounts.....		1,412,140 37
Unextinguished premiums on outstanding funded debt .....		
Miscellaneous income .....	\$80 92	506,867 00
Total other income.....	\$80 92	\$2,047,748 87
Gross corporate income.....	\$1,188,213 92	\$14,376,720 95
<i>Deductions from Gross Corporate Income.</i>		
Rents accrued for lease of other roads.....		\$31,134 93
Miscellaneous rents payable.....		74,611 23
Other properties—net loss.....		5,739 40
Interest accrued on funded debt.....	\$1,081,686 28	8,761,172 41
Other interest .....		
Extinguishment of discounts and securities.....		
Sinking and redemption funds chargeable to income.....	10,725 59	59,796 10
Other deductions .....		1,027,065 04
Total deductions .....	\$1,092,411 87	\$9,959,519 11
Net corporate income.....	\$95,802 05	\$4,417,201 84
Net corporate loss.....		
Dividends .....	71,243 06	7,540,530 00
Deductions for year to profit and loss.....		423,451 74
Additions for year to profit and loss.....		3,796,351 95
Surplus on June 30, 1912.....		21,832,891 31
Deficit on June 30, 1912.....	24,558 99	
Surplus on June 30, 1913.....		22,082,463 36
Deficit on June 30, 1913.....		

<sup>1</sup>Leased to Southern Pacific Company.<sup>2</sup>Leased to Atchison, Topeka and Santa Fe Railway Company and Southern Pacific Company.<sup>3</sup>Leased to Atchison, Topeka and Santa Fe Railway Company.



—Continued.

RAILROADS FOR YEAR ENDING JUNE 30, 1913.

Coast Line Railway Company <sup>1</sup>	Hanford and Summit Lake Railway Company <sup>1</sup>	Inter- California Railway Company <sup>1</sup>	Laton and Western Railroad Company <sup>2</sup>	Porterville Northeastern Railway Company <sup>1</sup>	Richmond Belt Railway <sup>2</sup>
\$42,870 00	\$35,526 79	\$123,392 04	\$7,450 00	\$29,219 28	\$9,941 42
					815 93
					\$815 93
\$42,870 00	\$35,526 79	\$123,392 04	\$7,450 00	\$29,219 28	\$9,125 49
					\$600 00
					5,509 79
					\$6,109 79
\$42,870 00	\$35,526 79	\$123,392 04	\$7,450 00	\$29,219 28	\$15,235 28
\$42,000 00	\$34,555 67	\$51,000 00 67,691 72	\$7,450 00	\$18,000 00	\$8,308 36
				437 37	
123 27	50 90			103 38	
\$42,123 27	\$34,606 57	\$118,691 72	\$7,450 00	\$18,540 75	\$8,308 36
\$746 73	\$920 22	\$4,700 32		\$10,678 53	\$6,926 92
	14 51			677 43 30 41	
44 01					
9,211 86		23,873 27			11,020 84
	3,157 13			9,287 48	
10,002 63		28,573 59		744 03	17,947 76
	2,251 42				

TABLE No. 8

ABSTRACT OF INCOME ACCOUNTS OF LEASED

	San Bernardino and Redlands Railroad Company <sup>1</sup>	Southern Pacific Railroad Company <sup>1</sup>
Gross income from lease of road.....	\$4,500 00	\$21,643,196 46
Salaries and maintenance of organization.....		
Taxes accrued .....		2,296,717 38
Total taxes, salaries, etc.....		\$2,296,717 38
Net income from lease of road.....	\$4,500 00	\$19,346,479 08
<i>Other Income.</i>		
Miscellaneous rents receivable.....		\$319,399 64
Other properties—net income.....		
Dividends declared on stock owned or controlled.....		50 93
Interest accrued on funded debt, owned or controlled.....		160,436 66
Interest on other securities, loans and accounts.....		1,954,003 53
Unextinguished premiums on outstanding funded debt .....		
Miscellaneous income .....		11,182 09
Total other income.....		\$2,445,072 85
Gross corporate income.....	\$4,500 00	\$21,791,551 93
<i>Deductions from Gross Corporate Income.</i>		
Rents accrued for lease of other roads.....		\$1,861,510 85
Miscellaneous rents payable.....		170,469 01
Other properties, net loss.....		4,866 68
Interest accrued on funded debt.....		6,202,074 57
Other interest .....		
Extinguishment of discounts on securities.....		
Sinking and redemption funds chargeable to income.....		163,843 33
Other deductions .....		570,194 10
Total deductions .....		\$8,972,958 54
Net corporate income.....	\$4,500 00	\$12,818,593 39
Net corporate loss.....		
Dividends .....	4,500 00	9,600,000 00
Deductions for year to profit and loss.....		153,661 62
Additions for year to profit and loss.....		169,485 92
Surplus on June 30, 1912.....		25,335,298 30
Deficit on June 30, 1912.....		
Surplus on June 30, 1913.....		28,569,715 99
Deficit on June 20, 1913.....		

<sup>1</sup>Leased to Southern Pacific Company.

—Concluded.

RAILROADS FOR YEAR ENDING JUNE 30, 1913.

South Pacific Coast Railway Company <sup>1</sup>	Total				
\$480,003 58	\$37,705,527 43				
62,284 05	4,172,140 14				
\$62,284 05	\$4,172,140 14				
\$417,719 53	\$33,533,387 29				
\$180 00	\$440,771 14				
-----	50 93				
-----	168,586 66				
-----	3,366,143 90				
-----					
103,779 71	627,419 51				
\$103,959 71	\$4,602,972 14				
\$521,679 24	\$38,136,359 43				
-----	\$1,892,645 78				
\$13,999 87	259,080 11				
-----	10,606 08				
216,460 00	16,422,707 29				
-----	67,691 72				
-----	437 37				
220,000 00	454,365 02				
71,219 37	1,668,756 06				
\$521,679 24	\$20,776,289 43				
-----	\$17,360,070 00				
-----	17,216,273 06				
-----	577,805 30				
232,457 55	4,198,369 87				
-----	47,175,291 98				
-----					
232,457 55	50,939,653 49				
-----					

TABLE

NUMBER OF TONS OF FREIGHT MOVED, CLASSIFIED BY COMMODITIES.

	Amador Central Railroad Company	Atchison, Topeka and Santa Fe Railway Company
Grain .....		84,191
Flour .....	163	16,039
Other mill products .....	1,570	18,129
Hay .....	74	117,310
Tobacco .....		
Cotton .....		94
Fruit and vegetables .....	291	166,784
Other products of agriculture .....	73	35,712
Live stock .....		34,094
Dressed meats .....		1,145
Other packing house products .....		7,528
Poultry, game and fish .....		367
Wool .....		530
Hides and leather .....		1,311
Other products of animals .....		93,034
Anthracite coal .....		11
Bituminous coal .....	601	14,282
Coke .....	23	737
Ores .....	11,651	11,388
Stone, sand and other like articles .....	23,275	719,846
Other products of mines .....	108	741,549
Lumber .....	7,767	307,972
Other products of forests .....		37,397
Petroleum and other oils .....	12,594	227,939
Sugar .....		9,789
Naval stores .....		
Iron—pig and bloom .....	34	6,341
Iron and steel rails .....	40	2,262
Other castings and machinery .....	277	40,681
Bar and sheet metal .....	8	13,963
Cement, brick and lime .....	10,817	447,744
Agricultural implements .....		1,637
Wagons, carriages, tools, etc. ....	12	1,400
Wines, liquors and beers .....	712	32,623
Household goods and furniture .....	30	10,375
Other manufactures .....	717	106,882
Merchandise .....	7,002	291,385
Miscellaneous .....	266	23,558
Total tonnage .....	78,105	3,626,029



## No. 9.

OVER CALIFORNIA RAILROADS DURING THE YEAR ENDING JUNE 30, 1913.

Boon and Loyalton Railroad Company	Bucksport and Elk River Railroad Company	Butte County Railroad Company	California West- ern Railroad and Navigation Company	Camino, Placer- ville and Lake Tahoe Railroad Company	Cement, Tolenas and Tidewater Railroad Company
286		336		14	228
46		205		35	42
		197		1	
586	10	745		150	20
		13		3	
58		420		92	80
		45		1	
298		272			60
		37		8	
		32		13	
		3			
		11			
		6		5	
20					
		34			265
	60	312		167	262,444
		4		19	
59,009	29,974	100,454	83,170	9,750	430
12,389	18,046	11,375	121,275	73	75
43		2,622		854	180
		78		22	140
19		1		15	
	10	422		50	489
140	70	545		240	1,684
		46		19	
		57		34	241,405
133		6			
		16		1	260
		134		7	200
	8	143		26	60
6,959	10	189		278	1,182
1,740		565	2,960		3,585
199		493			131
81,925	48,188	119,818	207,405	11,877	512,960

TABLE No. 9

NUMBER OF TONS OF FREIGHT MOVED, CLASSIFIED BY COMMODITIES.

	Crescent City Railway <sup>1</sup>	Diamond and Caldor Railroad Company
Grain .....		22
Flour .....		22
Other mill products .....		20
Hay .....		19
Tobacco .....		1
Cotton .....		
Fruit and vegetables .....		71
Other products of agriculture .....		3
Live stock .....		3
Dressed meats .....		20
Other packing house products .....		6
Poultry, game and fish .....		2
Wool .....		
Hides and leather .....		
Other products of animals .....		16
Anthracite coal .....		
Bituminous coal .....		
Coke .....		
Ores .....		
Stone, sand and other like articles .....	45,659	3
Other products of mines .....	2,200	4
Lumber .....		27,586
Other products of forests .....		28
Petroleum and other oils .....	37,656	37
Sugar .....		12
Naval stores .....		
Iron—pig and bloom .....		
Iron and steel rails .....		186
Other castings and machinery .....	4,597	65
Bar and sheet metal .....		11
Cement, brick and lime .....	128,780	2
Agricultural implements .....		
Wagons, carriages, tools, etc. ....		2
Wines, liquors and beers .....		18
Household goods and furniture .....		15
Other manufactures .....	647	30
Merchandise .....		7
Miscellaneous .....		10
Total tonnage .....	219,539	28,221

<sup>1</sup>From December 26, 1912, to June 30, 1913.

—Continued.

OVER CALIFORNIA RAILROADS DURING THE YEAR ENDING JUNE 30, 1913.

Iron Mountain Railway Company	Los Angeles and San Diego Beach Railway Company	McCloud River Railroad Company	Nevada-Califor- nia-Oregon Railway Company	Nevada County Narrow Gauge Railroad Company	Northwestern Pacific Railroad Company
-----	537	482	321	1,310	35,013
-----	-----	191	36	1,234	3,595
-----	73	205	-----	2,533	36,641
-----	403	851	2,164	2,317	23,553
-----	36	-----	-----	-----	-----
-----	-----	311	-----	1,607	56,472
-----	-----	-----	93	-----	6,008
-----	-----	942	8,016	73	34,041
-----	-----	-----	15	-----	688
-----	-----	-----	-----	-----	217
-----	-----	-----	-----	-----	6,836
-----	-----	10	52	-----	796
-----	-----	6	-----	96	1,330
-----	-----	-----	-----	-----	10,139
-----	-----	-----	-----	36	-----
-----	77	20	67	48	15,888
-----	-----	-----	-----	-----	346
146,151	-----	-----	-----	502	-----
-----	545	20	122	106	68,322
286	-----	-----	-----	-----	2,187
1,334	2,653	71,493	1,051	407	318,521
2,026	118	286,749	110	384	92,140
-----	206	274	219	6,686	26,488
-----	-----	111	62	313	1,153
-----	28	-----	-----	659	-----
-----	-----	-----	-----	53	871
-----	-----	-----	-----	28	1,600
-----	238	145	27	1,563	5,804
-----	-----	35	14	347	-----
-----	1,569	97	30	1,403	21,916
-----	-----	12	-----	19	106
-----	-----	5	-----	3	50,621
-----	-----	510	54	812	87,166
-----	102	8	27	415	3,025
154	216	-----	53	37	58,173
1,730	2,116	2,923	2,415	3,961	102,606
-----	52	28,029	-----	1,544	44,268
151,681	8,969	393,429	14,948	28,496	1,116,530

TABLE No. 9

NUMBER OF TONS OF FREIGHT MOVED, CLASSIFIED BY COMMODITIES.

	Ocean Shore Railroad Company	Pacific Coast Railway Company
Grain .....	2,767	11,350
Flour .....	15	1,087
Other mill products .....	35	480
Hay .....	5,553	3,955
Tobacco .....	5	-----
Cotton .....	-----	-----
Fruit and vegetables .....	8,689	41,225
Other products of agriculture.....	-----	-----
Live stock .....	-----	744
Dressed meats .....	-----	123
Other packing house products.....	-----	39
Poultry, game and fish.....	-----	347
Wool .....	-----	-----
Hides and leather .....	-----	135
Other products of animals.....	17,810	-----
Anthracite coal .....	-----	-----
Bituminous coal .....	299	103
Coke .....	18	-----
Ores .....	-----	-----
Stone, sand and other like articles.....	194,088	2,602
Other products of mines.....	2,067	-----
Lumber .....	63,903	13,438
Other products of forests.....	4,387	1,300
Petroleum and other oils.....	149	36,159
Sugar .....	-----	916
Naval stores .....	-----	-----
Iron—pig and bloom .....	-----	-----
Iron and steel rails.....	242	-----
Other castings and machinery.....	255	645
Bar and sheet metal.....	18	103
Cement, brick and lime.....	251	4,156
Agricultural implements .....	4	99
Wagons, carriages, tools, etc.....	2	41
Wines, liquors and beers.....	182	2,427
Household goods and furniture.....	64	360
Other manufactures .....	887	18,518
Merchandise .....	8,917	10,424
Miscellaneous .....	217	2,162
Total tonnage .....	310,824	152,938

<sup>1</sup>Entire line.



—Continued.

OVER CALIFORNIA RAILROADS DURING THE YEAR ENDING JUNE 30, 1913.

Pajaro Valley Consolidated Railroad Company	Sacramento Valley and Eastern Railway	San Diego and Southeastern Railway Company	San Diego and Arizona Railway Company <sup>1</sup>	San Joaquin and Eastern Railroad Company	San Pedro, Los Angeles and Salt Lake Rail- road Company <sup>1</sup>
7,520	85	2,042	114	199.5	85,504
	34	91	32	372.5	18,412
160		2,193	59	317.8	27,662
484	138	4,322	221	983.7	24,651
			1		79
					11
		6,048	72	1,384.9	141,027
4,401		78	21	70.1	6,225
83,387	95	79	48	174.4	34,120
22				452.6	435
			10	188.6	4,152
			1	11.4	2,018
			29		3,169
			3		2,147
	36	313	49	130.	28,798
			87		363
		260	4	804.	226,527
	215			26.2	33,889
	949				798,333
1,307		320,837	296		564,755
	50	135		6,434.8	131,214
2,528	321	10,244	1,154	1,522.	566,088
40	1,498	214	160	352.6	3,682
	1,301	2,209	1,236	150.1	22,044
			6	298.7	28,121
					52
	2,033				8,422
		228	954	1,049.5	3,477
35	384	368	19	3,992.6	54,390
		18	5	897.7	28,821
	1,257	5,602	34	30,083.3	211,674
			2	70.5	1,524
			38		6,926
		11	6		12,826
		21	4	5.	9,657
		261			59,013
924	223	8,648	233	9,076.9	135,932
2,610		12,450		4,261.8	36,242
		13,249	1,684	374.4	
103,418	8,619	389,921	6,582	63,685.6	3,322,382

TABLE No. 9

NUMBER OF TONS OF FREIGHT MOVED, CLASSIFIED BY COMMODITIES.

	Sierra Railway Company of California	Southern Pacific Company
Grain -----	1,535	452,994
Flour -----	1,082	60,648
Other mill products -----	2,044	211,913
Hay -----	983	426,518
Tobacco -----		747
Cotton -----		2,183
Fruit and vegetables -----	1,498	1,134,045
Other products of agriculture -----		47,944
Live stock -----	124	277,118
Dressed meats -----	12	30,030
Other packing house products -----	269	11,722
Poultry, game and fish -----		5,150
Wool -----	6	5,310
Hides and leather -----	150	8,680
Other products of animals -----		126,009
Anthracite coal -----		
Bituminous coal -----	485	70,612
Coke -----	111	17,232
Ores -----	13,158	162,648
Stone, sand and other like articles -----	8,320	3,073,127
Other products of mines -----	10,174	1,214,580
Lumber -----	54,329	1,687,957
Other products of forests -----	8,658	167,876
Petroleum and other oils -----	1,414	209,638
Sugar -----	569	111,522
Naval stores -----		337
Iron—pig and bloom -----	91	58,311
Iron and steel rails -----	764	18,050
Other castings and machinery -----	2,036	100,732
Bar and sheet metal -----	405	50,408
Cement, brick and lime -----	13,615	1,265,365
Agricultural implements -----		10,666
Wagons, carriages, tools, etc. -----		4,115
Wines, liquors and beers -----	1,983	159,316
Household goods and furniture -----	639	7,738
Other manufactures -----	8,128	327,851
Merchandise -----	3,576	972,522
Miscellaneous -----	1,927	363,776
Total tonnage -----	138,085	12,855,390

—Continued.

OVER CALIFORNIA RAILROADS DURING THE YEAR ENDING JUNE 30, 1913.

Stockton Terminal and Eastern Rail- road Company	Stone Canyon Railroad	Sugar Pine Railway Company	Sunset Railway Company	Tonopah and Tidewater Railroad Company	Ventura County Railway Company
2,281	29	62	10,997		129
	6	68	291	45	
165		20	363		
1,426	220	229	11,379	88	851
2,314		124	2,210		62,310
9					
315	31	1	4,494		
	16	6	206		
		12			
19			120		
		30	74		
	4				
42	5,332	24	516	38	
			124		
				24	
819			4,514		105
		7	4,228	4,982	
660	662	34,089	24,244	607	2,527
364		13,212	47	9	
222	30	3,660	961,395	30	12
		32	23		36
		12	280		
	53	1,045	60,938	53	46
		90	445		
93	63	194	8,835		
12					
	3				
	59	11	908		
10	14	16	19		10
589	148	355	1,027	68	123,119
2,282			29,540	673	7
35		77	10,213	6,459	
11,657	6,670	53,376	1,137,430	13,076	189,152

TABLE No. 9

NUMBER OF TONS OF FREIGHT MOVED, CLASSIFIED BY COMMODITIES.

	Western Pacific Railway Company	Yosemite Valley Railroad Company
Grain .....	15,005	1,287
Flour .....	4,477	67
Other mill products .....	4,572	-----
Hay .....	13,136	1,433
Tobacco .....	-----	-----
Cotton .....	-----	-----
Fruit and vegetables .....	19,629	237
Other products of agriculture .....	618	15
Live stock .....	19,139	520
Dressed meats .....	-----	-----
Other packing house products .....	40	-----
Poultry, game and fish .....	45	-----
Wool .....	155	5
Hides and leather .....	277	-----
Other products of animals .....	674	-----
Anthracite coal .....	-----	158
Bituminous coal .....	811	-----
Coke .....	310	-----
Ores .....	498	326
Stone, sand and other like articles .....	128,564	126,811
Other products of mines .....	896	75
Lumber .....	92,734	6,980
Other products of forests .....	4,276	36,288
Petroleum and other oils .....	18,095	1,328
Sugar .....	380	-----
Naval stores .....	-----	-----
Iron—pig and bloom .....	123	179
Iron and steel rails .....	606	297
Other castings and machinery .....	2,896	469
Bar and sheet metal .....	1,055	-----
Cement, brick and lime .....	11,442	453
Agricultural implements .....	482	-----
Wagons, carriages, tools, etc. ....	319	-----
Wines, liquors and beers .....	6,284	-----
Household goods and furniture .....	252	48
Other manufactures .....	4,093	420
Merchandise .....	47,239	5,526
Miscellaneous .....	9,679	92
Total tonnage .....	408,801	183,014

NOTE.—No statistics reported for Arcata and Mad River Railroad Company, Colusa and Lake Railroad Company, Holton Interurban Railway Company, Lake Tahoe Railway and Transportation Company, Mill Valley and Mt. Tamalpais Scenic Railway, Modesto and Empire Traction Company, Quincy Western Railway Company, South San Francisco Belt Railway Company, Bay Point and Clayton Railroad Company.



—Concluded.

OVER CALIFORNIA RAILROADS DURING THE YEAR ENDING JUNE 30, 1913.

Yreka Railroad Company	Total				
15	716,655.5				
69	108,404.5				
53	309,405.8				
33	644,805.7				
-----	849.				
-----	2,324.				
-----	1,651,399.9				
-----	180,397.1				
48	414,776.4				
-----	33,178.6				
-----	24,243.6				
-----	14,780.4				
4	10,205.				
11	14,157.				
-----	277,123.				
63	742.				
-----	337,139.				
-----	53,031.2				
-----	1,145,628.				
-----	5,547,026.				
12	2,121,211.8				
583	3,586,141.				
859	825,407.6				
283	1,575,153.1				
137	153,720.7				
-----	1,076.				
-----	76,785.				
-----	30,754.5				
61	284,493.6				
394	97,102.7				
13	2,406,984.3				
5	14,777.5				
-----	63,775.				
276	306,535.				
3	33,334.				
162	739,009.9				
2,782	1,661,736.8				
-----	544,736.4				
5,866	26,009,006.6				

TABLE

STATEMENT OF NUMBER OF OFFICERS AND EMPLOYEES

	Amador Central Railroad Company	Aracata and Mad River Railroad Company
General officers -----	3	
Other officers -----		
General office clerks -----	2	
Station agents -----	3	
Other station men -----	6	5
Enginemen -----	1	
Firemen -----	1	
Conductors -----	1	
Other trainmen -----	1	<sup>2</sup> 23
Machinists -----	1	
Carpenters -----		
Other shopmen -----	2	2
Section foremen -----	1	
Other trackmen -----	11	<sup>2</sup> 59
Switch tenders, crossing tenders and watchmen -----	1	
Telegraph operators and dispatchers -----		
Employees account floating equipment -----		
All other employees and laborers -----	4	10
Totals -----	38	99

<sup>1</sup>Includes enginemen, firemen and conductors.

<sup>2</sup>Includes section foremen.

TABLE No. 10

STATEMENT OF NUMBER OF OFFICERS AND EMPLOYEES

	Cement, Tolamas and Tidewater Rail- road Company	Crescent City Railway <sup>1</sup>
General officers -----	4	5
Other officers -----	6	1
General office clerks -----	3	3
Station agents -----	1	1
Other station men -----		1
Enginemen -----	<sup>2</sup> 3	3
Firemen -----	1	1
Conductors -----	1	2
Other trainmen -----	3	4
Machinists -----	3	
Carpenters -----		
Other shopmen -----	1	
Section foremen -----	1	2
Other trackmen -----	11	16
Switch tenders, crossing tenders and watchmen -----		
Telegraph operators and dispatchers -----		1
Employees account floating equipment -----		
All other employees and laborers -----		1
Totals -----	38	41

<sup>1</sup>From December 26, 1912, to June 30, 1913.

<sup>2</sup>Includes one hostler.

<sup>3</sup>Includes one electric conductor and one electric motorman.

No. 10.

OF CALIFORNIA RAILROADS ON JUNE 30, 1913.

Atchison, Topeka and Santa Fe Railway Company	Boca and Loyalton Railroad Company	Bucksport and Elk River Railroad Company	Butte County Railroad Company	California Western Railroad and Navigation Company	Camino, Placerville and Lake Tahoe Railroad Company
17	11	2	7	4	2
34	1	-----	2	4	-----
603	6	-----	2	1	1
185	3	-----	4	1	1
1,190	1	-----	2	3	-----
382	2	1	2	6	1
398	2	-----	2	7	1
229	2	1	2	6	-----
648	4	1	4	12	1
260	2	-----	3	8	-----
185	2	-----	1	2	-----
1,303	6	-----	1	2	-----
218	3	1	5	10	-----
2,319	14	3	18	71	-----
51	-----	-----	1	-----	-----
155	-----	-----	-----	1	-----
121	-----	-----	-----	-----	-----
1,850	2	-----	-----	4	-----
10,148	61	9	56	142	7

—Continued.

OF CALIFORNIA RAILROADS ON JUNE 30, 1913.

Diamond and Caldor Railroad Company	Holton Interurban Railway Company	Lake Tahoe Railway and Transportation Company	Los Angeles and San Diego Beach Railway Company	McCloud River Railroad Company	Mill Valley and Mt. Tamalpais Scenic Railway
3	3	6	2	4	2
1	3	2	1	5	1
1	3	2	3	3	1
2	1	3	3	2	-----
-----	3	2	5	3	-----
2	2	2	4	9	5
2	1	2	2	9	4
2	2	2	4	9	5
1	-----	3	2	19	1
1	-----	2	1	6	2
7	-----	1	-----	8	-----
4	-----	16	9	37	-----
3	1	2	2	7	1
9	-----	18	13	75	9
-----	-----	2	-----	-----	-----
1	-----	1	-----	1	-----
-----	-----	10	-----	-----	-----
-----	-----	167	34	4	1
39	19	243	55	201	32

TABLE No. 10

STATEMENT OF NUMBER OF OFFICERS AND EMPLOYEES

	Modesto and Empire Traction Company	Nevada- California- Oregon Rail- way Company <sup>1</sup>
General officers .....	1	8
Other officers .....		3
General office clerks .....	1	11
Station agents .....	1	13
Other station men .....	1	15
Enginemen .....	1	7
Firemen .....		7
Conductors .....	1	5
Other trainmen .....	1	4
Machinists .....		6
Carpenters .....		23
Other shopmen .....		14
Section foremen .....	1	11
Other trackmen .....		45
Switch tenders, crossing tenders and watchmen .....		
Telegraph operators and dispatchers .....		
Employees account floating equipment .....		
All other employees and laborers .....		9
Totals .....	8	181

<sup>1</sup>Entire line.

TABLE No. 10

STATEMENT OF NUMBER OF OFFICERS AND EMPLOYEES

	Sacramento Valley and Eastern Railway	San Diego and Southeastern Railway Company
General officers .....	2	9
Other officers .....		7
General office clerks .....	1	15
Station agents .....	1	11
Other station men .....		17
Enginemen .....	1	15
Firemen .....	1	9
Conductors .....	1	15
Other trainmen .....	1	16
Machinists .....		11
Carpenters .....		23
Other shopmen .....		21
Section foremen .....		11
Other trackmen .....		104
Switch tenders, crossing tenders and watchmen .....		
Telegraph operators and dispatchers .....		
Employees account floating equipment .....		
All other employees and laborers .....	4	16
Totals .....	12	300

<sup>1</sup>Entire line.



—Continued.

OF CALIFORNIA RAILROADS ON JUNE 30, 1913.

Nevada County Narrow Gauge Railroad Company	Northwestern Pacific Railroad Company	Ocean Shore Railroad Company	Pacific Coast Railway Company	Pajaro Valley Consolidated Railroad Company	Quincy Western Railway Company
5	8	2	7	5	
	12	3	3	1	1
2	45	8	43	2	
3	146	9	10	2	2
6	94	8	23		
4	51	4	5	2	1
4	37	4	5	2	1
4	51	6	5	2	
4	103	16	12	2	
1	49	3	4	2	
3	68	7	5		
6	142	28	17	5	
2	71	5	10	3	1
12	511	35	30	16	5
3	37	4			
	7	1	1		
3	159	9	2	3	1
62	1,713	152	182	47	12

—Continued.

OF CALIFORNIA RAILROADS ON JUNE 30, 1913.

San Diego and Arizona Railway Company	San Joaquin and Eastern Railway Company	San Pedro, Los Angeles and Salt Lake Railroad Company	Sierra Railway Company of California	South San Francisco Belt Railway Company	Southern Pacific Company <sup>1</sup>
7	3	9	6	3	85
3	2	19	2		127
23	10	221	6		2,322
1	3	28	6		667
1	4	163	13		3,882
1	5	63	5	2	1,454
1	5	62	5		1,380
1	4	42	4		960
2	8	124	8	2	3,883
2	5	30	8		1,206
		74	10		1,591
3	23	348	13		8,965
1	8	41	7	1	874
18	42	223	64	3	6,599
2	1	26			906
	4	36	1		792
					4,064
	12	185	7		7,750
66	139	1,694	165	11	47,507

TABLE No. 10

STATEMENT OF NUMBER OF OFFICERS AND EMPLOYEES

	Stockton Terminal and Eastern Rail- road Company	Stone Canyon Railroad	Sugar Pine Railway Company
General officers -----	2	-----	3
Other officers -----	1	1	1
General office clerks -----	1	-----	1
Station agents -----	1	-----	2
Other station men -----	-----	-----	-----
Enginemen -----	1	1	4
Firemen -----	-----	1	4
Conductors -----	-----	1	4
Other trainmen -----	1	1	8
Machinists -----	-----	-----	-----
Carpenters -----	-----	-----	1
Other shopmen -----	-----	-----	-----
Section foremen -----	1	1	2
Other trackmen -----	10	6	25
Switch tenders, crossing tenders and watch- men -----	-----	-----	4
Telegraph operators and dispatchers -----	-----	-----	-----
Employees account floating equipment -----	-----	-----	-----
All other employees and laborers -----	-----	-----	-----
Totals -----	18	12	59

NOTE—No statistics reported for Iron Mountain Railway Company, Colusa and Lake Railroad Company, Bay Point and Clayton Railroad Company.

—Concluded.

OF CALIFORNIA RAILROADS ON JUNE 30, 1913.

Sunset Railway Company	Tonopah and Tideewater Railroad Company	Ventura County Railway Company	Western Pacific Railway Company	Yosemite Valley Railroad Company	Yreka Railroad Company	Total
	6	4	6	6	1	263
1	4	2	3	2		259
1	10		113	2		3,472
5	4	1	38	6		1,170
26			213	5	2	5,694
6	3	1	56	5	1	2,121
6	4		52	5	1	2,029
4	4		36	5	1	1,424
11	8		93	11		5,046
	4	6	32	1	1	1,660
	1		44			2,056
2	8		276	11		11,265
8	9	1	59	10	1	1,396
106	18	18	439	31	4	11,010
	5		23			1,666
	2		9			1,013
			41			4,358
6	31	1	284	8		10,537
182	121	34	1,817	108	12	65,842

TABLE

STATEMENT OF AVERAGE DAILY COMPENSATION OF OFFICERS

	Amador Central Railroad Company	Armeta and Mad River Railroad Company
General officers .....	\$3 28	
Other officers .....		
General office clerks .....	1 97	
Station agents .....	2 28	
Other station men .....	2 06	\$2 22
Enginemen .....	4 00	
Firemen .....	2 50	
Conductors .....	2 93	
Other trainmen .....	2 28	12 92
Machinists .....	4 11	
Carpenters .....		
Other shopmen .....	2 48	3 00
Section foremen .....	3 06	
Other trackmen .....	2 07	22 48
Switch tenders, crossing tenders and watchmen .....	1 90	
Telegraph operators and dispatchers .....		
Employees, account floating equipment .....		
All other employees and laborers .....	1 91	2 42
Average, including general officers .....	2 36	
Average, excluding general officers .....	2 27	2 55

<sup>1</sup>Includes enginemen, firemen and conductors.

<sup>2</sup>Includes section foremen.

<sup>3</sup>Includes one hostler at \$2.50 per day.

TABLE No. 11

STATEMENT OF AVERAGE DAILY COMPENSATION OF OFFICERS

	Crescent City Railway <sup>3</sup>	Diamond and Calder Railroad Company
General officers .....		\$8 69
Other officers .....	\$5 88	4 34
General office clerks .....	3 89	1 00
Station agents .....	4 12	1 33
Other stationmen .....	1 99	2 31
Enginemen .....	4 43	4 80
Firemen .....	3 07	3 25
Conductors .....	3 65	3 70
Other trainmen .....	3 16	3 10
Machinists .....	2 97	3 90
Carpenters .....		3 42
Other shopmen .....		3 33
Section foremen .....	3 45	2 66
Other trackmen .....	1 59	2 08
Switchtenders, crossing tenders and watchmen .....		
Telegraph operators and dispatchers .....	3 72	1 40
Employees, account floating equipment .....		
All other employees and laborers .....	3 03	2 38
Average, including general officers .....		3 25
Average, excluding general officers .....	2 99	2 77

<sup>1</sup>Entire line.

<sup>2</sup>Includes one electric conductor, \$2.25; one electric motorman, \$2.46.

<sup>3</sup>From December 26, 1912, to June 30, 1913.



## No. 11.

AND EMPLOYEES OF CALIFORNIA RAILROADS ON JUNE 30, 1913.

Atchison, Topeka and Santa Fe Rail- way Company	Boca and Loyalton Railroad Company	Bucksport and Elk River Railroad Company	Butte County Railroad Company	California Western Rail- road and Navi- gation Company	Cement, Tolamas and Tidewater Rail- road Company
\$13 75	\$1 21	\$2 70	\$3 49	\$2 39	\$4 12
8 18	4 93	-----	3 53	6 00	4 22
2 64	1 43	-----	3 94	5 00	2 17
2 69	3 01	-----	2 72	3 78	3 07
2 31	2 86	-----	2 40	1 73	-----
6 23	4 00	3 45	4 72	3 26	3 08
3 81	3 11	-----	3 38	2 70	2 25
6 24	3 61	3 09	4 64	3 39	3 50
3 81	2 82	2 50	3 50	2 63	2 25
4 16	4 37	-----	2 87	2 69	3 50
3 58	3 23	-----	3 27	2 37	-----
2 79	3 06	-----	3 00	1 67	2 00
2 58	2 30	2 75	2 76	2 80	3 00
1 53	1 60	2 25	2 02	2 03	2 00
1 59	-----	-----	82	-----	-----
3 47	-----	-----	-----	80	-----
3 11	-----	-----	-----	-----	-----
2 45	2 87	-----	-----	1 60	-----
2 79	2 51	2 71	2 91	2 43	3 16
2 77	2 57	2 71	2 86	2 43	2 96

## —Continued.

AND EMPLOYEES OF CALIFORNIA RAILROADS ON JUNE 30, 1913.

Holton Interurban Railway Company	Los Angeles and San Diego Beach Rail- way Company	McCloud River Railroad Company	Mill Valley and Mt. Tamalpais Scenic Railway	Nevada- California- Oregon Rail- way Company <sup>1</sup>	Nevada County Narrow Gauge Railroad Company
\$3 43	\$3 87	\$12 74	\$10 23	\$8 93	\$5 57
2 48	4 30	6 13	6 70	5 75	-----
1 66	85	3 47	2 30	2 96	2 51
3 45	1 76	3 29	-----	2 35	3 01
2 60	1 70	2 50	-----	1 98	1 86
3 92	3 53	4 50	3 93	5 77	3 55
2 88	2 48	3 33	2 24	3 35	2 59
3 17	3 08	4 43	2 85	3 68	3 23
-----	2 39	3 33	2 36	2 83	2 45
-----	5 34	4 33	3 05	3 39	4 00
-----	-----	3 36	3 48	3 26	3 77
-----	2 64	2 99	4 51	3 11	3 06
2 94	2 90	3 00	2 78	2 19	2 98
-----	1 58	2 06	2 01	1 78	2 16
-----	-----	4 52	-----	-----	2 13
-----	2 21	3 01	4 00	2 56	1 52
2 91	2 33	3 32	3 31	2 84	2 91
2 81	2 26	3 00	2 89	2 59	2 66

TABLE No. 11

STATEMENT OF AVERAGE DAILY COMPENSATION OF OFFICERS

	Northwestern Pacific Railroad Company	Ocean Shore Railroad Company
General officers .....	\$16 64	\$10 69
Other officers .....	7 98	4 77
General office clerks .....	2 93	2 49
Station agents .....	2 47	2 50
Other stationmen .....	2 03	2 31
Enginemen .....	5 07	4 48
Firemen .....	3 07	2 79
Conductors .....	4 45	3 56
Other trainmen .....	3 20	2 71
Machinists .....	3 07	3 80
Carpenters .....	2 82	3 34
Other shopmen .....	2 85	3 06
Section foremen .....	3 16	2 82
Other trackmen .....	2 18	1 63
Switch tenders, crossing tenders and watchmen .....	2 19	1 33
Telegraph operators and dispatchers .....	4 11	3 80
Employees, account floating equipment .....	3 18	-----
All other employees and laborers .....	2 93	3 67
Average, including general officers .....	2 85	2 80
Average, excluding general officers .....	2 82	2 68

TABLE No. 11

STATEMENT OF AVERAGE DAILY COMPENSATION OF OFFICERS

	San Pedro, Los Angeles and Salt Lake Rail- road Company	Sierra Railway Company of California
General officers .....	\$14 62	\$11 92
Other officers .....	9 23	4 89
General office clerks .....	2 84	2 15
Station agents .....	2 67	3 09
Other stationmen .....	2 10	1 86
Enginemen .....	5 02	3 85
Firemen .....	3 17	2 79
Conductors .....	4 78	3 75
Other trainmen .....	3 40	2 73
Machinists .....	3 29	3 76
Carpenters .....	2 60	2 91
Other shopmen .....	2 37	2 88
Section foremen .....	2 33	2 35
Other trackmen .....	1 23	1 70
Switch tenders, crossing tenders and watchmen .....	1 80	-----
Telegraph operators and dispatchers .....	3 28	3 28
Employees, account floating equipment .....	-----	-----
All other employees and laborers .....	2 51	2 84
Average, including general officers .....	2 64	2 77
Average, excluding general officers .....	2 57	2 45

<sup>1</sup>Incomplete statistics.

—Continued.

AND EMPLOYEES OF CALIFORNIA RAILROADS ON JUNE 30, 1913.

Pacific Coast Railway Company	Pajaro Valley Consolidated Railroad Company	Sacramento Valley and Eastern Railway	San Diego and Southeastern Railway Company	San Diego and Arizona Railway Company	San Joaquin and Eastern Railroad Company
\$11 08	\$5 96	\$4 80	\$17 74	\$8 12	\$5 51
5 90	5 96	-----	4 55	10 26	5 92
3 10	3 97	1 64	3 28	3 37	2 73
2 69	2 69	1 90	2 30	4 16	3 15
2 13	2 35	-----	2 11	2 12	2 68
4 04	2 65	5 00	3 61	4 16	5 38
2 65	2 36	3 68	2 81	2 50	3 97
3 67	3 45	4 00	3 42	4 16	4 36
2 75	2 16	3 10	2 82	3 09	3 88
4 70	3 93	-----	3 51	3 63	4 24
3 29	-----	-----	3 08	-----	3 09
2 60	2 70	-----	2 81	2 38	3 23
2 31	2 76	-----	2 61	3 18	2 99
2 02	2 05	-----	1 71	1 53	2 51
-----	-----	-----	-----	2 66	2 76
4 24	-----	-----	-----	-----	3 40
-----	-----	-----	-----	-----	-----
2 99	2 72	2 17	2 22	-----	2 66
2 82	3 03	3 21	2 59	3 24	3 09
2 71	2 71	2 86	2 52	3 20	3 05

—Continued.

AND EMPLOYEES OF CALIFORNIA RAILROADS ON JUNE 30, 1913.

South San Francisco Belt Railway Company	Southern Pacific Company <sup>1</sup>	Stockton Terminal and Eastern Railroad Company	Stone Canyon Railroad	Sugar Pine Railway Company	Sunset Railway Company
-----	\$22 69	\$5 06	-----	\$6 09	-----
-----	8 23	3 96	\$6 23	5 76	\$6 52
-----	2 73	1 92	-----	1 64	3 29
-----	-----	2 47	-----	3 20	3 67
-----	-----	-----	-----	-----	2 90
\$3 45	-----	2 88	3 96	4 08	6 17
-----	-----	-----	2 96	2 78	3 75
-----	-----	-----	3 04	4 07	5 25
2 40	-----	2 84	2 69	2 79	4 04
-----	-----	-----	-----	-----	-----
-----	-----	-----	-----	2 92	-----
-----	-----	-----	-----	-----	2 59
2 75	3 00	2 13	2 97	2 64	2 63
2 00	1 63	1 94	1 79	2 01	1 50
-----	-----	-----	-----	2 09	-----
-----	3 50	-----	-----	-----	-----
-----	-----	-----	-----	-----	-----
-----	-----	-----	-----	3 09	3 11
-----	-----	3 18	2 40	3 01	2 72
-----	-----	2 66	2 40	2 78	2 72

TABLE No. 11

STATEMENT OF AVERAGE DAILY COMPENSATION OF OFFICERS

	Tonopah and Tidewater Railroad Company	Ventura County Railway Company
General officers .....	\$11 63	\$2 46
Other officers .....	7 14	4 45
General office clerks .....	3 55	2 42
Station agents .....	3 34	2 10
Other stationmen .....		
Enginemen .....	6 33	3 45
Firemen .....	4 09	2 86
Conductors .....	5 95	3 52
Other trainmen .....	3 75	3 16
Machinists .....	3 86	3 16
Carpenters .....	4 00	
Other shopmen .....	3 32	2 38
Section foremen .....	3 00	2 87
Other trackmen .....	1 75	2 03
Switch tenders, crossing tenders and watchmen.....	2 29	2 09
Telegraph operators and dispatchers.....	4 67	
Employees, account floating equipment.....		
All other employees and laborers.....	3 41	2 10
Average, including general officers.....	3 22	2 50
Average, excluding general officers.....	3 12	2 50

NOTE.—No statistics reported for Camino, Placerville and Lake Tahoe Railroad Company, Quincy Western Railway Company, Bay Point and Clayton Railroad Lake Tahoe Railway and Transportation Company, Modesto and Empire Traction Company, Quincy Western Railway Company, Bay Point and Clayton Railroad Company.



—Concluded.

AND EMPLOYEES OF CALIFORNIA RAILROADS ON JUNE 30, 1913.

Western Pacific Railway Company	Yosemite Valley Railroad Company	Yreka Railroad Company	
\$26 90	\$5 75	\$6 08	
8 07	6 98	-----	
3 29	3 51	-----	
2 76	2 41	-----	
2 45	2 15	2 20	
5 81	4 51	3 67	
3 69	2 72	2 36	
5 05	4 22	2 92	
3 53	3 21	-----	
4 28	3 73	3 00	
3 45	-----	-----	
2 53	2 66	-----	
2 27	2 62	2 60	
1 69	1 49	2 00	
1 66	-----	-----	
4 30	-----	-----	
3 07	-----	-----	
2 59	3 48	-----	
2 77	2 59	2 80	
2 69	2 56	2 48	

TABLE

STATEMENT OF ACCIDENTS TO PERSONS ON CALIFORNIA

	Amador Central Railroad Company	Arcata and Mad River Railroad Company
<i>Trainmen.</i>		
Number employed -----	4	23
Killed -----		1
Injured -----		2
Totals -----		3
<i>All Other Employees.</i>		
Number employed -----	34	76
Killed -----		
Injured -----		2
Totals -----		2
<i>Passengers.</i>		
Number of passengers -----	15,196	
Killed -----		
Injured -----		
Totals -----		
<i>All Others.</i>		
Killed -----		
Injured -----		
Totals -----		
<i>Grand Total.</i>		
Killed -----		1
Injured -----		4

## No. 12.

RAILROADS DURING THE YEAR ENDING JUNE 30, 1913.

Atchison, Topeka and Santa Fe Railway Company	Boca and Loyalton Railroad Company	Bucksport and Elk River Railroad Company	Butte County Railroad Company	California West- ern Railroad and Navigation Company	Camino, Placer- ville and Lake Tahoe Railroad Company
1,290	10	3	10	31	4
9					
169	1				
178	1				
7,251	51	6	46	111	6
12					
802					
814					
3,198,355	6,663		17,650		846
2					
102					
104					
42					
101					
143					
65					
1,174	1				

TABLE No. 12  
STATEMENT OF ACCIDENTS TO PERSONS ON CALIFORNIA

	Cement, Tolenas and Tidewater Railroad Company	Colusa and Lake Railroad Company <sup>2</sup>
<i>Trainmen.</i>		
Number employed -----	8	-----
Killed -----		
Injured -----		
Totals -----		
<i>All Other Employees.</i>		
Number employed -----	30	-----
Killed -----		
Injured -----		
Totals -----		
<i>Passengers.</i>		
Number of passengers -----	8,238	-----
Killed -----		
Injured -----		
Totals -----		
<i>All Others.</i>		
Killed -----		
Injured -----		
Totals -----		
<i>Grand Total.</i>		
Killed -----		
Injured -----		

<sup>1</sup>From December 26, 1912, to June 30, 1913.  
<sup>2</sup>No statistics reported.  
<sup>3</sup>No record kept.



—Continued.

RAILROADS DURING THE YEAR ENDING JUNE 30, 1913.

Crescent City Railway <sup>1</sup>	Diamond and Caldor Railroad Company	Holton Interurban Railway Company	Iron Mountain Railway Company	Lake Tahoe Railway and Transportation Company	Los Angeles and San Diego Beach Rail- way Company
10	7	5	-----	9	14
-----	-----	-----	1	-----	-----
-----	-----	-----	1	-----	-----
-----	-----	-----	2	-----	-----
22	27	14	-----	234	41
-----	-----	1	2	-----	-----
-----	-----	1	2	-----	-----
-----	1,232	3	-----	-----	426,406
-----	-----	-----	-----	-----	-----
-----	-----	-----	-----	-----	-----
-----	-----	-----	-----	-----	-----
-----	-----	-----	-----	-----	-----
-----	-----	-----	-----	-----	-----
-----	-----	-----	1	-----	-----
-----	-----	1	3	-----	-----

TABLE No. 12

STATEMENT OF ACCIDENTS TO PERSONS ON CALIFORNIA

	McCloud River Railroad Company	Mill Valley and Mt. Tamalpais Scenic Railway	Modesto and Empire Traction Company
<i>Trainmen.</i>			
Number employed -----	46	15	3
Killed -----	1		
Injured -----	1		
Totals -----	2		
<i>All Other Employees.</i>			
Number employed -----	155	17	5
Killed -----			
Injured -----	3		
Totals -----	3		
<i>Passengers.</i>			
Number of passengers -----	28,311	43,389	47,023
Killed -----			
Injured -----	1		
Totals -----	1		
<i>All Others.</i>			
Killed -----			
Injured -----			
Totals -----			
<i>Grand Total.</i>			
Killed -----	1		
Injured -----	5		

—Continued.

RAILROADS DURING THE YEAR ENDING JUNE 30, 1913.

Nevada-California-Oregon Railway Company	Nevada County Narrow Gauge Railroad Company	Northwestern Pacific Railroad Company	Ocean Shore Railroad Company	Pacific Coast Railway Company	Pajaro Valley Consolidated Railroad Company
23	16	242	30	27	8
		1		1	
2	1	12	11		1
2	1	13	11	1	1
158	46	1,471	122	155	39
				3	
	2	5	9	3	
	2	5	9	6	
29,089	93,824	7,236,183	180,118	101,576	102,448
		2			
	2	9			
	2	11			
		12	1		
		51	2		
		63	3		
		15	1	4	
2	5	77	22	3	1

TABLE No. 12

STATEMENT OF ACCIDENTS TO PERSONS ON CALIFORNIA

	Sacramento Valley and Eastern Railway	San Diego and Southeastern Railway Company	San Diego and Arizona Railway Company
<i>Trainmen.</i>			
Number employed -----	4	55	5
Killed -----		1	
Injured -----		10	
Totals -----		11	
<i>All Other Employees.</i>			
Number employed -----	8	245	61
Killed -----			
Injured -----		16	
Totals -----		16	
<i>Passengers.</i>			
Number of passengers -----	5,462	1,318,663	3,621
Killed -----			
Injured -----		40	
Totals -----		40	
<i>All Others.</i>			
Killed -----		2	
Injured -----		4	
Totals -----		6	
<i>Grand Total.</i>			
Killed -----		3	
Injured -----		70	

<sup>1</sup>Entire line.



—Continued.

RAILROADS DURING THE YEAR ENDING JUNE 30, 1913.

San Joaquin and Eastern Railroad Company	San Pedro, Los Angeles and Salt Lake Rail- road Company	Sierra Railway Company of California	South San Francisco Belt Railway Company	Southern Pacific Company	Stockton Terminal and Eastern Rail- road Company
28	291	21	4	7,677	2
				15	
7	39	2		429	3
7	39	2		444	3
154	1,403	126	7	39,830	16
	1			29	
10	152	4		1,668	
10	153	4		1,697	
32,885	1,541,250	58,490		33,216,932	18,958
				7	
	18			258	
	18			265	
	7			127	
	21			340	
	28			467	
	8			178	
17	230	6		2,695	3

TABLE No. 12

STATEMENT OF ACCIDENTS TO PERSONS ON CALIFORNIA

	Stone Canyon Railroad	Sugar Pine Railway Company	Sunset Railway Company
<i>Trainmen.</i>			
Number employed -----	4	20	27
Killed -----			1
Injured -----			10
Totals -----			11
<i>All Other Employees.</i>			
Number employed -----	8	39	155
Killed -----	1		
Injured -----	2		2
Totals -----	3		2
<i>Passengers.</i>			
Number of passengers -----	384		131,774
Killed -----			
Injured -----			2
Totals -----			2
<i>All Others.</i>			
Killed -----			4
Injured -----			4
Totals -----			8
<i>Grand Total.</i>			
Killed -----	1		5
Injured -----	2		18

NOTE.—No statistics reported for Quincy Western Railway Company, Bay Point and Clayton Railroad Company.

—Concluded.

RAILROADS DURING THE YEAR ENDING JUNE 30, 1913.

Tonopah and Tidewater Railroad Company	Ventura County Railway Company	Western Pacific Railway Company	Yosemite Valley Railroad Company	Yreka Railroad Company	Total
19	4	237	26	3	10,265
		1			32
		35	1		737
		36	1		769
102	34	1,580	82	9	53,976
		1			47
4	3	98	2		2,790
4	3	99	2		2,837
6,509	42,119	244,014	28,037	25,791	48,211,386
					11
		3			435
		3			446
	2	8			205
	2	13			538
	4	21			743
	2	10			295
4	5	149	3		4,500

TABLE

STATEMENT OF CLASSIFICATION OF EQUIPMENT OF CALIFORNIA

	Amador Central Railroad Company	Arcata and Mad River Railroad Company
Locomotives—total of all kinds owned or leased---	3	6
<i>Cars in Passenger Service.</i>		
First class -----	2	4
Second class -----		1
Combination -----		
Emigrant -----		
Dining -----		
Parlor -----		
Sleeping -----		
Baggage, express and postal-----		
Other cars -----	1	
Total all classes of passenger cars-----	3	5
Number fitted with train brake-----	3	
Number fitted with automatic coupler-----	3	
<i>Cars in Freight Service.</i>		
Box -----	4	7
Flat -----	1	200
Stock -----		
Coal -----		
Tank -----		4
Refrigerator -----		
Other cars -----		
Total all classes of freight cars-----	5	211
Number fitted with train brake-----	5	
Number fitted with automatic coupler-----	5	
<i>Cars in Company Service.</i>		
Officers and pay cars-----		1
Gravel -----	4	
Derrick -----		
Caboose -----		
Other road cars-----		
Total all classes in company service-----	4	1
Number fitted with train brake-----	4	
Number fitted with automatic coupler-----	4	
<i>Grand Total of Cars of all Kinds.</i>		
Number -----	12	217
Number fitted with train brake-----	12	
Number fitted with automatic coupler-----	12	

<sup>1</sup>Entire line.



## No. 13.

RAILROADS AT THE CLOSE OF THE FISCAL YEAR, JUNE 30, 1913.

Atchison, Topeka and Santa Fe Railway Company <sup>1</sup>	Boca and Loyalton Railroad Company	Bucksport and Elk River Railroad Company	Butte County Railroad Company	California West- ern Railroad and Navigation Company	Camino, Placer- ville and Lake Tahoe Railroad Company
1,841	6	2	3	7	1
586	1		2	1	
156				2	
144	1		2	1	1
33					
9					
489	1				
8					
1,425	3		4	4	1
1,425	3		4	4	
1,425	3		4	4	1
31,121			6	3	
2,968	35	8	81	156	1
3,221				1	
8,770				6	
2,327					
4,455		28		33	
52,862	35	36	87	199	1
52,862	35	36	87	166	
52,862	35		87	166	1
39					
3,374					
31					
747	2		1		
1,023	3			3	
5,214	5		1	3	
5,209	5		1		
5,214	5		1		
59,501	43	36	92	206	2
59,496	43	36	92	166	
59,501	43		92	166	2

TABLE No. 13

STATEMENT OF CLASSIFICATION OF EQUIPMENT OF CALIFORNIA

	Cement, Tolenas and Tidewater Railroad Company	Colusa and Lake Railroad Company
Locomotives—total of all kinds owned or leased.....	4	4
<i>Cars in Passenger Service.</i>		
First class .....		2
Second class .....		
Combination .....	1	1
Emigrant .....		
Dining .....		
Parlor .....		
Sleeping .....		
Baggage, express and postal.....		2
Other cars .....		
Total all classes of passenger cars.....	1	5
Number fitted with train brake.....	1	
Number fitted with automatic coupler.....	1	
<i>Cars in Freight Service.</i>		
Box .....	1	8
Flat .....	2	30
Stock .....		4
Coal .....	4	
Tank .....		1
Refrigerator .....		
Other cars .....	4	
Total all classes of freight cars.....	11	43
Number fitted with train brake.....	11	
Number fitted with automatic coupler.....	11	1
<i>Cars in Company Service.</i>		
Officers and pay cars.....		
Gravel .....		
Derrick .....		
Caboose .....		
Other road cars.....		3
Total all classes in company service.....		3
Number fitted with train brake.....		
Number fitted with automatic coupler.....		
<i>Grand Total of Cars of all Kinds.</i>		
Number .....	12	51
Number fitted with train brake .....	12	
Number fitted with automatic coupler.....	12	

<sup>1</sup>From December 26, 1912, to June 30, 1913.

—Continued.

RAILROADS AT THE CLOSE OF THE FISCAL YEAR, JUNE 30, 1913.

Present City Railway¹	Diamond and Calder Railroad Company	Holton Interurban Railway Company	Iron Mountain Railway Company	Lake Tahoe Railway and Transportation Company	Los Angeles and San Diego Beach Rail- way Company
2	5	4	4	4	3
				7	6
	1	2		1	2
				2	
				2	
		4			4
	1	6		12	12
	1	2		12	11
	1	2		12	10
		6		7	5
4	70	4	5	53	20
					1
16			19		
20	70	10	24	60	26
20	70	10		21	9
20		10		21	26
	2				
	2		1		
1	2		2	1	17
1	6		3	1	17
	6			1	
				1	
21	77	16	27	73	55
20	77	12		38	20
20		12		38	36

TABLE No. 13

STATEMENT OF CLASSIFICATION OF EQUIPMENT OF CALIFORNIA

	McCloud River Railroad Company	Mill Valley and Mt. Tamalpais Scenic Railway
Locomotives—total of all kinds owned or leased.....	13	6
<i>Cars in Passenger Service.</i>		
First class .....		12
Second class .....		
Combination .....	3	
Emigrant .....		
Dining .....		
Parlor .....		
Sleeping .....		
Baggage, express and postal.....		
Other cars .....		<sup>2</sup> 5
Total all classes of passenger cars.....	3	17
Number fitted with train brake.....	3	
Number fitted with automatic coupler.....	3	
<i>Cars in Freight Service.</i>		
Box .....		
Flat .....	382	1
Stock .....		
Coal .....		
Tank .....	9	
Refrigerator .....		
Other cars .....	27	
Total all classes of freight cars.....	418	1
Number fitted with train brake.....	418	
Number fitted with automatic coupler.....	418	
<i>Cars in Company Service.</i>		
Officers and pay cars.....	1	
Gravel .....		
Derrick .....		
Caboose .....	4	
Other road cars.....	32	
Total all classes in company service.....	37	
Number fitted with train brake.....	37	
Number fitted with automatic coupler.....	37	
<i>Grand Total of Cars of all Kinds.</i>		
Number .....	458	18
Number fitted with train brake.....	458	
Number fitted with automatic coupler.....	458	

<sup>1</sup>Entire line.<sup>2</sup>Includes one motor and four gravities.



—Continued.

RAILROADS AT THE CLOSE OF THE FISCAL YEAR, JUNE 30, 1913.

Modesto and Empire Traction Company	Nevada-California-Oregon Railway Company <sup>1</sup>	Nevada County Narrow Gauge Railroad Company	Northwestern Pacific Railroad Company	Ocean Shore Railroad Company	Pacific Coast Railway Company
1	12	6	60	9	8
	4	3	133		7
1	2		7	20	
	3	3	14	5	2
	2				
	3		25		2
		5	30		
1	14	11	209	25	11
1	14	10	209	25	11
1	14	10	209	25	11
1	50	34	297	35	35
1	87	28	782	55	133
	50		51		8
			33		
		4			16
		3		16	4
2	187	69	1,163	106	196
2	187	69	1,107	106	196
2	187	69	1,092	106	196
	2		3		
			45		
	1	1	2		
	3		22	2	
	32	1	151	9	1
	38	2	223	11	1
	38	2	223	11	1
	38	2	223	11	1
3	239	82	1,595	142	208
3	239	81	1,589	142	208
3	239	81	1,524	142	208

TABLE No. 13

STATEMENT OF CLASSIFICATION OF EQUIPMENT OF CALIFORNIA

	Pajaro Valley Consolidated Railroad Company	Quincy Western Railway Company
Locomotives—total of all kinds owned or leased.....	7	1
<i>Cars in Passenger Service.</i>		
First class .....	4	
Second class .....	2	
Combination .....	3	1
Emigrant .....		
Dining .....		
Parlor .....		
Sleeping .....		
Baggage, express and postal.....		
Other cars .....	1	
Total all classes of passenger cars.....	10	1
Number fitted with train brake.....	8	
Number fitted with automatic coupler.....	6	
<i>Cars in Freight Service.</i>		
Box .....	26	
Flat .....	12	1
Stock .....		
Coal .....		
Tank .....	2	
Refrigerator .....		
Other cars .....	228	
Total all classes of freight cars.....	268	1
Number fitted with train brake.....	173	
Number fitted with automatic coupler.....	173	
<i>Cars in Company Service.</i>		
Officers and pay cars.....		
Gravel .....		
Derrick .....		
Caboose .....		
Other road cars.....		
Total all classes in company service.....		
Number fitted with train brake.....		
Number fitted with automatic coupler.....		
<i>Grand Total of Cars of all Kinds.</i>		
Number .....	278	2
Number fitted with train brake.....	181	
Number fitted with automatic coupler.....	179	

<sup>1</sup>Entire line.

—Continued.

RAILROADS AT THE CLOSE OF THE FISCAL YEAR, JUNE 30, 1913.

Sacramento Valley and Eastern Railway	San Diego and South-eastern Railway Company	San Diego and Arizona Railway Company	San Joaquin and Eastern Railroad Company	San Pedro, Los Angeles and Salt Lake Railroad Company <sup>1</sup>	Sierra Railway Company of California
2	14	2	7	155	10
	7			59	2
	12				
1	4		3	8	1
				14	
				3	
	1			34	3
	9		1	1	4
1	33		4	119	10
1	32			119	10
1	32		4	119	10
1	49	18		1,266	14
5	241	53	6	648	42
				194	1
	22	1		745	
	3	4	1	212	3
6	315	81	7	3,065	60
6	315	81		3,065	60
6	315	81	7	3,065	60
				3	
				97	6
		1		4	
1	1	1	3	48	2
	3	19	1	117	4
1	4	21	4	269	12
1	4	13		269	12
1	4	6	4	269	12
8	352	102	15	3,453	82
8	351	94		3,453	82
8	351	87	15	3,453	82

TABLE No. 13

STATEMENT OF CLASSIFICATION OF EQUIPMENT OF CALIFORNIA

	South San Francisco Belt Railway Company <sup>1</sup>	Southern Pacific Company <sup>2</sup>
Locomotives—total of all kinds owned or leased----	2	1,309
<i>Cars in Passenger Service.</i>		
First class -----		940
Second class -----		9
Combination -----		106
Emigrant -----		
Dining -----		88
Parlor -----		
Sleeping -----		
Baggage, express and postal-----		530
Other cars -----		10
Total all classes of passenger cars-----		1,683
Number fitted with train brake-----		1,683
Number fitted with automatic coupler-----		1,673
<i>Cars in Freight Service.</i>		
Box -----		17,103
Flat -----		6,195
Stock -----		2,425
Coal -----		2,009
Tank -----		2,036
Refrigerator -----		170
Other cars -----		
Total all classes of freight cars-----		29,938
Number fitted with train brake-----		29,937
Number fitted with automatic coupler-----		29,938
<i>Cars in Company Service.</i>		
Officers and pay cars-----		26
Gravel -----		1,657
Derrick -----		40
Caboose -----		502
Other road cars-----		3,618
Total all classes in company service-----		5,843
Number fitted with train brake-----		5,695
Number fitted with automatic coupler-----		5,831
<i>Grand Total of Cars of all Kinds.</i>		
Number -----		37,464
Number fitted with train brake-----		37,315
Number fitted with automatic coupler-----		37,442

<sup>1</sup>Switching company.<sup>2</sup>Entire line.<sup>3</sup>Includes one auto motor car, one auto motor trailer, one gasoline motor car.<sup>4</sup>Locomotives and cars rented from Southern Pacific Co. and Atchison, Topeka and Santa Fe Railway Company.



—Continued.

RAILROADS AT THE CLOSE OF THE FISCAL YEAR, JUNE 30, 1913.

Stockton Terminal and Eastern Rail- road Company	Stone Canyon Railroad	Sugar Pine Railway Company	Sunset Railway Company <sup>1</sup>	Tonopah and Tidewater Railroad Company <sup>2</sup>	Ventura County Railway Company
1	1	4		6	4
<sup>2</sup> 3				2	1
				1	
1	1			1	1
				1	
4	1			5	2
4	1			5	2
2	1			5	2
1				17	8
4	3	70		17	15
				6	
					56
5	3	70		40	79
5	3	70		40	
5	3	70		40	79
				1	
		3			
		1		4	
		1		1	
		5		6	
		1		6	
		1		6	
9	4	75		51	81
9	4	71		51	2
7	4	71		51	81

TABLE No. 13

STATEMENT OF CLASSIFICATION OF EQUIPMENT OF CALIFORNIA

	Western Pacific Railway Company <sup>1</sup>	Yosemite Valley Railroad Company
Locomotives—total of all kinds owned or leased.....	115	6
<i>Cars in Passenger Service.</i>		
First class .....	40	2
Second class .....		1
Combination .....	6	2
Emigrant .....		
Dining .....	8	
Parlor .....		
Sleeping .....		
Baggage, express and postal.....	30	
Other cars .....		
Total all classes of passenger cars.....	84	5
Number fitted with train brake.....	84	5
Number fitted with automatic coupler.....	84	5
<i>Cars in Freight Service.</i>		
Box .....	5	13
Flat .....	500	99
Stock .....		3
Coal .....	25	
Tank .....	110	
Refrigerator .....		
Other cars .....		6
Total all classes of freight cars.....	640	121
Number fitted with train brake.....	640	121
Number fitted with automatic coupler.....	640	121
<i>Cars in Company Service.</i>		
Officers and pay cars.....		
Gravel .....	468	
Derrick .....	9	1
Caboose .....	56	3
Other road cars.....	248	3
Total all classes in company service.....	781	7
Number fitted with train brake.....	781	7
Number fitted with automatic coupler.....	781	7
<i>Grand Total of Cars of all Kinds.</i>		
Number .....	1,505	133
Number fitted with train brake.....	1,505	133
Number fitted with automatic coupler.....	1,505	133

<sup>1</sup>Entire line.

NOTE.—No statistics reported for Bay Point and Clayton Railroad Company.

—Concluded.

RAILROADS AT THE CLOSE OF THE FISCAL YEAR, JUNE 30, 1913.

Yreka Railroad Company	Total
2	3,664
-----	1,830
-----	214
1	327
-----	-----
-----	143
-----	14
-----	2
1	1,124
2	85
-----	-----
4	3,739
3	3,696
3	3,685
-----	-----
1	50,142
1	13,024
-----	5,958
-----	11,609
-----	4,745
-----	170
-----	4,895
-----	-----
2	90,543
2	89,935
2	89,919
-----	-----
-----	78
-----	5,654
-----	90
-----	1,406
-----	5,296
-----	-----
-----	12,524
-----	12,327
-----	12,459
-----	-----
6	106,806
5	105,958
5	106,063

TABLE

STATEMENT OF LOCOMOTIVE MILEAGE OF CALIFORNIA

	Atchison, Topeka and Santa Fe Railway Company	Boca and Loyalton Railroad Company
<i>Revenue Service—Locomotive Miles.</i>		
Freight -----	3,639,900	2,778
Passenger -----	4,616,738	462
Mixed -----	175,216	25,713
Special -----	142,007	52
Switching -----	1,404,183	13,581
Totals -----	9,878,044	42,586
Non-revenue service—locomotive miles -----	412,082	2,275
Totals -----	10,290,126	44,861

<sup>1</sup>Includes 27,153 motor car miles.<sup>2</sup>From December 26, 1912, to June 30, 1913.

TABLE No. 14

STATEMENT OF LOCOMOTIVE MILEAGE OF CALIFORNIA

	Los Angeles and San Diego Beach Railway Company	McCloud River Railroad Company
<i>Revenue Service—Locomotive Miles.</i>		
Freight -----		77,409
Passenger -----	45,125	25,871
Mixed -----	8,164	17,917
Special -----		165
Switching -----		17,439
Totals -----	53,289	138,801
Non-revenue service—locomotive miles -----	1,143	4,160
Totals -----	54,432	142,961



## No. 14.

## RAILROADS FOR THE FISCAL YEAR ENDING JUNE 30, 1913.

Bucksport and Elk River Railroad Company	Butte County Railroad Company	Camino, Placer- ville and Lake Tahoe Railroad Company	Cement, Totenas and Tidewater Railroad Company	Crescent City Railway <sup>2</sup>	Diamond and Calder Railroad Company
7,382			6,538	3,359	9,900
	27,223	2,866	3,954		10,626
	16,099		7,254	9,894	
7,382	43,322	2,866	17,746	13,253	20,526
	247			312	
7,382	43,569	2,866	17,746	13,565	20,526

## —Continued.

## RAILROADS FOR THE FISCAL YEAR ENDING JUNE 30, 1913.

Nevada-Califor- nia-Oregon Railway Company	Nevada County Narrow Gauge Railroad Company	Northwestern Pacific Railroad Company	Ocean Shore Railroad Company	Pacific Coast Railway Company	Pajaro Valley Consolidated Railroad Company
85,877	17,453	331,506	54,288	9,274	13,486
122,608	14,249	759,868	75,563	57,498	23,916
	37,187	24,350	38,524	87,450	17,087
59	2,251	946	28	68	47
1,336	2,920	154,059	15,074	53,800	1,034
209,880	74,060	1,270,729	183,477	208,090	55,570
5,660	4,215		11,297	1,592	659
215,540	78,275	1,270,729	194,774	209,682	56,229

TABLE No. 14

STATEMENT OF LOCOMOTIVE MILEAGE OF CALIFORNIA

	Sacramento Valley and Eastern Railway	San Diego and Southeastern Railway Company
<i>Revenue Service—Locomotive Miles.</i>		
Freight -----		66,417
Passenger -----		<sup>1</sup> 373,342
Mixed -----	10,950	16,175
Special -----		905
Switching -----		35,132
Totals -----	10,950	491,971
Non-revenue service—locomotive miles -----		1,941
Totals -----	10,950	493,912

<sup>1</sup>Includes 215,186 motor car miles electric.

TABLE No. 14

STATEMENT OF LOCOMOTIVE MILEAGE OF CALIFORNIA

	Sugar Pine Railway Company	Sunset Railway Company
<i>Revenue Service—Locomotive Miles.</i>		
Freight -----	23,363	132,106
Passenger -----		97,255
Mixed -----		
Special -----		
Switching -----	11,619	37,913
Totals -----	34,982	267,274
Non-revenue service—locomotive miles -----	3,479	1,434
Totals -----	38,461	268,708

NOTE.—No statistics reported for Amador Central Railroad Company, Arcata and Mad River Railroad Company, Iron Mountain Railway Company, Lake Tahoe Railway and Transportation Company, Mill Valley and Mt. Tamalpais Scenic Railway, Modesto and Empire Traction Company, Quincy Western Railway Company, South San Francisco Belt Railway Company, Stockton Terminal and Eastern Railroad Company, California Western Railroad and Navigation Company, Colusa and Lake Railroad Company, Holton Interurban Railway Company, Bay Point and Clayton Railroad Company, Yreka Railroad Company.

—Continued.

RAILROADS FOR THE FISCAL YEAR ENDING JUNE 30, 1913.

San Diego and Arizona Railway Company	San Joaquin and Eastern Railroad Company	San Pedro, Los Angeles and Salt Lake Rail- road Company	Sierra Railway Company of California	Southern Pacific Company	Stone Canyon Railroad
8,190	36,648	678,890	69,658	8,357,038	-----
-----	-----	870,765	49,480	16,533,792	-----
26	59,858	23,387	21,360	626,494	8,305
-----	-----	25,008	-----	24,651	-----
3,640	131	239,425	-----	3,862,376	-----
-----	-----	-----	-----	-----	-----
11,856	96,637	1,837,475	140,498	29,404,351	8,305
-----	4,940	26,839	3,738	1,180,574	-----
-----	-----	-----	-----	-----	-----
11,856	101,577	1,864,314	144,236	30,584,925	8,305

—Concluded.

RAILROADS FOR THE FISCAL YEAR ENDING JUNE 30, 1913.

Tonopah and Tidewater Railroad Company	Ventura County Railway Company	Western Pacific Railway Company	Yosemite Valley Railroad Company	Total	
62	8,060	762,426	55,648	14,457,656	
-----	24,488	612,453	82,857	24,390,284	
88,736	-----	-----	-----	1,327,614	
-----	-----	3,398	-----	99,585	
5,628	1,763	245,691	22,154	6,162,145	
-----	-----	-----	-----	-----	
94,426	34,311	1,623,968	160,659	46,437,284	
1,359	1,831	101,741	210	1,771,728	
-----	-----	-----	-----	-----	
95,785	36,142	1,725,709	160,869	48,209,012	

TABLE

STATEMENT OF CAR AND TRAIN MILEAGE STATISTICS OF CALI

	Atchison, Topeka and Santa Fe Rail- way Company	Boca and Loyalton Railroad Company
<i>Revenue Service—Freight Car Miles.</i>		
Loaded -----	67,449,560	106,434
Empty -----	24,936,708	79,892
Caboose -----	3,103,066	1,780
Totals -----	95,489,334	188,106
Average number of freight cars per train mile-----	30.54	7.22
Average number of loaded cars per train mile-----	21.57	4.08
Average number of empty cars per train mile-----	7.97	3.06
Average number of tons of freight per loaded car mile -----	15.15	19.84
<i>Revenue Service—Passenger Car Miles.</i>		
Passenger -----	9,832,937	24,522
Sleeping, parlor and observation-----	9,080,864	
Other passenger train cars-----	6,786,806	14,925
Totals -----	25,700,607	39,447
Average number of passengers per car mile-----	14	5
Average number of passengers per train mile-----	57	5
<i>Revenue Service—Special Car Miles.</i>		
Freight—Loaded -----	34,346	
Freight—Empty -----	315	
Caboose -----	3,221	
Passenger -----	15,847	52
Sleeping, parlor and observation-----	19,230	
Other passenger train cars-----	18,001	
Totals -----	90,960	52
Non-revenue service—car miles-----	6,954,500	

From December 26, 1912, to June 30, 1913.



No. 15.

CALIFORNIA RAILROADS FOR THE FISCAL YEAR ENDING JUNE 30, 1913.

San Joaquin and Lake River Railroad Company	Butte County Railroad Company	Camino, Placerville and Lake Tahoe Railroad Company	Cement, Tolamas and Tidewater Railroad Company	Present City Railway <sup>1</sup>	Diamond and Calder Railroad Company
25,404	138,786	3,464	24,318	18,233	76,164
25,404	95,971	3,496	21,764	17,613	72,270
		2,866			
50,808	234,757	9,826	46,082	35,846	148,434
6.88	8.76	3.43	10.86	10.67	7.23
3.44	5.18	1.21	5.73	5.43	3.71
3.44	3.58	1.22	5.13	5.24	3.61
14.80	25.70	27.43	42.18	34.97	12.19
	35,321		3,954		10,626
	35,321		3,954		10,626
	12	2	4.17		3
	15	2	4.17		3
		3,464			
		3,496			
		2,866			
		9,826			
	322			1,377	

TABLE No. 15

STATEMENT OF CAR AND TRAIN MILEAGE STATISTICS OF CALI

	Los Angeles and San Diego Beach Rail- way Company	McCloud River Railroad Company
<i>Revenue Service—Freight Car Miles.</i>		
Loaded .....	16,850	608,216
Empty .....	8,411	569,136
Caboose .....		57,483
Totals .....	25,261	1,234,835
Average number of freight cars per train mile.....	3.09	14.18
Average number of loaded cars per train mile.....	2.06	6.98
Average number of empty cars per train mile.....	1.03	6.53
Average number of tons of freight per loaded car mile .....	6.29	15.62
<i>Revenue Service—Passenger Car Miles.</i>		
Passenger .....	217,644	43,383
Sleeping, parlor and observation.....		102
Other passenger train cars.....	10,523	
Totals .....	228,167	43,485
Average number of passengers per car mile.....	20	13
Average number of passengers per train mile.....	39	13
<i>Revenue Service—Special Car Miles.</i>		
Freight—loaded .....		
Freight—empty .....		
Caboose .....		
Passenger .....		165
Sleeping, parlor and observation.....		
Other passenger train cars.....		
Totals .....		165
Non-revenue service—car miles.....		10,614

Continued.

CALIFORNIA RAILROADS FOR THE FISCAL YEAR ENDING JUNE 30, 1913.

Nevada-California-Oregon Railway Company	Nevada County Narrow Gauge Railroad Company	Northwestern Pacific Railroad Company	Ocean Shore Railroad Company	Pacific Coast Railway Company	Pajaro Valley Consolidated Railroad Company
608,155	93,873	3,081,140	297,241	350,927	177,830
316,162	55,030	1,141,525	209,972	152,294	159,113
91,553	14,670	320,490	31,964	-----	-----
1,015,870	163,573	4,543,155	539,177	503,221	336,943
11.87	3	13.29	5.81	4.85	11
7.10	1.73	9.02	3.20	3.38	5.80
3.69	1.02	3.34	2.26	1.48	5.19
7.34	5.45	12.87	19.12	9.04	6.05
244,494	102,653	4,067,076	286,311	208,940	51,003
99,076	-----	416	-----	-----	-----
122,584	-----	1,012,688	-----	76,754	-----
466,154	102,653	5,080,180	286,311	285,694	51,003
6	10	31	14	10	10
16	20	95	35	13	13
-----	797	4,161	-----	-----	-----
-----	257	6	-----	-----	-----
-----	6	475	-----	-----	-----
59	3,806	701	28	102	-----
-----	-----	348	-----	-----	-----
-----	-----	341	-----	-----	-----
59	4,866	6,032	28	102	-----
106,378	6,241	621,967	14,152	13,841	1,202

TABLE No. 15

STATEMENT OF CAR AND TRAIN MILEAGE STATISTICS OF CALI

	Sacramento Valley and Eastern Railway	San Diego and Southeastern Railway Company
<i>Revenue Service—Freight Car Miles.</i>		
Loaded .....	2,030	344,970
Empty .....	1,249	206,117
Caboose .....		16,000
Totals .....	3,279	557,087
Average number of freight cars per train mile.....	.30	6.89
Average number of loaded cars per train mile.....	.19	4.14
Average number of empty cars per train mile.....	.11	2.55
Average number of tons of freight per loaded car mile .....	29.67	18.23
<i>Revenue Service—Passenger Car Miles.</i>		
Passenger .....	10,950	630,553
Sleeping, parlor and observation .....		
Other passenger train cars.....		
Totals .....	10,950	630,553
Average number of passengers per car mile.....	4	15
Average number of passengers per train mile.....	4	25
<i>Revenue Service—Special Car Miles.</i>		
Freight—loaded .....		
Freight—empty .....		
Caboose .....		
Passenger .....		2,171
Sleeping, parlor and observation .....		
Other passenger train cars.....		
Totals .....		2,171
Non-revenue service—car miles.....		6,473

Entire line.



—Continued.

CALIFORNIA RAILROADS FOR THE FISCAL YEAR ENDING JUNE 30, 1913.

San Diego and Arizona Railway Company	San Joaquin and Eastern Railroad Company	San Pedro, Los Angeles and Salt Lake Railroad Company	Sierra Railway Company of California	Southern Pacific Company	Stone Canyon Railroad
9,781	165,845	9,965,198	434,044	150,665,504	7,601
16,590	151,567	4,536,102	110,878	61,931,904	9,869
8,229	-----	507,676	28,450	6,277,161	-----
34,600	317,412	15,008,976	573,372	218,874,569	17,470
4.21	4.46	127.10	11.08	33.04	2.10
1.19	2.33	18.66	8.39	22.74	.91
2.02	2.13	17.48	2.14	9.35	1.19
8.75	20.70	119.40	15.96	17.80	18.43
-----	103,169	1,576,625	119,242	36,990,943	8,305
52	-----	2,768,643	-----	21,381,729	-----
26	-----	1,015,082	42,604	25,388,066	-----
78	103,169	5,360,350	161,846	83,760,738	8,305
900	16	14	15	17	1
1,800	77	167	28	63	1
-----	-----	221	-----	169,929	-----
-----	-----	-----	-----	3,020	-----
-----	-----	40	-----	17,994	-----
-----	-----	72	-----	48,020	-----
-----	-----	-----	-----	12	-----
-----	-----	28,396	-----	112	-----
-----	-----	28,729	-----	239,087	-----
13	-----	146,638	26,166	7,747,346	-----

TABLE No. 15

STATEMENT OF CAR AND TRAIN MILEAGE STATISTICS OF CALI

	Sugar Pine Railway Company	Sunset Railway Company
<i>Revenue Service—Freight Car Miles.</i>		
Loaded -----	64,525	1,883,800
Empty -----	59,194	1,553,826
Caboose -----		103,812
Totals -----	123,719	3,541,438
Average number of freight cars per train mile-----	5.30	37.96
Average number of loaded cars per train mile-----	2.76	20.19
Average number of empty cars per train mile-----	2.53	16.66
Average number of tons of freight per loaded car mile -----	14.25	27.04
<i>Revenue Service—Passenger Car Miles.</i>		
Passenger -----		287,244
Sleeping, parlor and observation-----		1,039
Other passenger train cars-----		146,147
Totals -----		434,430
Average number of passengers per car mile-----		14
Average number of passengers per train mile-----		42
<i>Revenue Service—Special Car Miles.</i>		
Freight—loaded -----		
Freight—empty -----		
Caboose -----		
Passenger -----		
Sleeping, parlor and observation-----		
Other passenger train cars-----		
Totals -----		
Non-revenue service—car miles-----	4,756	7,997

NOTE.—No statistics reported for Amador Central Railroad Company, Arcata and Mad River Railroad Company, California Western Railroad and Navigation Company, Colusa and Lake Railroad Company, Bay Point and Clayton Railroad Company, Holton Interurban Railway Company, Iron Mountain Railway Company, Lake Tahoe Railway and Transportation Company, Mill Valley and Mt. Tamalpais Scenic Railway, Modesto and Empire Traction Company, Quincy Western Railway Company, South San Francisco Belt Railway Company, Stockton Terminal and Eastern Railroad Company and Yreka Railroad Company.

-- Concluded.

FORNIA RAILROADS FOR THE FISCAL YEAR ENDING JUNE 30, 1913.

Tonopah and Tidewater Railroad Company	Ventura County Railway Company	Western Pacific Railway Company	Yosemite Valley Railroad Company	Total
368,983	23,040	14,754,436	412,848	252,169,200
148,800	22,838	5,715,705	360,331	102,689,731
		745,657	52,366	11,363,223
517,783	45,878	21,215,798	825,545	366,222,154
5.89	5.68	28.78	15.75	-----
4.20	2.85	20.02	7.88	-----
1.69	2.83	7.75	6.88	-----
21.08	33.14	16.14	17.51	-----
87,993	24,820	841,324	141,911	55,951,943
85,892	-----	2,035,732	67,203	35,520,748
14,730	-----	1,112,810	162	35,743,907
188,615	24,820	3,989,866	209,276	127,216,598
4	8	12	8	-----
8	9	56	22	-----
-----		6,702	-----	219,620
-----		-----	-----	7,094
-----		3,047	-----	27,649
-----		276	-----	71,299
-----		14,375	-----	33,965
-----		4,500	-----	51,350
-----		28,900	-----	410,977
12,232	-----	1,011,869	136	16,694,220

TABLE

STATEMENT OF TRAIN MILEAGE STATISTICS OF CALIFORNIA

	Atchison, Topeka and Santa Fe Rail- way Company	Boca and Loyalton Railroad Company
<i>Train Mileage—Revenue Service.</i>		
Freight train—miles.....	2,965,352	2,289
Passenger train—miles.....	4,314,195	471
Mixed train—miles.....	161,557	23,766
Special service train—miles.....	13,274	52
Total revenue train mileage.....	7,454,378	26,578
Average number of passengers per train mile.....	57	5
Average number of tons of freight per train mile.....	326.90	81.06

From December 26, 1912, to June 30, 1913.

TABLE No. 16

STATEMENT OF TRAIN MILEAGE STATISTICS OF CALIFORNIA

	Los Angeles and San Diego Beach Rail- way Company	McCloud River Railroad Company
<i>Train Mileage—Revenue Service.</i>		
Freight train—miles.....	55,003	70,080
Passenger train—miles.....	45,125	25,871
Mixed train—miles.....	8,164	17,011
Special service train—miles.....	-----	165
Total revenue train mileage.....	108,292	113,127
Average number of passengers per train mile.....	39	13
Average number of tons of freight per train mile.....	11.89	109.12



## No. 16.

RAILROADS FOR FISCAL YEAR ENDING JUNE 30, 1913.

Bucksport and Elk River Railroad Company	Butte County Railroad Company	Camino, Placerville and Lake Tahoe Railroad Company	Cement, Tolamas and Tidewater Railroad Company	Crescent City Railway <sup>1</sup>	Diamond and Caldor Railroad Company
7,382			4,240	3,359	9,900
			3,954		10,626
	26,796	2,866			
7,382	26,796	2,866	8,194	3,359	20,526
	15	2	4.17		3
50.92	133.13	33.15	241.96	189.83	45.24

—Continued.

RAILROADS FOR FISCAL YEAR ENDING JUNE 30, 1913.

Nevada-California-Oregon Railway Company	Nevada County Narrow Gauge Railroad Company	Northwestern Pacific Railroad Company	Ocean Shore Railroad Company	Pacific Coast Railway Company	Pajaro Valley Consolidated Railroad Company
85,599	17,272	318,134	54,288	9,274	13,447
122,568	14,249	1,285,653	75,563	57,498	22,950
	37,187	23,594	38,524	94,450	17,187
59	2,251	883	28	68	31
208,226	70,959	1,628,264	168,403	161,290	53,615
16	20	95	35	13	13
52.17	9.38	116.08	61.24	30.58	35.13

TABLE No. 16

STATEMENT OF TRAIN MILEAGE STATISTICS OF CALIFORNIA

	Sacramento Valley and Eastern Railway	San Diego and Southeastern Railway Company
<i>Train Mileage—Revenue Service.</i>		
Freight train—miles.....		64,710
Passenger train—miles.....		373,342
Mixed train—miles.....	10,950	16,175
Special service train—miles.....		933
Total revenue train mileage.....	10,950	455,160
Average number of passengers per train mile.....	4	25
Average number of tons of freight per train mile....	5.50	75.51
Entire line.		

TABLE No. 16

STATEMENT OF TRAIN MILEAGE STATISTICS OF CALIFORNIA

	Sugar Pine Railway Company	Sunset Railway Company
<i>Train Mileage—Revenue Service.</i>		
Freight train—miles.....	23,363	93,294
Passenger train—miles.....		96,983
Mixed train—miles.....		
Special service train—miles.....		
Total revenue train mileage.....	23,363	190,277
Average number of passengers per train mile.....		42
Average number of tons of freight per train mile....	39.36	545.90

NOTE.—No statistics reported for Amador Central Railroad Company, Arcata and Mad River Railroad Company, California Western Railroad and Navigation Company, Colusa and Lake Railroad Company, Holton Interurban Railway Company, Bay Point and Clayton Railroad Company, Iron Mountain Railway Company, Lake Tahoe Railway and Transportation Company, Mill Valley and Mt. Tamalpais Scenic Railway, Modesto and Empire Traction Company, Quincy Western Railway Company, South San Francisco Belt Railway Company, Stockton Terminal and Eastern Railroad Company, Yreka Railroad Company.

Continued.

## RAILROADS FOR FISCAL YEAR ENDING JUNE 30, 1913.

San Diego and Arizona Railway Company	San Joaquin and Eastern Railroad Company	San Pedro, Los Angeles and Salt Lake Railroad Company	Sierra Railway Company of California	Southern Pacific Company	Stone Canyon Railroad
8,190	14,187	500,757	28,781	6,035,452	-----
-----	-----	784,897	42,862	15,313,776	-----
26	78,696	23,341	22,911	589,214	8,305
-----	-----	24,994	-----	16,839	-----
8,216	92,883	1,333,989	94,554	21,955,281	8,305
1,800	77	167	28	63	1
10.41	48.27	1361.94	134.07	404.77	16.86

—Concluded.

## RAILROADS FOR FISCAL YEAR ENDING JUNE 30, 1913.

Tonopah and Tidewater Railroad Company	Ventura County Railway Company	Western Pacific Railway Company	Yosemite Valley Railroad Company	Total	
55	8,075	737,137	52,412	11,182,032	
-----	24,488	602,328	82,296	23,289,069	
87,886	-----	3,358	-----	1,299,232	
-----	-----	-----	-----	62,935	
87,941	32,563	1,342,823	134,708	35,833,268	
8	9	56	22	-----	
88.44	94.56	323.11	137.97	-----	

TABLE

STATEMENT OF PASSENGER TRAFFIC OF CALIFORNIA

	Amador Central Railroad Company	Atchison, Topeka and Santa Fe Rail- way Company
<i>Number of Passengers Carried Earning Revenue.</i>		
Entire line -----	15,196	11,608,596
State -----	15,196	3,198,355
<i>Number of Passengers Carried One Mile.</i>		
Entire line -----	182,005	1,159,806,097
State -----	182,005	257,152,208
<i>Number of Passengers Carried One Mile Per Mile of Road.</i>		
Entire line -----	15,167	141,125
State -----	15,167	183,308
<i>Average Distance Carried.</i>		
Entire line -----	11.97	99.91
State -----	11.97	80.40
<i>Total Passenger Revenue.</i>		
Entire line -----	\$14,984 07	\$25,491,140 25
State -----	14,984 07	5,925,377 98
<i>Average Amount Received From Each Passenger.</i>		
Entire line -----	\$.89605	\$2.19588
State -----	.89605	1.85263
<i>Average Receipts Per Passenger Per Mile.</i>		
Entire line -----	.08233	.02198
State -----	.08233	.02304
<i>Total Passenger Service Train Revenue.</i>		
Entire line -----	18,234 26	31,615,266 08
State -----	18,234 26	6,711,023 88
<i>Passenger Service Train Revenue Per Mile of Road.</i>		
Entire line -----	1,519 52	3,846 95
State -----	1,519 52	4,783 88
<i>Passenger Service Train Revenue Per Train Mile.</i>		
Entire line -----	1	1.55943
State -----	1	1.49942

'No statistics reported.



## No. 17.

RAILROADS DURING THE FISCAL YEAR ENDING JUNE 30, 1913.

Boea and Loyalton Railroad Company	Butte County Railroad Company	Camino, Placer- ville and Lake Tahoe Rail- road Company	Cement, Tolenas and Tidewater Rail- road Company	Diamond and Caldor Railroad Company	Holton Interurban Railway Company
6,663	17,650	846	8,238	1,232	1
6,663	17,650	846	8,238	1,232	1
133,838	407,788	6,764	16,476	34,427	1
133,838	407,788	6,764	16,476	34,427	1
2,967	12,946	6,764	4,119	1,043	1
2,967	12,946	6,764	4,119	1,043	1
20.09	23.10	7.99	2.	27.94	1
20.09	23.10	7.99	2.	27.94	1
\$8,392 63	\$20,245 32	\$631 15	\$871 04	\$1,966 45	\$29,765 45
8,392 63	20,245 32	631 15	871 04	1,966 45	29,765 45
1.25958	1.14704	.74604	.10573	1.59615	1
1.25958	1.14704	.74604	.10573	1.59615	1
.06270	.04965	.09331	.05286	.05712	1
.06270	.04965	.09331	.05286	.05712	1
12,084 72	23,292 41	631 15	1,455 44	1,966 45	34,136 51
12,084 72	23,292 41	631 15	1,455 44	1,966 45	34,136 51
267 95	739 44	78 40	727 72	59.58939	1,168 66
267 95	739 44	78 40	727 72	59.58939	1,168 66
.49860	.86925	.22021	.36809	.18506	1
.49860	.86925	.22021	.36809	.18506	1

TABLE No. 17

STATEMENT OF PASSENGER TRAFFIC OF CALIFORNIA

	Los Angeles and San Diego Beach Railway Company	McCloud River Railroad Company	Mill Valley and Mt. Tamalpais Scenic Railway
<i>Number of Passengers Carried Earning Revenue.</i>			
Entire line -----	426,406	28,311	43,389
State -----	426,406	28,311	43,389
<i>Number of Passengers Carried One Mile.</i>			
Entire line -----	4,609,935	555,979	733,275
State -----	4,609,935	555,979	733,275
<i>Number of Passengers Carried One Mile Per Mile of Road.</i>			
Entire line -----	261,868	7,681	1
State -----	261,868	7,681	1
<i>Average Distance Carried.</i>			
Entire line -----	10.81	19.64	16.90
State -----	10.81	19.64	16.90
<i>Total Passenger Revenue.</i>			
Entire line -----	\$73,183 45	\$22,092 35	\$73,018 53
State -----	73,183 45	22,092 35	73,018 53
<i>Average Amount Received From Each Passenger.</i>			
Entire line -----	.17162	.78034	1.68288
State -----	.17162	.78034	1.68288
<i>Average Receipts Per Passenger Per Mile.</i>			
Entire line -----	.01587	.03974	.09957
State -----	.01587	.03974	.09957
<i>Total Passenger Service Train Revenue.</i>			
Entire line -----	76,292 42	25,461 80	73,018 53
State -----	76,292 42	25,461 80	73,018 53
<i>Passenger Service Train Revenue Per Mile of Road.</i>			
Entire line -----	4,331 58	351 78	6,875 57
State -----	4,331 58	351 78	6,875 57
<i>Passenger Service Train Revenue Per Train Mile.</i>			
Entire line -----	.61594	.59376	.11777
State -----	.61594	.59376	.11777

<sup>1</sup>No statistics reported.

—Continued.

RAILROADS DURING THE FISCAL YEAR ENDING JUNE 30, 1913.

Modesto and Empire Traction Company	Nevada-California-Oregon Railway Company	Nevada County Narrow Gauge Railroad Company	Northwestern Pacific Railroad Company	Ocean Shore Railroad Company	Pacific Coast Railway Company
47,023	29,373	93,824	7,236,183	180,118	101,576
47,023	29,039	93,824	7,236,183	180,118	101,576
1	2,471,407	1,025,405	124,939,587	3,988,967	2,037,136
1	2,016,688	1,025,405	124,939,587	3,988,967	2,037,136
1	10,316	50,020	311,679	74,560	19,768
1	10,241	50,020	311,679	74,560	19,768
1	84.14	10.93	17.27	22.14	20.06
1	69.45	10.93	17.27	22.14	20.06
\$5,091 93	\$143,586 35	\$56,850 03	\$2,016,551 67	\$82,996 66	\$57,253 28
5,091 93	117,169 16	56,850 03	2,016,551 67	82,996 66	57,253 28
.10828	4.88838	.60592	.27868	.46078	.56365
.10828	4.03489	.60592	.29868	.46078	.56365
1	.05810	.05544	.01614	.02080	.02810
1	.05810	.05544	.01614	.02080	.02810
5,272 01	175,185 51	64,400 65	2,225,631 98	90,870 44	67,386 10
5,272 01	143,502 60	64,400 65	2,225,631 98	90,870 44	67,386 10
1,054 40	734 28	3,141 50	5,552 14	1,698 51	653 92
1,054 40	728 73	3,141 50	5,552 14	1,698 51	653 92
.13256	1.17565	1.25206	1.69993	.79650	.44350
.13256	1.17080	1.25206	1.69993	.79650	.44350

TABLE No. 17

STATEMENT OF PASSENGER TRAFFIC OF CALIFORNIA

	Pajaro Valley Consolidated Railroad Company	Sacramento Valley and Eastern Railway	San Diego and Southeastern Railway Company
<i>Number of Passengers Carried Earning Revenue.</i>			
Entire line -----	102,448	5,462	1,318,663
State -----	102,448	5,462	1,318,663
<i>Number of Passengers Carried One Mile.</i>			
Entire line -----	520,863	40,533	9,606,109
State -----	520,863	40,533	9,606,109
<i>Number of Passengers Carried One Mile Per Mile of Road.</i>			
Entire line -----	12,719	2,702	127,928
State -----	12,719	2,702	127,928
<i>Average Distance Carried.</i>			
Entire line -----	5.17	7.51	7.28
State -----	5.17	7.51	7.28
<i>Total Passsenger Revenue.</i>			
Entire line -----	\$10,929 25	\$3,327 45	\$171,733 64
State -----	10,929 25	3,327 45	171,733 64
<i>Average Amount Received From Each Passenger.</i>			
Entire line -----	.10668	.72594	.13023
State -----	.10668	.72594	.13023
<i>Average Receipts Per Passenger Per Mile.</i>			
Entire line -----	.02063	.08209	.01788
State -----	.02063	.08209	.01788
<i>Total Passenger Service Train Revenue.</i>			
Entire line -----	11,416 23	4,336 36	189,330 01
State -----	11,416 23	4,336 36	189,330 01
<i>Passenger Service Train Revenue Per Mile of Road.</i>			
Entire line -----	275 35	289 09	2,521 37
State -----	275 35	289 09	2,521 37
<i>Passenger Service Train Revenue Per Train Mile.</i>			
Entire line -----	.28443	.39601	.48606
State -----	.28443	.39601	.48606

<sup>1</sup>Not segregated to California.

<sup>2</sup>No records kept.



—Continued.

RAILROADS DURING THE FISCAL YEAR ENDING JUNE 30, 1913.

San Diego and Arizona Railway Company	San Joaquin and Eastern Railroad Company	San Pedro, Los Angeles and Salt Lake Railroad Company	Sierra Railway Company of California	Southern Pacific Company	Stockton Terminal and Eastern Rail- road Company
3,621	32,885	1,541,250	58,490	35,983,456	18,958
3,621	32,885	<sup>1</sup>	58,490	33,216,932	18,958
46,810	1,675,464	134,103,010	1,860,434	1,433,822,748	218,646
46,810	1,675,464	<sup>1</sup>	1,860,434	1,057,213,169	218,646
3,283	29,961	118,217	24,482	217,373	12,215
3,283	29,961	<sup>1</sup>	24,482	256,180	12,215
12 93	50 94	87 01	31 80	39 85	11 50
12 93	50 94	<sup>1</sup>	31 80	31 83	11 50
\$1,309 55	\$135,084 65	\$3,137,233 99	\$103,518 18	\$32,028,817 60	\$6,061 95
1,309 55	135,084 65	1,217,702 44	103,518 18	22,546,296 18	6,061 95
.36165	4.10779	2.03551	1.76984	.89010	.31975
.36165	4.10779	<sup>1</sup>	1.76984	.67876	.31975
.02797	.08062	.02339	.05564	.02234	.02772
.02797	.08062	<sup>1</sup>	.05564	.02133	.02772
1,309 55	135,208 12	3,686,266 64	121,398 05	37,111,571 71	6,283 24
1,309 55	135,208 12	1,389,163 63	121,398 05	25,398,807 04	6,283 24
91 83	2,417 88	3,249 59	1,598 35	5,762 28	338 66
91 83	2,417 88	<sup>1</sup>	1,598 35	6,346 60	338 66
50.36731	1.71810	1.84699	1.84577	1.66409	<sup>2</sup>
50.36731	1.71810	<sup>1</sup>	1.84577	1.55297	<sup>2</sup>

TABLE No. 17

STATEMENT OF PASSENGER TRAFFIC OF CALIFORNIA

	Stone Canyon Railroad	Sugar Pine Railway Company <sup>1</sup>	Sunset Railway Company
<i>Number of Passengers Carried Earning Revenue.</i>			
Entire line -----	384	-----	131,774
State -----	384	-----	131,774
<i>Number of Passengers Carried One Mile.</i>			
Entire line -----	7,967	-----	4,093,739
State -----	7,967	-----	4,093,739
<i>Number of Passengers Carried One Mile Per Mile of Road.</i>			
Entire line -----	378	-----	67,188
State -----	378	-----	67,188
<i>Average Distance Carried.</i>			
Entire line -----	20.75	-----	31.07
State -----	20.75	-----	31.07
<i>Total Passsenger Revenue.</i>			
Entire line -----	\$380 75	-----	\$156,326 87
State -----	380 75	-----	156,326 87
<i>Average Amount Received From Each Passenger.</i>			
Entire line -----	.99154	-----	1.18632
State -----	.99154	-----	1.18632
<i>Average Receipts Per Passenger Per Mile.</i>			
Entire line -----	.04779	-----	.038187
State -----	.04779	-----	.038187
<i>Total Passenger Service Train Revenue.</i>			
Entire line -----	380 75	-----	178,285 41
State -----	380 75	-----	178,285 41
<i>Passenger Service Train Revenue Per Mile of Road.</i>			
Entire line -----	18 13	-----	2,926 06
State -----	18 13	-----	2,926 06
<i>Passenger Service Train Revenue Per Train Mile.</i>			
Entire line -----	.04584	-----	1.83832
State -----	.04584	-----	1.83832

<sup>1</sup>No passengers carried.

NOTE.—No statistics reported for Arcata and Mad River Railroad Company, California Western Railroad and Navigation Company, Colusa and Lake Railroad Company, Bay Point and Clayton Railroad Company, Crescent City Railway, Iron Mountain Railway Company, Lake Tahoe Railway and Transportation Company, Quincy Western Railway Company, South San Francisco Belt Railway Company.

—Concluded.

## RAILROADS DURING THE FISCAL YEAR ENDING JUNE 30, 1913.

Tonopah and Tidewater Railroad Company	Ventura County Railway Company	Western Pacific Railway Company	Yosemite Valley Railroad Company	Yreka Railroad Company	Total
7,338	42,119	279,854	28,037	25,791	59,425,154
6,509	42,119	244,014	28,037	25,791	46,670,136
834,045	208,190	66,100,079	1,786,856	193,432	2,956,068,011
689,315	208,190	34,010,153	1,786,856	193,432	1,510,012,158
4,612	9,679	70,547	22,569	25,791	1,669,667
4,767	9,679	86,399	22,569	25,791	1,648,372
113 66	4 94	236 19	63 73	7 50	-----
105 90	4 94	139 37	63 73	7 50	-----
\$43,186 11	\$4,791 90	\$1,354,082 72	\$142,104 76	\$13,397 75	\$65,410,907 73
36,040 68	4,791 90	709,009 32	142,104 76	13,397 75	33,764,456 47
5.88527	.11377	4.83853	5.06847	.51904	-----
5.53706	.11377	2.90560	5.06847	.51904	-----
.05178	.02302	.02049	.07953	.06925	-----
.05229	.02302	.02085	.07953	.06925	-----
58,767 62	5,218 58	1,475,667 89	152,384 98	16,055 63	77,664,467 23
48,595 05	5,218 58	713,668 16	152,384 98	16,055 63	37,946,502 14
324 95	242 61	1,574 93	1,924 78	2,140 75	-----
336 07	242 61	1,812 99	1,924 78	2,140 75	-----
.51514	.21311	1.07777	1.85167	.90484	-----
.55293	.21311	1.18484	1.85167	.90484	-----

TABLE

STATEMENT OF FREIGHT TRAFFIC OF CALIFORNIA

	Amador Central Railroad Company	Atchison, Topeka and Santa Fe Rail- way Company
<i>Number of Tons Carried of Freight Earning Revenue.</i>		
Entire line -----	78,105	21,131,338
State -----	78,105	5,616,593
<i>Number of Tons Carried of Freight Earning Revenue One Mile.</i>		
Entire line -----	588,027	6,267,811,193
State -----	588,027	1,022,181,786
<i>Number of Tons Carried of Freight Earning Revenue One Mile Per Mile of Road.</i>		
Entire line -----	49,002	762,668
State -----	49,002	728,652
<i>Average Distance Haul of One Ton Freight Earning Revenue.</i>		
Entire line -----	7.53	296.61
State -----	7.53	181.99
<i>Average Amount Received for Each Ton of Freight.</i>		
Entire line -----	\$0.91243	\$3.05460
State -----	.91243	2.23433
<i>Average Receipts Per Ton Per Mile.</i>		
Entire line -----	.12119	.01030
State -----	.12119	.01228
<i>Total Revenue From Freight Operation.</i>		
Entire line -----	71,265 86	64,547,714 60
State -----	71,265 86	12,549,309 60
<i>Total Revenue From Operation Freight Per Mile of Road.</i>		
Entire line -----	5,938 82	7,854 17
State -----	5,938 82	8,945 65
<i>Total Revenue From Operation Freight Per Train Mile.</i>		
Entire line -----	1	3.60806
State -----	1	4.01333

<sup>1</sup>No statistics kept.

<sup>2</sup>From December 26, 1912, to June 30, 1913.



## No. 18.

## RAILROADS DURING THE FISCAL YEAR ENDING JUNE 30, 1913.

Boca and Loyalton Railroad Company	Bucksport and Elk River Railroad Company	Butte County Railroad Company	Camino, Placer- ville and Lake Tahoe Rail- road Company	Cement, Toleno and Tidewater Rail- road Company	Crescent City Railway?
108,154	48,188	119,975	11,877	512,960	231,966
108,154	48,188	119,975	11,877	512,960	231,966
2,111,935	375,868	3,567,276	95,016	1,025,920	637,641
2,111,935	375,868	3,567,276	95,016	1,025,920	637,641
46,827	44,776	113,247	95,016	256,480	76,182
46,827	44,776	113,247	95,016	256,480	76,182
19.52	7.80	29.73	8	2	2.75
19.52	7.80	29.73	8	2	2.75
\$0.72835	\$0.59550	\$0.91011	\$0.76016	\$0.15567	\$0.25719
.72835	.59550	.91011	.76016	.15567	.25719
.03729	.07635	.03061	.09502	.07783	.09356
.03729	.07635	.03061	.09502	.07783	.09356
78,769 37	28,696 02	109,190 85	9,028 47	79,856 83	59,661 50
78,769 37	28,696 02	109,190 85	9,028 47	79,856 83	59,661 50
1,746 55	3,587 00	3,466 38	1,128 55	39,928 41	7,128 01
1,746 55	3,587 00	3,466 38	1,128 55	39,928 41	7,128 01
3.62319	3.88729	4.07488	3.15010	18.83415	17.76168
3.02319	3.88729	4.07488	3.15010	18.83415	17.76168

TABLE No. 18

STATEMENT OF FREIGHT TRAFFIC OF CALIFORNIA

	Diamond and Caldor Railroad Company	Holton Interurban Railway Company
<i>Number of Tons Carried of Freight Earning Revenue.</i>		
Entire line -----	28,221	33,995
State -----	28,221	33,995
<i>Number of Tons Carried of Freight Earning Revenue One Mile.</i>		
Entire line -----	928,722	1
State -----	928,722	1
<i>Number of Tons Carried of Freight Earning Revenue One Mile Per Mile of Road.</i>		
Entire line -----	931,293	1
State -----	931,293	1
<i>Average Distance Haul of One Ton Freight Earning Revenue.</i>		
Entire line -----	32.91	1
State -----	32.91	1
<i>Average Amount Received for Each Ton of Freight.</i>		
Entire line -----	\$2.57423	\$1.31337
State -----	2.57423	1.31337
<i>Average Receipts Per Ton Per Mile.</i>		
Entire line -----	.07822	1
State -----	.07822	1
<i>Total Revenue From Freight Operation.</i>		
Entire line -----	72,647 50	44,648 08
State -----	72,647 50	44,648 08
<i>Total Revenue From Operation Freight Per Mile of Road.</i>		
Entire line -----	2,201 43	1,528 52
State -----	2,201 43	1,528 52
<i>Total Revenue From Operation Freight Per Train Mile.</i>		
Entire line -----	3.53929	1
State -----	3.53929	1

<sup>1</sup>No statistics reported.

—Continued.

RAILROADS DURING THE FISCAL YEAR ENDING JUNE 30, 1913.

Iron Mountain Railway Company	Los Angeles and San Diego Beach Railway Company	McCloud River Railroad Company	Modesto and Empire Traction Company	Nevada-California-Oregon Railway Company	Nevada County Narrow Gauge Railroad Company
151,700	8,969	426,014	12,164	47,054	31,157
151,700	8,969	426,014	12,164	46,354	31,157
1,668,700	106,029	9,503,514	60,820	5,316,027	511,272
1,668,700	106,029	9,503,514	60,820	4,466,017	511,272
151,700	6,007	131,300	12,164	22,282	24,940
151,700	6,007	131,300	12,164	22,679	24,940
11	11.82	22.31	1	112.98	16.41
11	11.82	22.31	1	96.35	16.41
\$0.24871	\$1.27423	\$0.83680	\$0.43743	\$4.79396	\$2.06201
.24871	1.27423	.83680	.43743	4.06620	2.06201
.02261	.10797	.03751	.08748	.04243	.12566
.02261	.10797	.03751	.08748	.04220	.12566
37,730 20	11,448 60	356,487 52	5,320 99	225,575 20	64,246 15
37,730 20	11,448 60	356,487 52	5,320 99	188,484 71	64,246 15
2,695 01	4,991 08	4,925 22	1,064 20	945 49	3,133 96
2,695 01	4,991 08	4,925 22	1,064 20	957 16	3,133 96
1	1.40232	4.09327	.62599	2.19003	1.17967
1	1.40232	4.09327	.62599	2.20195	1.17967

TABLE No. 18

STATEMENT OF FREIGHT TRAFFIC OF CALIFORNIA

	Northwestern Pacific Railroad Company	Ocean Shore Railroad Company
<i>Number of Tons Carried of Freight Earning Revenue.</i>		
Entire line -----	1,116,530	310,824
State -----	1,116,530	310,824
<i>Number of Tons Carried of Freight Earning Revenue One Mile.</i>		
Entire line -----	39,667,086	5,684,178
State -----	39,667,086	5,684,178
<i>Number of Tons Carried of Freight Earning Revenue One Mile Per Mile of Road.</i>		
Entire line -----	98,955	106,246
State -----	98,955	106,246
<i>Average Distance Haul of One Ton Freight Earning Revenue.</i>		
Entire line -----	35.53	18.30
State -----	35.53	18.30
<i>Average Amount Received for Each Ton of Freight.</i>		
Entire line -----	\$1.27159	\$0.58519
State -----	1.27159	.58519
<i>Average Receipts Per Ton Per Mile.</i>		
Entire line -----	.03579	.03177
State -----	.03579	.03177
<i>Total Revenue From Freight Operation.</i>		
Entire line -----	1,419,768 80	180,505 58
State -----	1,419,768 80	180,505 58
<i>Total Revenue From Operation Freight Per Mile of Road.</i>		
Entire line -----	3,541 81	3,373 93
State -----	3,541 81	3,373 93
<i>Total Revenue From Operation Freight Per Train Mile.</i>		
Entire line -----	4.15468	1.94485
State -----	4.15468	1.94485



—(Continued.)

RAILROADS DURING THE FISCAL YEAR ENDING JUNE 30, 1913.

Pacific Coast Railway Company	Pajaro Valley Consolidated Railroad Company	Sacramento Valley and Eastern Railway	San Diego and Southeastern Railway Company	San Diego and Arizona Railway Company	San Joaquin and Eastern Railroad Company
152,988	103,418	8,619	399,729	6,582	63,686
152,988	103,418	8,619	399,729	6,582	63,686
3,172,203	1,076,066	60,247	6,107,390	85,567	3,433,877
3,172,203	1,076,066	60,247	6,107,390	85,567	3,433,877
30,783	25,954	4,016	81,334	6,000	61,407
30,783	25,954	4,016	81,334	6,000	61,407
20.74	10.405	6.99	15.28	13	53.92
20.74	10.405	6.99	15.28	13	53.92
\$0.98309	\$0.46499	\$1.04906	\$0.57880	\$0.66107	\$8.75178
.98309	.46499	1.04906	.57880	.66107	8.75178
.04740	.04469	.15652	.03788	.05085	.16231
.04740	.04469	.15652	.03788	.05085	.16231
150,351 57	48,088 01	9,429 73	231,363 00	4,351 15	557,366 06
150,351 57	48,088 01	9,429 73	231,363 00	4,351 15	557,366 06
1,459 02	1,159 86	628 65	3,081 14	305 13	9,967 20
1,459 02	1,159 86	628 65	3,081 14	305 13	9,967 20
1.44954	1.56975	.86116	2.86039	.52959	6.00073
1.44954	1.56975	.86116	2.86039	.52959	6.00073

TABLE NO. 18

STATEMENT OF FREIGHT TRAFFIC OF CALIFORNIA

	San Pedro, Los Angeles and Salt Lake Railroad Company	Sierra Railway Company of California
<i>Number of Tons Carried of Freight Earning Revenue.</i>		
Entire line -----	3,322,382	138,085
State -----	<sup>1</sup>	138,085
<i>Number of Tons Carried of Freight Earning Revenue One Mile.</i>		
Entire line -----	545,024,618	6,930,679
State -----	<sup>1</sup>	6,930,679
<i>Number of Tons Carried of Freight Earning Revenue One Mile Per Mile of Road.</i>		
Entire line -----	480,460	91,253
State -----	<sup>1</sup>	91,253
<i>Average Distance Haul of One Ton Freight Earning Revenue.</i>		
Entire line -----	164.05	50.11
State -----	<sup>1</sup>	50.11
<i>Average Amount Received for Each Ton of Freight.</i>		
Entire line -----	\$1.90872	\$2.17890
State -----	<sup>1</sup>	2.17890
<i>Average Receipts Per Ton Per Mile.</i>		
Entire line -----	.01164	.04341
State -----	<sup>1</sup>	.04341
<i>Total Revenue From Freight Operation.</i>		
Entire line -----	6,341,500 50	300,863 64
State -----	2,330,913 04	300,863 64
<i>Total Revenue From Operation Freight Per Mile of Road.</i>		
Entire line -----	5,590 28	3,961 20
State -----	<sup>1</sup>	3,961 20
<i>Total Revenue From Operation Freight Per Train Mile.</i>		
Entire line -----	4.21126	5.82031
State -----	<sup>1</sup>	5.82031

<sup>1</sup>Not segregated to state.<sup>2</sup>No records kept.

Continued.

RAILROADS DURING THE FISCAL YEAR ENDING JUNE 30, 1913.

Southern Pacific Company	Stockton Terminal and Eastern Rail- road Company	Stone Canyon Railroad	Sugar Pine Railway Company	Sunset Railway Company	Tonopah and Tidewater Railroad Company
20,515,403	11,657	6,670	53,376	1,137,430	68,687
17,584,213	11,657	6,670	53,376	1,137,430	68,404
4,759,687,174	145,228	140,070	919,666	50,929,121	8,502,209
2,686,358,855	145,228	140,070	919,666	50,929,121	7,777,227
752,508	8,113	6,670	38,952	835,862	47,012
689,086	8,113	6,670	38,952	835,862	53,784
232.01	12.46	21	17.23	44.77	123.78
152.77	12.46	21	17.23	44.77	113.70
\$2.74915	\$0.94070	\$0.92923	\$1.43948	\$0.48128	\$3.87661
1.97206	.94070	.92923	1.43948	.48128	3.60488
.01185	.07551	.04425	.08354	.01075	.03132
.01291	.07551	.04425	.08354	.01075	.03171
56,399,970 16	10,965 79	6,197 94	76,833 56	547,422 25	266,272 95
34,677,039 98	10,965 79	6,197 94	76,833 56	547,422 25	246,588 38
8,800 67	612 61	295 14	3,254 28	8,984 45	1,472 34
8,707 79	612 61	295 14	3,254 28	8,984 45	1,705 31
5.04203	2	.74629	3.28869	5.86771	2.33268
5.11498	2	.74629	3.28869	5.86771	2.80402

TABLE No. 18

STATEMENT OF FREIGHT TRAFFIC OF CALIFORNIA

	Ventura County Railway Company	Western Pacific Railway Company
<i>Number of Tons Carried of Freight Earning Revenue.</i>		
Entire line -----	189,152	1,215,275
State -----	189,152	1,097,652
<i>Number of Tons Carried of Freight Earning Revenue One Mile.</i>		
Entire line -----	763,563	601,416,972
State -----	763,563	238,175,130
<i>Number of Tons Carried of Freight Earning Revenue One Mile Per Mile of Road.</i>		
Entire line -----	35,498	641,874
State -----	35,498	605,006
<i>Average Distance Haul of One Ton Freight Earning Revenue.</i>		
Entire line -----	4.04	494.88
State -----	4.04	216.97
<i>Average Amount Received for Each Ton of Freight.</i>		
Entire line -----	\$0.15919	\$3.81447
State -----	.15919	1.88442
<i>Average Receipts Per Ton Per Mile.</i>		
Entire line -----	.03944	.00771
State -----	.03944	.00868
<i>Total Revenue From Freight Operation.</i>		
Entire line -----	30,111 94	4,635,630 55
State -----	30,111 94	2,068,439 55
<i>Total Revenue From Operation Freight Per Mile of Road.</i>		
Entire line -----	1,399 90	4,947 58
State -----	1,399 90	5,254 64
<i>Total Revenue From Operation Freight Per Train Mile.</i>		
Entire line -----	3.72903	2.85116
State -----	3.72903	2.80605

NOTE.—No statistics reported for Arcata and Mad River Railroad Company, California Western Railroad and Navigation Company, Colusa and Lake Railroad Company, Bay Point and Clayton Railroad Company, Lake Tahoe Railway and Transportation Company, Mill Valley and Mt. Tamalpais Scenic Railway, Quincy Western Railway Company and South San Francisco Belt Railway Company.



Concluded.

RAILROADS DURING THE FISCAL YEAR ENDING JUNE 30, 1913.

Yosemite Valley Railroad Company	Yreka Railroad Company	Total
183,014	5,866	51,991,160
183,014	5,866	30,104,237
7,231,210	43,995	12,335,329,079
7,231,210	43,995	4,106,529,901
91,338	5,866	6,173,985
91,338	5,866	5,566,388
39.51	7 50	-----
39.51	7 50	-----
\$67899	\$1.69633	-----
67899	1.69633	-----
.01719	.22618	-----
.01719	.22618	-----
124,264 61	9,950 76	\$137,153,496 29
124,264 61	9,950 76	56,797,607 59
1,569 59	1,326 77	-----
1,569 59	1,326 77	-----
2.37092	.56079	-----
2.37092	.56079	-----



# ELECTRIC RAILROADS.

TABLES NOS. 1 TO 7, INCLUSIVE.

TABLE

STATEMENT OF BALANCE SHEETS OF ELECTRIC RAILWAY COMPAN

	Bakersfield and Kern Electric Rail- way Company	California Street Cable Railroad Company
<i>Assets.</i>		
Road and equipment.....	\$675,795 59	\$1,491,784 31
Securities .....		
Other investments .....		366,868 80
Working assets .....	22,877 42	42,979 71
Accrued income not due.....		
Deferred debit items.....	188,389 48	941,745 97
Deficit .....		
Totals .....	\$887,062 49	\$2,843,378 79
<i>Liabilities.</i>		
Capital stock .....	\$250,000 00	\$1,000,000 00
Mortgages, bonded and secured debt.....	104,000 00	1,000,000 00
Working liabilities .....	352,971 97	13,090 62
Accrued liabilities not due.....	137 62	22,500 00
Deferred credit items.....	45,876 52	506,413 80
Appropriated surplus .....		
Surplus .....	134,076 38	301,374 37
Totals .....	\$887,062 49	\$2,843,378 79

<sup>1</sup>Includes franchise \$165,000.00.

<sup>2</sup>Includes bonds alive in sinking fund \$21,000.00.

<sup>3</sup>Includes assessment of \$50,000.00.

TABLE No. 1

STATEMENT OF BALANCE SHEETS OF ELECTRIC RAILWAY COMPAN

	Nevada County Traction Company	Northern Electric Railway Company
<i>Assets.</i>		
Road and equipment.....	\$219,004 76	\$8,605,830 78
Securities .....		11,423,900 00
Other investments .....		212,711 00
Working assets .....	12,179 05	1,223,017 37
Accrued income not due.....		
Deferred debit items.....		18,971,359 55
Deficit .....		
Totals .....	\$231,183 81	\$40,436,818 70
<i>Liabilities.</i>		
Capital stock .....	\$100,000 00	\$25,000,000 00
Mortgages, bonded and secured debt.....	88,000 00	10,281,000 00
Working liabilities .....	2,368 60	5,151,436 16
Accrued liabilities not due.....	195 46	
Deferred credit items.....		4,248 71
Appropriated surplus .....		
Surplus .....	40,619 75	133 83
Totals .....	\$231,183 81	\$40,436,818 70

<sup>1</sup>Stock issued for rights of way, property and franchises.

<sup>2</sup>Bond discount.

<sup>3</sup>Includes stocks owned in other roads \$7,242,600.00 and stock issued for property, surveys, etc., of \$3,000,000.00.



No. 1.

## IES OF CALIFORNIA FOR THE FISCAL YEAR ENDING JUNE 30, 1913

Central California Traction Company	Fresno City Railway Company <sup>4</sup>	Fresno Traction Company	Humboldt Transit Company	Los Angeles Railway Corporation	Monterey and Pacific Grove Railway Company
\$3,880,320 10	\$699,576 11	\$5,820,442 77	\$390,245 96	\$41,963,198 41	\$611,479 03
1,100 00	20,147 00	1,511 25	50,763 31	489,000 00	2,960 69
282,329 26	33,343 26	42,022 33			
1,628,776 16	6,327 20	125,671 88	503,256 86	423,975 00	8,908 72
	19,524 53	103,441 73		10,747 68	5,073 75
\$5,802,525 52	\$778,918 10	\$6,093,089 96	\$1,244,266 13	\$43,432,434 61	\$628,422 19
\$1,000,000 00	\$500,000 00	\$5,000,000 00	\$1,000,000 00	\$20,000,000 00	\$300,000 00
1,500,000 00	128,000 00	750,000 00	198,000 00	20,000,000 00	279,000 00
260,472 06	36,603 98	285,025 83	35,749 52	1,639,082 72	48,256 90
18,750 00		18,760 61	6,080 19	309,937 52	1,165 29
	<sup>a</sup> 114,314 12	39,303 52	2,970 00	507,810 08	
				975,604 29	
23,303 46			1,466 42		
\$5,802,525 52	\$778,918 10	\$6,093,089 96	\$1,244,266 13	\$43,432,434 61	\$628,422 19

<sup>4</sup>Leased to Fresno Traction Company.<sup>a</sup>Franchise rights.<sup>a</sup>Includes expenditures for road and equipment leased lines of \$32,426.75.

—Continued.

## IES OF CALIFORNIA FOR THE FISCAL YEAR ENDING JUNE 30, 1913.

Northern Electric Railway Company (Marysville and Colusa Branch) <sup>5</sup>	Oakland and Antioch Railway	Oakland, Antioch and Eastern Railway	Pacific Electric Railway Company	Peninsular Railway Company	Petaluma and Santa Rosa Railway Company
\$703,276 50	\$2,225,557 43	\$2,368,404 28	\$120,955,628 96	\$15,328,654 90	\$2,008,066 31
104,000 00				4 00	81,721 00
241,376 24	<sup>a</sup> 3,500,000 00	<sup>a</sup> 10,242,600 00	26,666,739 37	333,587 38	81,416 47
41,991 22	47,940 04	499,897 55	7,448,388 01		
1,557,400 00	<sup>a</sup> 311,424 59	<sup>a</sup> 375,000 00	3,904,678 95	50 00	154 51
		6,368 70	2,252,432 47	434,305 05	
\$2,648,043 96	\$6,084,922 06	\$13,492,270 53	\$161,227,867 76	\$16,096,601 33	\$2,171,358 29
\$1,500,000 00	\$3,500,000 00	\$10,000,000 00	\$100,000,000 00	\$12,000,000 00	\$1,000,000 00
750,000 00	2,014,921 25	2,570,000 00	52,402,000 00	500,000 00	975,000 00
359,403 50	561,823 81	679,670 53	4,728,310 99	3,571,159 90	116,919 08
			983,355 15	2,708 34	18,469 46
36,923 08		<sup>a</sup> 242,600 00	3,114,201 62	22,733 09	
1,717 38	8,177 00				60,969 75
\$2,648,043 96	\$6,084,922 06	\$13,492,270 53	\$161,227,867 76	\$16,096,601 33	\$2,171,358 29

<sup>5</sup>Leasehold privilege.<sup>a</sup>Leased to and operated by Northern Electric Railway Company.

TABLE No. 1

STATEMENT OF BALANCE SHEETS OF ELECTRIC RAILWAY COMPAN

	Point Loma Railroad Company	Presidio and Ferries Railway Company
<i>Assets.</i>		
Road and equipment.....	\$191,628 41	\$452 795 73
Securities.....		
Other investments.....		37,882 77
Working assets.....	10,908 20	198,001 07
Accrued income not due.....		
Deferred debit items.....	28,136 59	2450,000 00
Deficit.....	49,479 81	
Totals.....	\$280,153 01	\$1,138,679 57
<i>Liabilities.</i>		
Capital stock.....	\$66,000 00	\$1,000,000 00
Mortgages, bonded and secured debt.....	130,000 00	
Working liabilities.....	43,554 89	10,843 21
Accrued liabilities not due.....	2,107 57	4,800 00
Deferred credit items.....	38,490 55	
Appropriated surplus.....		
Surplus.....		123,036 36
Totals.....	\$280,153 01	\$1,138,679 57

<sup>1</sup>Leased to and operated by Northern Electric Railway Company.

<sup>2</sup>Represents capital stock discount.

<sup>3</sup>Includes acquirement of constituent corporations, \$19,461,394.46; franchises, \$331,610.59; the Union Pacific Company of California agreement, \$3,585,500.00.

TABLE No. 1

STATEMENT OF BALANCE SHEETS OF ELECTRIC RAILWAY COMPAN

	San Jose Railroads	Santa Barbara Consolidated Railroad Company	South San Francisco Railroad and Power Company
<i>Assets.</i>			
Road and equipment.....	\$7,825,160 53	\$256,131 18	\$40,294 23
Securities.....			
Other investments.....	84,000 00		
Working assets.....	905,314 22	15,226 63	7,592 57
Accrued income not due.....			
Deferred debit items.....	32,707 08	2,084 38	12,250 00
Deficit.....	62,427 57		
Totals.....	\$8,909,609 40	\$273,442 19	\$60,136 80
<i>Liabilities.</i>			
Capital stock.....	\$5,000,000 00	\$1,000 00	\$13,500 00
Mortgages, bonded and secured debt.....	3,000,000 00	163,000 00	
Working liabilities.....	551,591 56	49,027 69	825 69
Accrued liabilities not due.....	56,879 16	828 75	326 32
Deferred credit items.....	301,138 68		
Appropriated surplus.....		32,263 03	
Surplus.....		27,322 72	45,484 79
Totals.....	\$8,909,609 40	\$273,442 19	\$60,136 80

NOTE.—No statistics reported for Glendale and Eagle Rock Railway Company, Monterey and Del Monte Heights Railway Company and Sacramento Gas and Electric Railway Company.

—Continued.

IES OF CALIFORNIA FOR THE FISCAL YEAR ENDING JUNE 30, 1913.

Sacramento Terminal Company¹	Sacramento Valley Electric Railroad Company	Sacramento and Woodland Railroad Company¹	San Diego Electric Railway Company	San Francisco, Napa and Calistoga Rail- way Company	San Francisco- Oakland Terminal Railways
\$104,552 51	\$103,740 71.	\$849,133 20	\$3,362,242 68	\$3,241,969 41	\$23,713,297 68
9,551 19	254,763 81	18,530 02	135,342 69	46,100 31	2,200,343 02
					2,120,802 98
					2,657,278 22
					2,968 55
		\$997,300 00	304,117 05	10,842 78	\$23,825,264 51
\$414,106 70	\$358,504 52	\$1,864,963 22	\$3,801,702 42	\$3,298,912 50	\$53,919,954 96
\$250,000 00	\$353,030 00	\$1,000,000 00	\$1,250,000 00	\$2,000,000 00	\$28,175,000 00
150,000 00		750,000 00	1,700,000 00	1,210,000 00	20,233,000 00
14,106 70	3,573 72	114,963 22	324,300 72	25,662 91	3,876,577 59
			10,644 69	5,541 66	407,744 20
	1,900 80		203,965 18		235,689 54
					322,899 86
			312,791 83	57,707 93	669,043 77
\$414,106 70	\$358,504 52	\$1,864,963 22	\$3,801,702 42	\$3,298,912 50	\$53,919,954 96

—Concluded.

IES OF CALIFORNIA FOR THE FISCAL YEAR ENDING JUNE 30, 1913.

Stockton Electric Railroad Company	Tidewater Southern Railway Company	Union Traction Company	United Railroads of San Francisco	Visalia Electric Railroad Company	Grand Total
\$789,061 23	\$1,145,480 15	\$1,396,171 77	\$82,969,484 98	\$954,091 38	\$335,592,501 98
			2,188,492 16		16,705,735 18
117,433 86	35,859 88				43,730,758 15
50,021 84	132,958 25	6,099 39	855,922 57	29,134 67	15,503,955 24
					2,968 55
338,750 00	41,200 00	15,000 00	2,253,136 60	998,100 00	58,256,007 86
				435,703 65	3,379,504 94
\$1,295,266 93	\$1,355,498 28	\$1,417,271 16	\$88,267,036 31	\$2,417,029 70	\$473,171,431 90
\$500,000 00	\$874,252 00	\$750,000 00	\$43,800,000 00	\$24,000 00	\$270,206,782 00
115,000 00	206,000 00	650,000 00	38,714,000 00		160,560,921 25
498,353 70	87,829 49		4,237,273 76	1,417,029 70	29,097,860 72
243 05	2,145 80	13,291 35	824,754 50		2,711,366 69
	184,844 60		228,868 81	976,000 00	6,808,292 70
					1,330,767 18
181,670 18	426 39	3,979 81	462,139 24		2,455,441 36
\$1,295,266 93	\$1,355,498 28	\$1,417,271 16	\$88,267,036 31	\$2,417,029 70	\$473,171,431 90

TABLE

STATEMENT OF MILEAGE, CAPITALIZATION, REVENUES AND EXPENSES  
JUNE 30.

	Bakersfield and Kern Electric Railway Company	California Street Cable Railroad Company
<i>Mileage.</i>		
Owned .....	10.44	11.00
Operated .....	10.44	11.00
<i>Capitalization.</i>		
Capital stock outstanding.....	\$250,000 00	\$1,000,000 00
Funded debt .....	104,000 00	1,000,000 00
Totals .....	\$354,000 00	\$2,000,000 00
Amount per mile.....	33,908 00	181,818 00
<i>Revenues.</i>		
Passenger .....	\$107,712 11	\$461,769 90
Freight .....		
Other than transportation.....		4,927 78
Miscellaneous income .....	271 57	5,858 61
Gross revenue .....	\$107,983 68	\$472,556 29
Less operating expense.....	67,175 26	237,921 66
Net revenue .....	\$40,808 42	\$234,634 63
Net loss .....		
Less taxes and interest.....	12,503 37	70,582 01
Net income .....	\$28,305 05	\$164,052 62
Net deficit .....		
Net operating revenue per mile of road.....	3,909 00	21,330 00
Net operating loss per mile of road.....		
Net income per mile of road operated.....	2,711 00	14,914 00
Net deficit per mile of road operated.....		
Total number of revenue passengers carried.....	2,160,262	9,220,866

<sup>1</sup>Leased to Fresno Traction Company.

<sup>2</sup>No statistics kept.



No. 2.  
OF ELECTRIC RAILWAYS OF CALIFORNIA FOR THE FISCAL YEAR ENDING  
1913.

Central California Traction Company	Fresno City Railway Company <sup>1</sup>	Fresno Traction Company	Humboldt Transit Company	Los Angeles Railway Corporation	Monterey and Del Monte Heights Rail- way Company
78.508	8.58	22.60	13.00	339.62	3.00
78.508	8.58	30.58	13.00	376.25	3.00
\$3,998,900 00	\$500,000 00	\$5,000,000 00	\$500,000 00	\$20,000,000 00	\$50,300 00
1,500,000 00	128,000 00	750,000 00	198,000 00	20,000,000 00	-----
\$5,498,900 00	\$628,000 00	\$5,750,000 00	\$698,000 00	\$40,000,000 00	\$50,300 00
86,509 00	73,198 00	261,364 00	61,934 00	123,525 00	16,767 00
\$269,384 43	-----	\$209,308 30	\$85,690 55	\$6,806,367 69	\$1,387 05
52,896 11	-----	945 00	-----	-----	-----
1,843 53	-----	1,500 31	-----	1,773 14	47 50
1,390 59	-----	2,466 95	23,688 94	77,671 12	-----
\$325,514 66	-----	\$214,220 56	\$109,379 49	\$6,885,811 95	\$1,434 55
229,483 13	-----	166,810 96	76,962 93	4,995,679 30	2,767 63
\$96,031 53	-----	\$47,409 60	\$32,416 56	\$1,890,132 65	-----
86,940 23	-----	57,038 07	18,562 44	1,353,460 09	\$1,333 08
\$9,091 30	-----	-----	\$13,854 12	\$536,672 56	-----
-----	-----	\$9,628 47	-----	-----	\$1,333 08
1,223 00	-----	1,550 00	2,494 00	5,023 00	-----
116 00	-----	-----	1,066 00	1,426 00	444 00
-----	-----	315 00	-----	-----	444 00
1,782,924	-----	4,187,629	1,732,448	135,784,507	2

TABLE No. 2

STATEMENT OF MILEAGE, CAPITALIZATION, REVENUES AND EXPENSES  
JUNE 30.

	Monterey and Pacific Grove Railway Company	Nevada County Traction Company
<i>Mileage.</i>		
Owned .....	5.50	5.7
Operated .....	5.50	5.7
<i>Capitalization.</i>		
Capital stock outstanding.....	\$300,000 00	\$100,000 00
Funded debt .....	279,000 00	88,000 00
Totals .....	\$579,000 00	\$188,000 00
Amount per mile.....	105,273 00	32,981 00
<i>Revenues.</i>		
Passenger .....	\$42,889 51	\$28,174 90
Freight .....		
Other than transportation.....	371 70	
Miscellaneous income .....	46 05	2 30
Gross revenue .....	\$43,307 26	\$28,177 20
Less operating expense.....	28,043 10	17,398 15
Net revenue .....	\$15,264 16	\$10,779 05
Net loss .....		
Less taxes and interest.....	19,355 65	5,890 99
Net income .....		\$4,888 06
Net deficit .....	\$4,071 49	
Net operating revenue per mile of road.....	2,775 00	1,891 00
Net operating loss per mile of road.....		
Net income per mile of road operated.....		857 00
Net deficit per mile of road operated.....	740 00	
Total number of revenue passengers carried.....	907,750	54,618

<sup>1</sup>No statistics kept.<sup>2</sup>Road in operation for only a portion of month of June, 1913. Operated by Northern Electric Railway Company.<sup>3</sup>Leased from Oakland and Antioch Railway January 1, 1913. Capitalization figured on mileage of both lines.<sup>4</sup>From July 1, 1912, to December 31, 1912, when road was operated by Oakland, Antioch and Eastern Railway Company.

—Continued.

OF ELECTRIC RAILWAYS OF CALIFORNIA FOR THE FISCAL YEAR ENDING 1913.

Northern Electric Railway Company	Northern Electric Railway Company (Marysville and Colusa Branch) <sup>2</sup>	Oakland and Antioch Railway <sup>4</sup>	Oakland, Antioch and Eastern Railway <sup>3</sup>	Pacific Electric Railway Company	Peninsular Railway Company
143.06	24.28	35.73	55.79	935.438	95.83
149.25	24.28	35.73	91.52	982.457	70.80
\$25,000,000 00	\$1,500,000 00	\$3,500,000 00	\$10,000,000 00	\$74,000,000 00	\$12,000,000 00
10,281,000 00	750,000 00	2,014,921 00	4,584,921 00	52,402,000 00	500,000 00
\$35,281,000 00	\$2,250,000 00	\$5,514,921 00	\$14,584,921 00	\$126,402,000 00	\$12,500,000 00
287,445 00	100,536 00	159,253 00	161,302 00	150,589 00	136,791 00
\$414,273 86	\$3,964 70	\$8,722 23	\$43,562 25	\$7,603,909 54	\$246,793 13
229,463 93	1,184 22	11,139 11	11,007 86	1,299,786 83	21,369 46
66,183 39	1 35	19 55	225 23	263,322 01	5,960 52
359,999 40	3,076 92	-----	3 00	438,860 77	43,641 00
\$1,069,920 58	\$8,227 19	\$19,880 89	\$54,798 34	\$9,605,879 15	\$317,764 11
475,831 32	3,134 94	18,500 94	37,554 71	6,496,560 17	228,194 69
\$594,089 26	\$5,092 25	\$1,379 95	\$17,243 63	\$3,109,318 98	\$89,569 42
470,076 02	1,657 50	888 13	23,612 33	2,909,447 65	228,352 06
\$124,013 24	\$3,434 75	\$491 82	-----	\$199,871 33	-----
-----	-----	-----	\$6,368 70	-----	\$138,782 64
3,980 00	209 00	38 00	188 00	3,164 00	1,265 00
831 00	141 00	14 00	-----	203 00	-----
-----	-----	-----	69 00	-----	1,960 00
1,377,662	1	1	1	68,686,203	2,636,720

TABLE NO. 2

STATEMENT OF MILEAGE, CAPITALIZATION, REVENUES AND EXPENSES  
JUNE 30,

	Petaluma and Santa Rosa Railway Company	Point Loma Railroad Company
<i>Mileage.</i>		
Owned .....	42.96	8.45
Operated .....	42.96	8.45
<i>Capitalization.</i>		
Capital stock outstanding.....	\$1,000,000 00	\$66,000 00
Funded debt .....	988,000 00	130,000 00
Totals .....	\$1,988,000 00	\$196,000 00
Amount per mile.....	53,585 00	23,932 00
<i>Revenues.</i>		
Passenger .....	\$101,511 77	\$41,796 85
Freight .....	203,727 12	
Other than transportation.....	3,890 64	
Miscellaneous income .....	3,186 89	8 17
Gross revenue .....	\$312,316 42	\$41,805 02
Less operating expense.....	200,603 83	31,734 59
Net revenue .....	\$111,712 59	\$10,070 43
Net loss .....		
Less taxes and interest.....	59,544 88	8,823 83
Net income .....	\$52,167 71	\$1,246 60
Net deficit .....		
Net operating revenue per mile of road.....	2,600 00	1,191 00
Net operating loss per mile of road.....		
Net income per mile of road operated.....	1,214 00	147 00
Net deficit per mile of road operated.....		
Total number of revenue passengers carried.....	723,788	621,882

<sup>1</sup>No record kept.

<sup>2</sup>Operated by Northern Electric Railway Company.

<sup>3</sup>Capitalization included in Pacific Gas and Electric report.



—Continued.

OF ELECTRIC RAILWAYS OF CALIFORNIA FOR THE FISCAL YEAR ENDING 1913.

Presidio and Ferries Railroad Company	Sacramento Gas and Electric Railway Company <sup>3</sup>	Sacramento Terminal Company <sup>2</sup>	Sacramento and Woodland Railroad Company <sup>2</sup>	San Diego Electric Railway Company	San Francisco, Napa and Calistoga Rail- way Company
9.0499	39.82	6.19	19.11	63.49	44.522
9.0499	42.03	6.19	19.11	63.49	44.522
\$1,000,000 00	-----	\$250,000 00	\$1,000,000 00	\$1,250,000 00	\$2,000,000 00
		150,000 00	750,000 00	1,700,000 00	1,210,000 00
\$1,000,000 00	-----	\$400,000 00	\$1,750,000 00	\$2,950,000 00	\$3,210,000 00
115,296 00	-----	64,620 00	102,279 00	48,250 00	77,170 00
\$325,272 25	\$557,642 30	-----	\$105,676 40	\$965,951 72	\$197,823 61
	918 00	-----	31,945 74	-----	18,489 58
1,200 00	250 00	-----	914 84	33,079 50	2 60
11,418 23	1,767 65	-----	10 38	10,942 47	748 73
\$337,890 48	\$560,577 95	-----	\$138,547 36	\$1,009,973 69	\$217,064 52
180,732 12	342,669 45	-----	78,717 73	622,108 42	121,930 67
\$157,158 36	\$217,908 50	-----	\$59,829 63	\$387,865 27	\$95,133 85
	22,413 85	-----	38,601 84	138,975 23	69,404 60
\$157,158 36	\$195,494 65	-----	\$21,227 79	\$248,890 04	\$25,729 25
17,366 00	5,184 00	-----	3,131 00	6,109 00	2,136 00
17,366 00	4,651 00	-----	1,111 00	3,920 00	578 00
1	11,580,981	-----	437,622	20,802,650	667,423

TABLE NO. 2

STATEMENT OF MILEAGE, CAPITALIZATION, REVENUES AND EXPENSES  
JUNE 30.

	San Francisco- Oakland Terminal Railways	San Jose Railroads
<i>Mileage.</i>		
Owned -----	256.18	41.89
Operated -----	256.18	41.89
<i>Capitalization.</i>		
Capital stock outstanding-----	\$28,175,000 00	\$5,000,000 00
Funded debt -----	20,233,000 00	3,000,000 00
Totals -----	\$48,408,000 00	\$8,000,000 00
Amount per mile-----	204,339 00	203,562 00
<i>Revenues.</i>		
Passenger -----	\$4,452,385 38	\$349,453 52
Freight -----	39,824 40	415 12
Other than transportation-----	9,675 85	16,827 27
Miscellaneous income -----	174,990 70	36,412 14
Gross revenue -----	\$4,676,876 33	\$403,108 05
Less operating expense-----	2,961,862 36	261,117 61
Net revenue -----	\$1,715,013 97	\$141,990 44
Net loss -----		
Less taxes and interest-----	1,123,652 76	173,268 69
Net income -----	\$591,361 21	
Net deficit -----		\$31,278 25
Net operating revenue per mile of road-----	6,694 00	3,390 00
Net operating loss per mile of road-----		
Net income per mile of road operated-----	2,308 00	
Net deficit per mile of road operated-----		746 00
Total number of revenue passengers carried-----	77,072,203	7,003,642

Continued.  
OF ELECTRIC RAILWAYS OF CALIFORNIA FOR THE FISCAL YEAR ENDING  
1913.

Santa Barbara Consolidated Railroad Company	South San Francisco Railroad and Power Company	Stockton Electric Railroad Company	Tidewater Southern Railway Company	Union Traction Company	United Railroads of San Francisco
5.96	4.02	14.98	36.05	14.67	253.695
5.96	4.02	14.98	32.70	14.67	271.276
\$1,000 00	\$13,500 00	\$500,000 00	\$874,252 00	\$750,000 00	\$43,800,000 00
184,500 00	-----	115,000 00	206,000 00	635,000 00	38,714,000 00
\$185,500 00	\$13,500 00	\$615,000 00	\$1,080,252 00	\$1,385,000 00	\$82,514,000 00
33,007 00	3,515 00	42,181 00	30,689 00	100,654 00	337,904 00
\$62,175 37	\$21,738 90	\$190,744 03	\$6,759 42	\$87,628 69	\$8,586,048 50
91 00	-----	736 00	20,115 82	23 00	3,199 06
461 17	-----	8 60	177 20	736 71	58,526 18
\$62,727 54	\$21,738 90	\$191,488 63	\$27,052 44	\$88,388 40	\$8,647,773 71
49,123 84	15,132 75	110,509 88	19,745 32	49,733 27	4,783,128 61
\$13,603 70	\$6,606 15	\$80,978 75	\$7,307 12	\$38,655 13	\$3,864,645 13
11,738 91	820 00	36,382 53	6,880 73	35,862 32	2,420,866 11
\$1,864 79	\$5,786 15	\$44,596 22	\$426 39	\$2,792 81	\$1,443,779 02
2,282 00	1,643 00	5,406 00	223 00	2,635 00	14,246 00
313 00	1,439 00	2,977 00	13 00	190 00	5,322 00
1,261,911	434,778	3,824,673	15,812	2,325,007	171,524,517

TABLE NO. 2

STATEMENT OF MILEAGE, CAPITALIZATION, REVENUES AND EXPENSES  
JUNE 30.

	Visalia Electric Railroad Company	Grand Total
<i>Mileage.</i>		
Owned .....	29.32	
Operated .....	45.95	2,820.0229
<i>Capitalization.</i>		
Capital stock outstanding.....	\$1,000,000 00	\$244,378,952 00
Funded debt .....		162,595,342 00
Totals .....	\$1,000,000 00	\$406,974,294 00
Amount per mile.....	42,590 00	3,456,761 00
<i>Revenues.</i>		
Passenger .....	\$52,828 78	32,439,347 64
Freight .....	21,392 92	1,964,621 22
Other than transportation.....	852 26	417,095 23
Miscellaneous income.....	582 28	1,256,777 52
Gross revenue .....	\$75,656 24	\$36,077,841 61
Less operating expense.....	72,709 35	22,983,578 69
Net revenue .....	\$2,946 89	\$13,094,262 92
Net loss .....		
Less taxes and interest.....	81,943 37	9,487,526 19
Net income .....		\$3,606,736 73
Net deficit .....	\$78,996 48	
Net operating revenue per mile of road.....	64 00	4,643 00
Net operating loss per mile of road.....		
Net income per mile of road operated.....		1,279 00
Net deficit per mile of road operated.....	1,719 00	
Total number of revenue passengers carried.....	150,972	526,979,450

NOTE.—No statistics reported for Glendale and Eagle Rock Railway Company and Sacramento Valley Electric Railroad Company.



—Concluded.

OF ELECTRIC RAILWAYS OF CALIFORNIA FOR THE FISCAL YEAR ENDING 1943.

TABLE

STATEMENT OF OPERATING EXPENSES OF ELECTRIC RAILWAY COMPAN

Los Angeles  
Railway  
Corporation

<i>Way and Structures.</i>	
Superintendence of way and structures.....	\$23,455 78
Ballast .....	2,975 00
Ties .....	59,417 77
Rails .....	31,641 49
Rail fastening and joints.....	17,166 59
Special work .....	59,497 49
Underground construction .....	
Roadway and track labor.....	220,076 55
Paving .....	230,690 71
Miscellaneous roadway and track expenses.....	9,405 39
Cleaning and sanding track.....	46,238 89
Removal of snow, ice and sand.....	
Tunnels .....	
Elevated structures and foundations.....	
Bridges, trestles and culverts.....	8,512 89
Crossings, fences, cattle guards and signs.....	1,974 13
Signal and interlocking systems.....	5,279 31
Telephone and telegraph systems.....	3,934 47
Other miscellaneous way expenses.....	1,583 33
Poles and fixtures.....	22,971 69
Underground conduits .....	
Transmission system .....	3,609 70
Distribution system .....	38,427 72
Miscellaneous electric line expenses.....	1,337 15
Buildings and structures.....	15,014 11
Depreciation of way and structures.....	409,854 41
Other operations .....	Dr.
Other operations .....	Cr.
Totals .....	\$1,204,064 57
<i>Equipment.</i>	
Superintendence of equipment.....	\$16,823 46
Power plant equipment.....	
Substation equipment .....	10,993 81
Passenger and combination cars.....	229,138 59
Freight, express and mail cars.....	
Locomotives .....	
Service cars .....	6,085 83
Electric equipment of cars.....	96,574 87
Electric equipment of locomotives.....	
Shop machinery and tools.....	6,644 43
Shop expenses .....	28,727 63
Horses and vehicles.....	6,195 96
Other miscellaneous equipment expenses.....	941 55
Depreciation of equipment.....	204,927 16
Other operations .....	Dr.
Other operations .....	Cr.
Totals .....	\$607,053 29
<i>Traffic.</i>	
Superintendence and solicitation.....	\$3,900 31
Advertising .....	14,358 72
Miscellaneous traffic expenses.....	
Totals .....	\$18,259 03

\*Road leased from Oakland and Antioch Railway January 1, 1913.

No. 3.

IES (CLASS A) OF CALIFORNIA FOR FISCAL YEAR ENDING JUNE 30, 1913.

Oakland, Antioch and Eastern Railway <sup>1</sup>	Pacific Electric Railway Company	San Diego Electric Railway Company	San Francisco Oakland Terminal Railways	United Railroads of San Francisco	Total
\$0 80	\$87,553 96	\$1,490 65	\$30,821 33	\$20,888 56	\$164,211 08
-----	2,234 11	-----	553 63	1,674 59	7,437 33
-----	87,110 34	3,890 21	8,668 08	21,066 97	171,153 37
-----	41,542 30	313 36	14,855 37	61,328 39	149,680 91
-----	51,333 42	317 10	5,439 99	16,922 01	91,179 11
37 90	66,520 85	433 37	7,812 13	7,852 77	142,159 51
4,646 84	-----	-----	-----	979 83	5,626 67
-----	310,064 36	16,362 45	55,777 83	192,205 74	794,486 93
-----	138,832 68	32,453 79	89,057 44	188,073 53	679,108 15
28 16	33,027 79	752 85	2,589 73	23,440 29	69,244 21
25 55	21,624 21	3,806 98	17,341 75	35,896 35	124,933 73
-----	2,766 66	313 46	-----	-----	3,080 12
6 75	490 52	-----	-----	-----	497 27
-----	-----	-----	-----	-----	-----
2 75	36,805 39	125 50	2,674 93	2,105 77	50,227 23
-----	27,264 85	22 75	1,028 24	87 69	30,377 66
262 80	10,836 50	-----	4,422 23	1,787 88	22,588 72
373 74	14,678 14	-----	240 91	-----	19,227 26
1 21	683 50	48 46	386 25	25,600 29	28,303 04
15 50	33,179 72	1,452 50	9,951 43	7,536 47	75,107 31
-----	-----	26 98	-----	-----	26 98
45 50	4,910 24	5 21	-----	-----	8,570 65
248 13	113,520 62	3,045 35	43,520 36	38,308 22	237,070 40
11 00	14,577 52	273 34	8,963 00	3,762 40	28,924 41
21 27	66,332 03	3,853 32	44,951 41	24,639 35	154,811 49
-----	-----	40,194 93	-----	-----	450,049 34
-----	-----	-----	-----	-----	-----
\$5,727 90	\$1,165,889 71	\$109,187 56	\$349,056 04	\$674,157 10	\$3,508,082 88
-----	-----	-----	-----	-----	-----
\$540 39	\$42,234 05	\$1,408 03	\$14,588 72	\$14,036 28	\$89,630 93
-----	2,663 77	6,749 29	233 25	34,984 93	44,631 24
169 93	37,438 92	-----	586 27	782 05	49,970 98
1,889 17	390,517 77	25,067 37	106,941 62	239,865 85	993,420 37
387 46	75,047 37	-----	172 98	-----	75,607 81
54 66	17,767 96	-----	253 74	-----	18,076 36
96 72	5,833 16	98 14	1,133 62	10,330 05	23,577 52
713 17	246,168 41	12,151 69	59,030 48	145,661 11	560,299 73
41 12	22,966 19	-----	245 89	-----	23,253 20
79 22	15,566 14	2,614 12	3,298 30	5,459 52	33,661 73
326 93	68,036 84	626 25	8,172 75	20,139 61	126,030 01
99 93	1,634 02	338 83	5,069 05	5,369 47	18,707 26
-----	369 37	-----	43,577 79	127 29	45,016 00
-----	210,393 00	26,133 42	-----	-----	441,453 58
-----	-----	-----	-----	-----	-----
\$4,398 70	\$1,136,636 97	\$75,187 14	\$243,304 46	\$476,756 16	\$2,543,336 72
-----	-----	-----	-----	-----	-----
\$1,913 38	\$48,505 42	-----	\$12,823 45	-----	\$67,142 56
489 78	114,647 66	\$21,342 97	20,230 21	-----	171,069 34
-----	17 95	-----	9 90	-----	27 85
-----	-----	-----	-----	-----	-----
\$2,403 16	\$163,171 03	\$21,342 97	\$33,063 56	-----	\$238,239 75

TABLE No. 3

STATEMENT OF OPERATING EXPENSES OF ELECTRIC RAILWAY COMPAN

		Los Angeles Railway Corporation
<i>Conducting Transportation.</i>		
Superintendence of transportation.....		\$116,695 02
Power plant employees.....		
Substation employees.....		34,979 54
Fuel for power.....		
Water for power.....		
Lubricants for power.....		
Miscellaneous power plant supplies and expenses.....		
Substation supplies and expenses.....		1,514 02
Power purchased.....		618,963 91
Power exchanged—balance.....		<sup>1</sup> 34,331 20
Other operations.....	Dr.	
Other operations.....	Cr.	
Passenger conductors—motormen and trainmen.....		1,647,247 59
Freight and express conductors—motormen and trainmen.....		
Miscellaneous car service employees.....		4,233 52
Miscellaneous car service expenses.....		43,620 60
Station employees.....		
Station expenses.....		
Carhouse employees.....		110,763 42
Carhouse expenses.....		48,191 34
Operation of signal and interlocking systems.....		18,877 91
Operation of telephone and telegraph systems.....		5,367 29
Express and freight collections and delivery.....		
Loss and damage.....		22 60
Other transportation expenses.....		1,787 39
Totals.....		\$2,617,932 95
<i>General and Miscellaneous.</i>		
Salaries and expenses of general officers.....		\$34,686 26
Salaries and expenses of general office clerks.....		34,064 04
General office supplies and expenses.....		10,904 11
Law expenses.....		15,032 93
Relief department expenses.....		
Pensions.....		
Miscellaneous general expenses.....		27,923 03
Other operations.....	Dr.	
Other operations.....	Cr.	
Injuries and damages.....		212,398 44
Insurance.....		182 05
Stationery and printing.....		9,383 62
Store expenses.....		20,059 71
Stable expenses.....		15,857 17
Rent of tracks and terminals.....		4,013 99
Rent of equipment.....		38,790 61
Totals.....		\$423,295 96
<i>Recapitulation of Expenses.</i>		
Way and structures.....		\$1,204,064 57
Equipment.....		607,053 29
Traffic.....		18,259 03
Conducting transportation.....		2,617,932 95
General and miscellaneous.....		423,295 96
Totals.....		\$4,870,605 80
Ratio of operating expenses to operating revenues.....		71.4%

<sup>1</sup>Credit item.<sup>2</sup>Road leased from Oakland and Antioch Railway January 1, 1913.<sup>3</sup>Also includes salaries and expenses of general officers.



Continued.

IES (CLASS A) OF CALIFORNIA FOR FISCAL YEAR ENDING JUNE 30, 1913.

Oakland, Antioch and Eastern Railway <sup>2</sup>	Pacific Electric Railway Company	San Diego Electric Railway Company	San Francisco Oakland Terminal Railways	United Railroads of San Francisco	Total
\$2,349 02	\$108,345 78	\$9,384 15	\$57,962 36	\$126,228 62	\$420,964 95
	4,091 50	14,537 76		8,961 80	27,591 06
341 63	98,848 55		2,362 08	19,580 45	156,112 25
1,168 32	13,538 39	57,672 91			72,379 62
	260 11	1,142 18			1,402 29
	362 04	1,020 50		270 60	1,653 14
	229 17	3,818 70		607 65	4,655 52
51 92	5,612 22		240 66	772 62	8,191 44
5,006 00	951,478 06		450,547 00	997,101 24	3,023,096 21
	29,245 05				5,086 15
4,080 77	1,091,232 49	222,755 88	1,017,678 50	1,513,366 60	5,496,361 83
1,707 70	209,630 79		7,623 09		218,961 58
	120,379 96	80 77	35,889 46	13,490 87	174,074 58
980 78	103,981 41	6,849 61	34,354 86	57,232 87	247,020 13
1,604 88	251,549 35	2,496 72	8,000 44		264,051 39
520 84	34,193 64	374 47	11,022 63		46,111 58
1,911 63	178,095 03	7,082 73	69,385 70	148,673 44	515,911 95
	638 42	513 89	3,280 93	4,148 76	56,773 34
44 70	25,310 73		21,798 28	2,400 39	68,432 01
397 76	10,429 27		1,675 06	4,073 18	21,942 56
35 00	5,746 76		11 13		5,815 49
130 82	16,928 05	2,253 06	190,395 55	5,645 98	217,140 85
\$20,331 77	\$3,260,526 77	\$329,983 33	\$1,912,227 73	\$2,902,555 07	\$11,043,557 62
\$1,307 10	\$35,582 51		\$24,865 50	\$91,261 44	\$187,702 81
769 80	146,830 89	22,188 40	54,744 18	47,294 39	305,831 20
182 75	60,300 03	2,351 74	22,509 17	24,843 47	121,091 27
	18,549 56	2,763 10	25,551 57	84,443 64	146,340 80
		287 86	600 00	4,180 00	5,067 86
87 51	29,133 19	5,423 14	34,925 61	87,368 53	184,861 01
374 21	217,115 79	40,947 64	94,692 11	226,582 84	792,111 03
172 87	8,823 29	3,371 23	19,835 15	30,752 23	63,136 82
454 27	32,245 60	1,366 54	11,181 65	9,653 02	64,284 70
811 40	24,993 21	2,435 30	7,510 32	21,006 28	76,816 22
	2,993 57	171 78	5,230 78	12,974 44	36,984 18
	9,281 33	796 79	21,650 91	12,000 00	47,743 02
593 77	53,445 35	538 32	1,482 70		94,850 75
\$4,693 18	\$639,294 32	\$82,398 28	\$324,779 65	\$652,360 28	\$2,126,821 67
\$5,727 90	\$1,165,889 71	\$109,187 56	\$349,056 04	\$674,157 10	\$3,508,082 88
4,398 70	\$1,136,636 97	\$75,187 14	\$243,304 46	\$476,756 16	\$2,543,396 72
2,403 16	163,171 08	21,342 97	33,063 56		238,239 75
20,331 77	3,260,526 77	329,983 33	1,912,227 73	2,902,555 07	11,043,557 62
4,693 18	639,294 32	82,398 28	324,779 65	652,360 28	2,126,821 67
\$37,554 71	\$6,365,518 80	\$618,099 28	\$2,862,431 44	\$4,705,828 61	\$19,460,038 64
68.53%	67.72%	61.25%	62.94%	54.78%	

TABLE No. 3

STATEMENT OF OPERATING EXPENSES OF ELECTRIC RAILWAY COMPAN

	California Street Cable Railroad Company	Central California Traction Company	Northern Electric Railway Company
<b>I. Way and Structures.</b>			
Superintendence of way and structures		\$6,064 42	\$4,430 80
Maintenance of road way and track	\$28,732 34	16,153 14	45,234 54
Other maintenance of way		3,939 04	16,799 29
Poles and fixtures		544 84	1,811 51
Underground conduits			
Transmission system			110 00
Distribution system		4,698 12	7,740 58
Miscellaneous electric line expenses		384 81	1,283 39
Building and structures		1,180 45	5,283 18
Depreciation of way and structures			
Other operations Dr.			
Other operations Cr.			
Totals	\$28,732 34	\$32,964 82	\$82,573 29
<b>II. Equipment.</b>			
Superintendence of equipment		\$2,539 78	\$3,846 98
Power plant equipment			
Substation equipment		2,924 33	2,543 50
Maintenance of cars and locomotives	\$22,594 82	9,459 89	38,897 84
Maintenance of electric equipment of cars and locomotives		5,955 17	13,831 57
Miscellaneous equipment expenses		2,191 41	7,706 71
Depreciation of equipment			
Other operations Dr.			
Other operations Cr.			
Totals	\$22,594 82	\$23,070 58	\$66,826 60
<b>III. Traffic.</b>			
Traffic expenses		\$11,355 16	\$18,174 90
<b>IV. Conducting Transportation.</b>			
Superintendence of transportation		\$3,287 45	\$12,298 29
Power plant employees	\$8,199 10		
Substation employees	2,618 75	6,014 51	14,089 92
Fuel for power	12,733 17		292 43
Water for power	2,346 75		19 68
Lubricants for power	2,308 41		
Miscellaneous power plant supplies and expenses	763 72		
Substation supplies and expenses		90 87	855 47
Power purchased		40,185 14	69,994 84
Power exchanged—balance			
Other operations Dr.			
Other operations Cr.			
Passenger conductors—motormen and trainmen	118,317 70	46,679 73	43,000 91
Freight and express conductors—motormen and trainmen		7,326 80	15,397 82
Miscellaneous car service employees and expenses		5,580 62	24,362 71
Station employees and expenses	5,765 60	13,785 13	34,787 12
Carhouse employees and expenses		8,462 63	12,535 19
Signal interlocking telephone and telegraph systems		98 18	10,864 64
Express and freight collections and delivery		193 11	
Loss and damage		534 13	828 10
Other transportation expenses	1,916 68	1,789 58	480 80
Totals	\$154,969 88	\$134,027 88	\$239,807 92

<sup>1</sup>Credit item.

—Continued.

IES (CLASS B) OF CALIFORNIA FOR FISCAL YEAR ENDING JUNE 30, 1913.

Peninsular Railway Company	Petaluma and Santa Rosa Railway Company	Presidio and Ferries Railroad Company	Sacramento Gas and Electric Rail- way Company	San Jose Railroads	Total
\$1,557 88	\$1,067 36	-----	\$1,225 12	\$338 20	\$14,683 78
16,601 98	5,130 02	-----	10,208 37	17,192 62	139,253 01
784 89	753 58	-----	5,996 41	72 02	28,345 23
825 02	191 33	-----	919 29	946 78	5,238 77
-----	-----	-----	16 90	-----	16 90
71 48	-----	-----	-----	17 45	78 93
1,196 44	2,464 44	-----	2,699 35	1,759 25	20,558 18
622 16	-----	-----	186 49	1,576 69	4,053 54
1,631 20	1,713 70	-----	651 60	655 82	11,115 95
-----	-----	-----	-----	-----	-----
-----	1,270 00	-----	-----	-----	1,270 00
-----	-----	-----	1750 60	-----	1750 60
-----	-----	-----	-----	-----	-----
\$23,291 05	\$12,590 43	-----	\$21,152 93	\$22,558 83	\$223,863 69
-----	-----	-----	-----	-----	-----
11 15	\$2,975 20	-----	\$3,194 55	\$52 91	\$12,620 57
-----	-----	-----	264 20	-----	264 20
41 80	7 82	-----	-----	39 92	5,557 37
13,320 23	4,230 66	-----	13,733 59	12,469 65	114,706 68
-----	-----	-----	-----	-----	-----
3,744 26	1,329 45	-----	9,940 87	5,010 14	39,811 46
2,435 33	916 17	-----	1,508 23	313 78	15,071 63
3,466 92	-----	-----	-----	-----	3,466 92
-----	5,118 12	-----	-----	-----	5,118 12
-----	-----	-----	1998 61	-----	1998 61
-----	-----	-----	-----	-----	-----
\$23,019 69	\$14,577 42	-----	\$27,642 83	\$17,886 40	\$195,618 34
-----	-----	-----	-----	-----	-----
\$3,875 29	\$6,314 31	-----	\$4,970 04	\$1,714 77	\$46,404 47
-----	-----	-----	-----	-----	-----
\$6,179 80	\$1,634 50	-----	\$4,225 39	\$2,327 71	\$29,953 14
-----	-----	-----	-----	-----	8,199 10
5,208 89	-----	-----	-----	-----	27,932 07
-----	-----	-----	-----	-----	13,025 60
-----	-----	-----	-----	-----	2,366 43
-----	-----	-----	-----	-----	2,308 41
-----	-----	-----	-----	-----	763 72
117 75	-----	-----	-----	-----	1,064 09
45,066 12	13,644 05	\$34,845 82	-----	56,053 25	259,789 22
-----	-----	-----	-----	-----	-----
-----	88,521 16	-----	54,677 73	-----	143,198 89
-----	-----	-----	13,313 27	-----	13,313 27
55,288 11	22,451 21	74,484 30	182,589 01	121,457 40	664,268 37
5,626 95	-----	-----	1,215 38	-----	29,566 95
9,400 82	949 74	8,400 00	8,115 59	3,734 85	60,544 33
5,582 55	16,605 14	-----	40 90	14 14	76,580 58
7,159 11	2,324 53	11,283 35	11,540 10	4,134 73	57,489 64
-----	-----	-----	-----	-----	-----
1 58	97 31	-----	1 10	-----	11,062 81
-----	-----	-----	-----	-----	-----
42 92	1,944 90	-----	-----	-----	193 11
549 83	58 01	38,674 65	289 17	407 31	3,350 05
-----	-----	-----	-----	-----	44,166 03
\$140,224 43	\$148,230 55	\$167,688 12	\$249,381 10	\$188,129 39	\$1,422,459 27

TABLE NO. 3

STATEMENT OF OPERATING EXPENSES OF ELECTRIC RAILWAY COMPAN

	California Street Cable Railroad Company	Central California Traction Company	Northern Electric Railway Company
<i>V. General and Miscellaneous.</i>			
Salaries and expenses of general officers and general office clerks.....	\$16,599 60	\$8,930 57	\$18,536 38
General office supplies and expenses.....	3,605 48	3,059 93	5,486 59
Law expenses .....	1,800 00	1,449 45	2,556 59
Relief department expenses.....			
Pensions .....			
Miscellaneous general expenses.....	590 00	1,680 01	2,270 84
Other operations .....	Dr.		
Other operations .....	Cr.		
Injuries and damages.....	5,586 90	1,369 93	18,165 02
Insurance .....	993 90	1,903 56	7,938 48
Stationery and printing.....	1,240 23	2,287 74	7,054 25
Store expenses .....		1,447 42	
Stable expenses .....	1,208 51		
Rent of tracks and terminals.....		2,312 27	
Rent of equipment.....		3,623 81	6,439 41
Totals .....	\$31,624 62	\$28,064 69	\$68,447 56
<i>Recapitulation of Expenses.</i>			
I—Way and structures.....	\$28,732 34	\$32,964 82	\$82,573 29
II—Equipment .....	22,594 82	23,070 58	66,826 60
III—Traffic .....		11,355 16	18,174 90
IV—Conducting transportation .....	154,969 88	134,027 88	239,807 92
V—General and miscellaneous.....	31,624 62	28,064 69	68,447 56
Totals .....	\$237,921 66	\$229,483 13	\$475,830 27
Ratio of operating expenses to operating revenues .....	50.756%	70.49%	63.26%

<sup>1</sup>Credit item.

TABLE NO. 3

STATEMENT OF OPERATING EXPENSES OF ELECTRIC RAILWAY COMPAN

	Bakersfield and Kern Electric Rail- way Company	Fresno Traction Company
<i>I. Way and Structures.</i>		
Superintendence of way and structures.....	\$465 00	\$567 83
Maintenance of way.....	990 93	10,210 31
Maintenance of electric lines.....	265 51	5,831 33
Buildings and structures.....	1 85	598 17
Depreciation of way and structures.....		
Other operations .....	Dr.	
Other operations .....	Cr.	
Totals .....	\$1,723 29	\$17,207 64
<i>II. Equipment.</i>		
Superintendence of equipment.....	\$465 00	\$757 05
Maintenance of power equipment.....	14 25	14 48
Maintenance of cars and locomotives.....	2,497 83	9,303 75
Maintenance of electric equipment of cars and locomotives .....	807 65	3,255 01
Miscellaneous equipment expenses.....	78 92	181 65
Depreciation of equipment.....		1,923 60
Other operations .....	Dr.	
Other operations .....	Cr.	
Totals .....	\$3,863 65	\$15,435 54
<i>III. Traffic.</i>		
Traffic expenses .....	\$1,351 05	\$535 19

<sup>1</sup>Leased to and operated by Northern Electric Railway Company.

<sup>2</sup>From July 1, 1912, to December 31, 1912, when road was operated by Oakland, Antioch and Eastern Railway.



—Continued.

IES (CLASS B) OF CALIFORNIA FOR FISCAL YEAR ENDING JUNE 30, 1913

Peninsular Railway Company	Petaluma and Santa Rosa Railway Company	Presidio and Ferries Railroad Company	Sacramento Gas and Electric Rail- way Company	San Jose Railroads	Total
\$11,471 20	\$10,225 05	\$9,880 00	\$36,763 90	\$10,937 33	\$123,344 03
1,065 70	1,378 47	265 00	3,161 04	362 23	18,384 44
2,160 15	972 53	535 00		2,104 50	11,578 22
1,323 95	2,069 44			1,146 96	9,081 20
			1,383 59		1,383 59
3,444 79	302 66	384 00	730 55	3,358 47	33,342 32
834 44	2,989 99	480 00		688 73	15,829 10
2,211 36	395 51	900 00		1,166 27	15,255 36
3,487 57	557 47			1,087 47	6,579 93
105 42		600 00	250 65		2,164 58
764 00				46 80	3,123 07
8,357 29					18,420 51
\$35,225 87	\$18,891 12	\$13,044 00	\$39,522 55	\$20,898 76	\$255,719 17
\$23,291 05	\$12,590 43		\$21,152 93	\$22,558 83	\$223,863 69
23,019 69	14,577 42		27,642 83	17,886 40	195,618 34
3,875 29	6,314 31		4,970 04	1,714 77	46,404 47
140,224 43	148,230 55	\$167,688 12	249,381 10	188,129 39	1,422,459 27
35,225 87	18,891 12	13,044 00	39,522 55	20,898 76	255,719 17
\$225,636 33	\$200,603 83	\$180,732 12	\$342,669 45	\$251,188 15	\$2,144,064 94
80.49%	64.64%	55.29%	61.13%	68.45%	

—Continued.

IES (CLASS C) OF CALIFORNIA FOR FISCAL YEAR ENDING JUNE 30, 1913.

Humboldt Transit Company	Monterey and Pacific Grove Railway Company	Nevada County Traction Company	Northern Elec- tric Railway Company (Marysville and Colusa Branch)	Oakland and Antioch Railway	Point Loma Railroad Company
\$892 05	\$420 36		\$45 24	\$352 88	\$63 93
6,344 31	1,763 80	\$2,021 58	6 67	473 59	1,493 87
405 47	494 04	450 89	25 45	42 14	262 34
113 50	395 76	102 81	91	61 08	141 53
					3,362 76
\$7,755 33	\$3,073 96	\$2,575 28	\$78 27	\$929 69	\$5,324 43
\$2,098 88	\$422 64		\$29 35	\$533 35	\$60 30
545 02		4 45			
2,280 64	1,939 61	429 59	317 04	2,151 53	1,422 18
1,053 24	1,623 79	624 29	114 37	1,293 30	822 73
7 41	177 50	33 47	31 57	35 97	98 53
\$5,985 19	\$4,163 45	\$1,091 80	\$492 33	\$4,014 15	\$2,403 74
\$195 40			\$151 09	\$1,660 94	\$370 35

TABLE NO. 3

STATEMENT OF OPERATING EXPENSES OF ELECTRIC RAILWAY COMPAN

	Sacramento and Woodland Railroad Company <sup>1</sup>	San Francisco, Napa and Calistoga Railway	Santa Barbara Consolidated Railroad Company
<i>I. Way and Structures.</i>			
Superintendence of way and structures	\$947 89	\$2,203 45	-----
Maintenance of way	2,564 95	17,467 40	\$4,273 14
Maintenance of electric lines	222 91	823 61	383 17
Buildings and structures	76 24	237 38	35 34
Depreciation of way and structures	-----	-----	-----
Other operations	Dr. -----	-----	-----
Other operations	Cr. -----	-----	-----
Totals	\$3,811 99	\$20,731 84	\$4,691 65
<i>II. Equipment.</i>			
Superintendence of equipment	\$523 50	\$2,056 82	\$600 00
Maintenance of power equipment	2,088 80	109 09	-----
Maintenance of cars and locomotives	5,345 83	5,917 65	-----
Maintenance of electric equipment of cars and locomotives	2,315 30	4,161 08	3,996 42
Miscellaneous equipment expenses	1,076 64	1,698 30	486 55
Depreciation of equipment	-----	-----	-----
Other operations	Dr. -----	-----	-----
Other operations	Cr. -----	-----	-----
Totals	\$11,350 07	\$13,942 94	\$5,082 97
<i>III. Traffic Expenses.</i>			
Traffic expenses	\$4,619 32	\$4,277 63	\$475 00

<sup>1</sup>Leased to and operated by Northern Electric Railway Company.

—(Continued.)

IES (CLASS C) OF CALIFORNIA FOR FISCAL YEAR ENDING JUNE 30, 1913.

South San Francisco Railroad and Power Company	Stockton Electric Railroad Company	Tidewater Southern Railway Company	Union Traction Company	Visalia Electric Railroad Company	Grand total
\$23 21	\$494 75			\$793 53	\$7,270 12
329 87	14,575 24	\$1,544 38	\$1,993 66	5,493 76	71,547 46
95 11	663 68		2,472 57	1,986 47	14,424 69
	274 75		85 22	330 18	2,454 72
					3,362 76
\$448 19	\$16,008 42	\$1,544 38	\$4,551 45	\$8,603 94	\$99,059 75
\$72 94	\$539 21		\$570 00	\$525 00	\$9,254 04
	6,096 24			371 02	9,243 35
736 48	33 06	\$1,219 89	2,608 45	2,137 68	38,341 21
256 20	1,410 03		597 01	1,907 32	24,237 65
	650 41		37 92	361 46	4,956 30
					1,923 60
			2 87		2 87
\$1,065 62	\$8,728 95	\$1,219 89	\$3,816 25	\$5,302 48	\$87,959 02
	\$3,016 57	\$1,010 54	\$696 55	\$1,064 15	\$19,423 78

TABLE No. 3

STATEMENT OF OPERATING EXPENSES OF ELECTRIC RAILWAY COMPAN

	Bakersfield and Kern Electric Rail- way Company	Fresno Traction Company
<i>IV. Conducting Transportation.</i>		
Superintendence of transportation.....	\$465 00	\$2,482 48
Power plant employees.....		
Substation employees.....		
Fuel for power.....		
Other power supplies and expenses.....		50
Power purchased.....	17,908 30	25,521 26
Power exchanged—balance.....		
Other operations.....Dr.		
Other operations.....Cr.		
Conductors, motormen and trainmen.....	28,655 24	65,991 42
Miscellaneous transportation expenses.....	2,464 32	5,941 40
Totals.....	\$49,492 86	\$99,937 06
<i>V. General and Miscellaneous.</i>		
General expenses.....	\$7,328 61	\$8,918 41
Other operations.....Dr.		
Other operations.....Cr.		
Injuries and damages.....	3,199 38	2,243 18
Insurance.....	105 41	490 33
Stationery and printing.....	111 01	996 58
Store and stable expenses.....		105 87
Rent of tracks and terminals.....		
Rent of equipment.....		169 20
Totals.....	\$10,744 41	\$12,923 57
<i>Recapitulation of Expenses.</i>		
I—Way and structures.....	\$1,723 29	\$17,207 64
II—Equipment.....	3,863 65	15,435 54
III—Traffic.....	1,351 05	535 19
IV—Conducting transportation.....	49,492 86	99,937 06
V—General and miscellaneous.....	10,744 41	12,923 57
Totals.....	\$67,175 26	\$146,039 00
Ratio of operating expenses to operating revenues.....	62.21%	68.74%

<sup>1</sup>Credit item.<sup>2</sup>From July 1, 1912, to December 31, 1912, when road was operated by Oakland, Antioch and Eastern Railway.<sup>3</sup>Leased to and operated by Northern Electric Railway Company.



—Continued.

IES (CLASS C) OF CALIFORNIA FOR FISCAL YEAR ENDING JUNE 30, 1913.

Humboldt Transit Company	Monterey and Pacific Grove Railway Company	Nevada County Traction Company	Northern Elec- tric Railway Company (Marysville and Colusa Branch) <sup>3</sup>	Oakland and Antioch Railway <sup>2</sup>	Point Loma Railroad Company
\$1,698 70 2,960 00	\$455 25	\$1,800 00	\$102 32	\$1,291 22	\$401 86
6,759 25 726 15	5,153 90	2,100 00 19 96 3,675 90	90 00 487 53	914 27 572 65 2,266 80	9,308 04
39,331 75 2,469 38	12,020 86 709 72	4,292 35 522 19	467 02 514 45	4,099 40 1,420 66	7,243 20 956 69
\$53,945 23	\$18,339 73	\$12,410 40	\$1,661 32	\$10,565 00	\$17,909 79
\$6,679 09	\$1,284 00	\$823 10	\$235 00	\$1,254 69	\$1,650 20
140 00 2,732 39 80 30	425 25 328 88 292 73 135 10	313 00 184 57	314 01 183 57	15 54 207 88	520 00 145 71 74 28 104 99
			19 35	1146 95	1,199 96
\$9,631 78	\$2,465 96	\$1,320 67	\$751 93	\$1,331 16	\$3,695 14
\$7,755 33 5,985 19 195 40	\$3,073 96 4,163 45	\$2,575 28 1,091 80	\$78 27 492 33 151 09	\$929 69 4,014 15 1,660 94	\$5,324 43 2,403 74 370 35
53,945 23 9,631 78	18,339 73 2,465 96	12,410 40 1,320 67	1,661 32 751 93	10,565 00 1,331 16	17,909 79 3,695 14
\$77,512 93	\$28,043 10	\$17,398 15	\$3,134 94	\$18,500 94	\$29,703 45
87.63%	64.754%	61.75%	60.87%	93%	71.05%

TABLE No. 3

STATEMENT OF OPERATING EXPENSES OF ELECTRIC RAILWAY COMPAN

	Sacramento and Woodland Railroad Company <sup>1</sup>	San Francisco, Napa and Calistoga Railway	Santa Barbara Consolidated Railroad Company
<i>IV. Conducting Transportation.</i>			
Superintendence of transportation-----	\$1,915 72	\$1,266 37	-----
Power plant employees-----		1,490 00	-----
Substation employees-----	1,608 25	-----	-----
Fuel for power-----		-----	-----
Other power supplies and expenses-----	578 90	31 86	-----
Power purchased-----	14,126 36	20,823 27	\$10,605 32
Power exchanged—balance-----			-----
Other operations-----Dr.			-----
Other operations-----Cr.			-----
Conductors, motormen and trainmen-----	14,215 31	14,611 07	17,497 37
Miscellaneous transportation expenses-----	13,354 85	11,157 99	3,742 52
Totals-----	\$45,799 39	\$49,380 56	\$31,845 21
<i>V. General and Miscellaneous.</i>			
General expenses-----	\$4,337 98	\$22,771 66	\$5,659 64
Other operations-----Dr.			-----
Other operations-----Cr.			-----
Injuries and damages-----	3,435 78	8,007 15	1,200 00
Insurance-----	2,364 85	1,350 93	7 81
Stationery and printing-----	1,571 54	1,175 18	161 56
Store and stable expenses-----		229 78	-----
Rent of tracks and terminals-----	395 81	63 00	-----
Rent of equipment-----	1,031 00	-----	-----
Totals-----	\$13,136 96	\$33,597 70	\$7,029 01
<i>Recapitulation of Expenses.</i>			
I—Way and structures-----	\$3,811 99	\$20,731 84	\$4,691 65
II—Equipment-----	11,350 07	13,942 94	5,082 97
III—Traffic-----	4,619 32	4,277 63	475 00
IV—Conducting transportation-----	45,799 39	49,380 56	31,845 21
V—General and miscellaneous-----	13,136 96	33,597 70	7,029 01
Totals-----	\$78,717 73	\$121,930 67	\$49,123 84
Ratio of operating expenses to oper- ating revenues-----	56.81%	56.32%	78.31%

<sup>1</sup>Leased and operated by Northern Electric Railway Company.

NOTE.—No statistics reported for Glendale and Eagle Rock Railway Company. Monterey and Del Monte Heights Railway Company. Sacramento Valley Electric Railroad Company.

Concluded.

IES (CLASS C) OF CALIFORNIA FOR FISCAL YEAR ENDING JUNE 30, 1913.

South San Francisco Railroad and Power Company	Stockton Electric Railroad Company	Tidewater Southern Railway Company	Union Traction Company	Visalia Electric Railroad Company	Grand total
\$360 00	\$2,082 90		\$975 00	\$1,389 35	\$16,686 17
				4,450 00	4,450 00
				2,404 34	7,116 86
		\$2,671 06			9,430 31
4,256 24				17 41	6,203 67
	14,693 94		3,860 40	16,293 76	144,724 78
7,794 00	50,610 98	5,206 02	26,665 75	11,899 67	310,601 41
504 00	4,579 10	2,544 41	2,431 70	6,538 87	59,852 25
\$12,914 24	\$71,966 92	\$10,421 49	\$33,932 85	\$38,543 40	\$559,065 45
\$624 70	\$6,645 75	\$993 27	\$5,278 86	\$6,452 69	\$80,937 65
			408 70		408 70
32 00	2,554 87	87 00	462 41	1,787 16	24,736 73
48 00	340 03	5 65	586 20	121 54	8,627 73
	517 90	740 30		528 79	6,826 19
	730 47			90 70	1,396 91
		2,193 55		9,000 00	11,652 36
		1,529 25		1,214 50	5,016 31
\$704 70	\$10,789 02	\$5,549 02	\$6,736 17	\$19,195 38	\$139,602 58
\$448 19	\$16,008 42	\$1,544 38	\$4,551 45	\$8,603 94	\$99,059 75
1,065 62	8,728 95	1,219 89	3,816 25	5,302 48	87,959 02
	3,016 57	1,010 54	696 55	1,064 15	19,423 78
12,914 24	71,966 92	10,421 49	33,932 85	38,543 40	559,065 45
704 70	10,789 02	5,549 02	6,736 17	19,195 38	139,602 58
\$15,132 75	\$110,509 88	\$19,745 32	\$49,733 27	\$72,709 35	\$905,110 58
69.64%	57.71%	72.99%	56.26%	96.30%	

TABLE

STATEMENT OF MILEAGE TRAFFIC AND MISCELLANEOUS STATISTICS  
ENDING JUNE

	Bakersfield and Kern Electric Railway Company	California Street Cable Railroad Company
Passenger car mileage.....	407,017	1,325,429
Freight, mail and express car mileage.....		
Total car mileage.....	407,017	1,325,429
Regular fare passengers carried.....	2,159,837	9,220,866
Revenue transfer passengers carried.....	425	
Total revenue passengers carried.....	2,160,262	9,220,866
Free transfer passengers carried.....	142,190	1,431,199
Total passengers carried.....	2,302,452	10,652,065
Passenger revenue .....	\$107,437.55	\$460,316.70
Average fare revenue passengers.....	.04973	.04992
Average fare all passengers.....	.04666	.04321
Total revenue from transportation.....	107,709.12	460,316.70
Revenue from transportation per car mile.....	.26463	.3472
Total revenue from operation other than transportation .....	274.56	8,439.59
Revenue from operations other than transpor- tation per car mile.....	.00067	.00636
Total operating revenues.....	107,983.68	468,756.29
Operating revenues per car mile.....	.26531	.35366
Total operating expenses.....	67,175.26	237,921.66
Operating expenses per car mile.....	.16504	.17950

TABLE No. 4

STATEMENT OF MILEAGE TRAFFIC AND MISCELLANEOUS STATISTICS  
ENDING JUNE

	Nevada County Traction Company	Northern Electric Railway Company
Passenger car mileage.....	69,950	1,262,098
Freight, mail and express car mileage.....		936,150
Total car mileage.....	69,950	2,198,248
Regular fare passengers carried.....	54,618	1,278,669
Revenue transfer passengers carried.....		98,993
Total revenue passengers carried.....	54,618	1,377,662
Free transfer passengers carried.....		102,441
Total passengers carried.....	54,618	1,480,103
Passenger revenue .....	\$27,320.90	\$395,122.85
Average fare revenue passengers.....	.50	.28681
Average fare all passengers.....	.50	.26696
Total revenue from transportation.....	27,934.90	656,373.13
Revenue from transportation per car mile.....	.399	.29859
Total revenue from operation other than transportation .....	240.00	95,813.42
Revenue from operations other than transpor- tation per car mile.....	.003	.04359
Total operating revenues.....	28,174.90	752,186.55
Operating revenues per car mile.....	.402	.34218
Total operating expenses.....	17,398.15	475,830.27
Operating expenses per car mile.....	.249	.21646

<sup>1</sup>No records kept. Road operated by Oakland, Antioch and Eastern Railway from January 1, 1913.

<sup>2</sup>Operated by Northern Electric Railway Company.

<sup>3</sup>No statistics reported. Road leased from Oakland and Antioch Railway January 1, 1913.



No. 4.  
OF ELECTRIC RAILWAY COMPANIES OF CALIFORNIA FOR FISCAL YEAR  
30, 1913.

Central California Traction Company	Fresno Traction Company	Humboldt Transit Company	Los Angeles Railway Corporation	Monterey and Pacific Grove Railway Company
1,027,278 119,975	1,127,097 1,170	622,087	27,862,687	189,484
1,147,253 1,749,924 33,000	1,128,267 4,187,629	622,087 1,732,448	27,862,687 135,784,507	189,484 866,772 40,978
1,782,924 49,867	4,187,629 657,681 -	1,732,448	135,784,507 40,710,038	907,750
1,832,791 \$263,468.32 .14777 .14375 321,166.98 .27994 4,347.68 .00378 325,514.66 .28373 229,483.13 .20003	4,845,310 \$208,318.30 .04975 .04299 209,263.30 .18547 3,191.32 .00283 212,454.62 .18830 146,039.00 .12944	1,732,448 \$85,690.55 .04904 .04904 86,170.55 .13852 86,170.55 .13852 77,512.93 .12460	176,494,545 \$6,748,024.93 .04969 .03825 6,783,295.64 .24345 38,460.75 .00138 6,821,756.39 .24483 4,870,605.80 .17480	907,750 \$42,534.35 .04688 .04688 42,589.51 .22477 717.75 .00379 43,307.26 .22853 28,043.10 .14800

—Continued.

OF ELECTRIC RAILWAY COMPANIES OF CALIFORNIA FOR FISCAL YEAR  
30, 1913.

Northern Electric Railway Company (Marysville and Colusa Branch) <sup>12</sup>	Oakland, Antioch and Eastern Railway <sup>3</sup>	Oakland and Antioch Railway <sup>1</sup>	Pacific Electric Railway Company	Peninsular Railway Company
			26,169,388 4,540,330	1,063,913 95,715
			30,709,718 68,686,203	1,159,628 2,636,720
			68,686,203 10,117,603	2,636,720 224,948
			78,803,806 \$7,328,047.38 .10669 .09299	2,861,668 \$240,533.63 .09122 .08405
			8,948,634.41 .29139	272,713.39 .23517
19.85	364.48	19.55	450,445.31	7,605.48
5,150.27	54,798.34	19,880.89	9,399,079.72 .30606	280,318.87 .24173
3,134.94	37,554.71	18,500.94	6,365,518.80 .20728	225,636.33 .19458

TABLE No. 4

STATEMENT OF MILEAGE TRAFFIC AND MISCELLANEOUS STATISTICS  
ENDING JUNE

	Petaluma and Santa Rosa Railway Company <sup>1</sup>	Point Loma Railroad Company
Passenger car mileage.....	353,179	133,354
Freight, mail and express car mileage.....	256,406	-----
Total car mileage.....	609,585	133,354
Regular fare passengers carried.....	720,222	621,882
Revenue transfer passengers carried.....	3,566	-----
Total revenue passengers carried.....	723,788	621,882
Free transfer passengers carried.....	4,492	-----
Total passengers carried.....	728,280	621,882
Passenger revenue .....	\$95,110.31	\$41,346.48
Average fare revenue passengers.....	.13140	.066486
Average fare all passengers.....	.13069	.066486
Total revenue from transportation.....	169,741.31	41,745.02
Revenue from transportation per car mile.....	.27845	.313039
Total revenue from operation other than transportation .....	5,697.53	60.00
Revenue from operations other than transpor- tation per car mile.....	.00934	.000450
Total operating revenues.....	175,438.84	41,805.02
Operating revenues per car mile.....	.28780	.313489
Total operating expenses.....	105,694.55	29,703.45
Operating expenses per car mile.....	.17338	.222741

<sup>1</sup>Revenue and expenses for railway only.<sup>2</sup>Operated by Northern Electric Railway Company.

TABLE No. 4

STATEMENT OF MILEAGE TRAFFIC AND MISCELLANEOUS STATISTICS  
ENDING JUNE

	San Jose Railroads	Santa Barbara Consolidated Railroad Company
Passenger car mileage.....	1,966,949	243,880
Freight, mail and express car mileage.....	4,369	-----
Total car mileage.....	1,971,318	243,880
Regular fare passengers carried.....	7,003,642	1,261,911
Revenue transfer passengers carried.....	-----	-----
Total revenue passengers carried.....	7,003,642	1,261,911
Free transfer passengers carried.....	1,842,736	236,031
Total passengers carried.....	8,846,378	1,497,942
Passenger revenue .....	\$347,422.27	\$61,815.37
Average fare revenue passengers.....	.04962	.048986
Average fare all passengers.....	.03935	.041267
Total revenue from transportation.....	348,093.24	61,965.37
Revenue from transportation per car mile.....	.17658	.254081
Total revenue from operation other than transportation .....	18,858.52	762.17
Revenue from operations other than transpor- tation per car mile.....	.00957	.003125
Total operating revenues.....	366,951.76	62,727.54
Operating revenues per car mile.....	.18615	.257207
Total operating expenses.....	251,188.15	49,123.84
Operating expenses per car mile.....	.12742	.201426

—Continued.

OF ELECTRIC RAILWAY COMPANIES OF CALIFORNIA FOR FISCAL YEAR  
30, 1913.

Sacramento Gas and Electric Railway Company	Sacramento and Woodland Railroad Company <sup>2</sup>	San Diego Electric Railway Company	San Francisco, Napa and Calistoga Railway Company	San Francisco- Oakland Terminal Railways
2,394,541	304,139	3,422,643	239,975	16,318,256
-----	41,416	-----	72,188	79,451
2,394,541	345,555	3,422,643	412,163	16,397,707
11,512,966	436,210	20,802,650	667,423	77,072,203
38,375	1,412	-----	-----	-----
11,580,981	437,622	20,802,650	667,423	77,072,203
-----	40,286	5,210,657	-----	21,200,388
11,580,981	477,908	26,013,307	667,423	98,272,591
\$555,320.50	\$99,813.87	\$963,676.36	\$192,504.34	\$4,422,070.73
.04794	.22808	.04632	.28843	.05737
-----	.20886	.03705	.28843	.04499
558,328.01	137,292.41	965,382.11	215,424.78	4,472,890.58
.23317	.39731	.28206	.52267	.27277
2,249.94	1,254.95	43,702.88	1,062.53	74,695.40
.00094	.00363	.01277	.00258	.00455
560,577.95	138,547.36	1,009,084.99	216,487.31	4,547,585.98
.23411	.40094	.29482	.52525	.27733
342,669.45	78,717.73	618,099.28	121,930.67	2,862,431.44
.14310	.22780	.18059	.29583	.17456

—Continued.

OF ELECTRIC RAILWAY COMPANIES OF CALIFORNIA FOR FISCAL YEAR  
30, 1913.

South San Francisco Railroad and Power Company	Stockton Electric Railroad Company	Tidewater Southern Railway Company	Union Traction Company	United Railroads of San Francisco
105,406	855,439	36,629	446,463	23,598,274
-----	-----	38,995	-----	-----
105,406	855,439	75,624	446,463	23,598,274
434,778	3,824,673	15,812	1,987,186	171,524,517
-----	-----	-----	337,821	-----
434,778	3,824,673	15,812	2,325,007	171,524,517
-----	585,429	2,841	30,000	73,657,088
434,778	4,410,102	18,653	2,355,007	245,181,605
-----	1,824.60	177.20	1,559.70	59,199.06
\$21,738.90	\$189,664.03	\$6,502.85	\$85,250.30	\$8,514,665.90
.05	.04959	.411	.0366	.04964
.05	.04301	.348	.0362	.03472
21,738.90	189,664.03	26,875.24	86,828.70	8,530,048.50
.20624	.22172	.35537	.194	.36145
-----	.00213	.00234	.0035	.00251
21,738.90	191,488.63	27,052.44	88,388.40	8,589,247.56
.20624	.22385	.35772	.198	.36399
15,132.75	110,509.88	19,745.32	49,733.27	4,705,828.61
.14356	.12919	.26109	.111	.19939

TABLE No. 4

STATEMENT OF MILEAGE TRAFFIC AND MISCELLANEOUS STATISTICS  
ENDING JUNE

	Visalia Electric Railroad Company	Grand total
Passenger car mileage.....	214,159	111,859,714
Freight, mail and express car mileage.....	58,734	6,244,899
Total car mileage.....	272,893	118,104,613
Regular fare passengers carried.....	150,972	526,424,880
Revenue transfer passengers carried.....		554,570
Total revenue passengers carried.....	150,972	526,979,450
Free transfer passengers carried.....	3,540	156,249,455
Total passengers carried.....	154,512	683,228,905
Passenger revenue .....	\$50,177.73	\$31,608,608.94
Average fare revenue passengers.....	.33236	
Average fare all passengers.....	.32475	
Total revenue from transportation.....	74,223.35	33,895,834.80
Revenue from transportation per car mile.....	.27199	
Total revenue from operation other than transportation .....	1,282.89	822,327.11
Revenue from operations other than transpor- tation per car mile.....	.00470	
Total operating revenues.....	75,506.24	34,718,161.91
Operating revenues per car mile.....	.27669	
Total operating expenses.....	72,709.35	22,233,572.76
Operating expenses per car mile.....	.26644	

NOTE.—No statistics reported for Glendale and Eagle Rock Railway Company, Monterey and Del Monte Heights Railway Company, Presidio and Ferries Railway Company, Sacramento Valley Electric Railroad Company.





TABLE

STATEMENT OF EQUIPMENT OF ELECTRIC RAILWAY

	Bakersfield and Kern Electric Railway	California Street Cable Railroad Company
Closed passenger cars.....		
Open passenger cars.....	2	
Combination closed and open passenger cars.....	13	47
Freight cars.....		
Mail cars.....		
Express cars.....		
Baggage cars.....		
Combination cars.....		
Work cars.....		
Snow plows.....		
Sweepers.....		
Miscellaneous cars and engines.....		
Totals.....	15	47
Cars with electric equipment.....	15	
Cars without electric equipment.....		47

TABLE No. 5

STATEMENT OF EQUIPMENT OF ELECTRIC RAILWAY

	Northern Electric Railway Company	Northern Elec- tric Railway Company (Marysville and Colusa Branch) <sup>1</sup>
Closed passenger cars.....	22	
Open passenger cars.....	2	
Combination closed and open passenger cars.....	9	
Freight cars.....	353	
Mail cars.....		
Express cars.....		
Baggage cars.....		
Combination cars.....	7	
Work cars.....	5	
Snow plows.....		
Sweepers.....		
Miscellaneous cars and engines.....		
Totals.....	398	
Cars with electric equipment.....	25	
Cars without electric equipment.....	373	

<sup>1</sup>No equipment owned. Equipment of Northern Electric Railway Company used.

<sup>2</sup>Operated by Oakland, Antioch and Eastern Railway January 1, 1913.

<sup>3</sup>Includes four locomotives.

No. 5.

## COMPANIES OF CALIFORNIA ON JUNE 30, 1913.

Central California Traction Company	Fresno Traction Company	Humboldt Transit Company	Los Angeles Railway Corporation	Monterey and Pacific Grove Railway Company	Nevada County Traction Company
10		18		1	4
	2	1			
	27		802	7	
27					
7					
2	2	1	89		
16			13		
62	31	20	904	8	4
22	29	20	850	8	4
40	2		51		

—Continued.

## COMPANIES OF CALIFORNIA ON JUNE 30, 1913.

Oakland and Antioch Railway <sup>2</sup>	Oakland, Antioch and Eastern Railway	Pacific Electric Railway Company	Peninsular Railway Company	Petaluma and Santa Rosa Railway Company	Point Loma Railroad Company
2	32	30	12	10	4
		10		2	
		529	16		
2	74	972		78	
		25			
			1		
	19	19			
		53	3	1	
	36	52	3		
4	131	1,690	35	91	4
4	36	676	33	14	4
	95	1,014	2	77	

TABLE No. 5

STATEMENT OF EQUIPMENT OF ELECTRIC RAILWAY

	Presidio and Ferries Railroad Company	Sacramento Gas and Electric Railway Company
Closed passenger cars.....	30	-----
Open passenger cars.....	-----	-----
Combination closed and open passenger cars.....	-----	55
Freight cars.....	-----	-----
Mail cars.....	-----	-----
Express cars.....	-----	-----
Baggage cars.....	-----	-----
Combination cars.....	-----	-----
Work cars.....	-----	3
Snow plows.....	-----	-----
Sweepers.....	-----	-----
Miscellaneous cars and engines.....	-----	3
Totals.....	30	61
Cars with electric equipment.....	30	59
Cars without electric equipment.....	-----	2

\*No equipment owned. Equipment of Northern Electric Railway Company used.

\*Includes two locomotives, one wrecking crane.

TABLE No. 5

STATEMENT OF EQUIPMENT OF ELECTRIC RAILWAY

	Santa Barbara Consolidated Railroad Company	South San Francisco Railroad and Power Company
Closed passenger cars.....	-----	-----
Open passenger cars.....	-----	-----
Combination closed and open passenger cars.....	8	4
Freight cars.....	-----	-----
Mail cars.....	-----	-----
Express cars.....	-----	-----
Baggage cars.....	-----	-----
Combination cars.....	-----	-----
Work cars.....	1	-----
Snow plows.....	-----	-----
Sweepers.....	-----	-----
Miscellaneous cars and engines.....	3	-----
Totals.....	12	4
Cars with electric equipment.....	9	4
Cars without electric equipment.....	3	-----

NOTE.—No statistics reported for Glendale and Eagle Rock Railway Company, Monterey and Del Monte Heights Railway Company and Sacramento Valley Electric Railroad Company.



—Continued.

COMPANIES OF CALIFORNIA ON JUNE 30, 1913.

Sacramento Terminal Company <sup>1</sup>	Sacramento and Woodland Railroad Company <sup>1</sup>	San Diego Electric Railway Company	San Francisco. Napa and Calis- toga Railway Company	San Francisco- Oakland Terminal Railways	San Jose Railroads
-----	-----	3	10	289	-----
-----	-----	7	-----	2	4
-----	-----	100	3	120	53
-----	-----	-----	17	15	2
-----	-----	-----	-----	-----	-----
-----	-----	-----	2	-----	-----
-----	-----	-----	-----	1	-----
-----	-----	6	1	48	-----
-----	-----	-----	-----	-----	-----
-----	-----	2	1	25	1
-----	-----	118	34	480	60
-----	-----	110	13	394	55
-----	-----	8	21	86	5

—Concluded.

COMPANIES OF CALIFORNIA ON JUNE 30, 1913.

Stockton Electric Railroad Company	Tidewater Southern Railway Company	Union Traction Company	United Railroads of San Francisco	Visalia Electric Railroad Company	Total
-----	-----	1	362	5	845
-----	-----	4	1	-----	37
21	1	14	390	-----	2,219
-----	-----	-----	-----	-----	1,540
-----	-----	-----	-----	-----	-----
-----	-----	-----	-----	-----	32
-----	-----	-----	-----	-----	3
-----	-----	-----	-----	3	49
1	-----	2	72	1	291
-----	-----	-----	-----	-----	-----
1	1	-----	11	1	119
23	2	21	836	10	5,135
23	-----	18	771	7	3,233
-----	2	3	65	3	1,902

TABLE

STATEMENT OF MILEAGE STATISTICS OF ELECTRIC RAILWAY

	Bakersfield and Kern Electric Rail- way Company	California Street Cable Railroad Company
<i>Line Owned.</i>		
Miles of single track.....	5.81	11
Miles of second track.....	4.63	
Miles of sidings and turnouts.....		
Totals .....	10.44	11
<i>Line of Proprietary Companies.</i>		
Miles of single track.....		
Miles of second track.....		
Miles of sidings and turnouts.....		
Totals .....		
<i>Line Operated Under Lease.</i>		
Miles of single track.....		
Miles of second track.....		
Miles of sidings and turnouts.....		
Totals .....		
<i>Line Operated Under Contract.</i>		
Miles of single track.....		
Miles of second track.....		
Miles of sidings and turnouts.....		
Totals .....		
<i>Line Operated Under Trackage Rights.</i>		
Miles of single track.....		
Miles of second track.....		
Miles of sidings and turnouts.....		
Totals .....		
<i>Total Mileage Operated.</i>		
Miles of single track.....	5.81	11
Miles of second track.....	4.63	
Miles of sidings and turnouts.....		
Totals .....	10.44	11
<i>New Line Constructed During Year.</i>		
Miles of single track.....		
Miles of second track.....		
Miles of sidings and turnouts.....		
Totals .....		

<sup>1</sup>Leased to Fresno Traction Company.

## No. 6.

COMPANIES OPERATING IN CALIFORNIA ON JUNE 30, 1913.

Central California Traction Company	Fresno City Railway Company <sup>1</sup>	Fresno Traction Company	Humboldt Transit Company	Los Angeles Railway Corporation	Monterey and Del Monte Heights Rail- way Company
58.384	5.16	11.72	11.27	166.05	3
7.860	2.63	9.75		157.77	
12.264	.79	.53	1.73	15.80	
78.508	8.58	22	13	339.62	3
		5.16			
		2.63			
		.79			
		8.58			
				9.13	
				9.18	
				7.83	
				26.14	
				5.25	
				5.24	
				10.49	
58.384		16.88	11.27	180.43	3
7.860		12.38		172.19	
12.264		1.32	1.73	23.63	
78.508		30.58	13	376.25	3
		2.24			
		1.88			
		4.12			

TABLE No. 6

STATEMENT OF MILEAGE STATISTICS OF ELECTRIC RAILWAY

	Monterey and Pacific Grove Railway Company	Nevada County Traction Company
<i>Line Owned.</i>		
Miles of single track.....	5.50	5.659
Miles of second track.....		
Miles of sidings and turnouts.....		.041
Totals .....	5.50	5.7
<i>Line of Proprietary Companies.</i>		
Miles of single track.....		
Miles of second track.....		
Miles of sidings and turnouts.....		
Totals .....		
<i>Line Operated Under Lease.</i>		
Miles of single track.....		
Miles of second track.....		
Miles of sidings and turnouts.....		
Totals .....		
<i>Line Operated Under Contract.</i>		
Miles of single track.....		
Miles of second track.....		
Miles of sidings and turnouts.....		
Totals .....		
<i>Line Operated Under Trackage Rights.</i>		
Miles of single track.....		
Miles of second track.....		
Miles of sidings and turnouts.....		
Totals .....		
<i>Total Mileage Operated.</i>		
Miles of single track.....	5.50	5.659
Miles of second track.....		
Miles of sidings and turnouts.....		.041
Totals .....	5.50	5.7
<i>New Line Constructed During Year.</i>		
Miles of single track.....		
Miles of second track.....		
Miles of sidings and turnouts.....		
Totals .....		

<sup>1</sup>Includes 4.67 miles of street car track.

<sup>2</sup>Operated by Oakland, Antioch and Eastern Railway from January 1, 1913.

<sup>3</sup>Operated by Northern Electric Railway Company.



—Continued.

COMPANIES OPERATING IN CALIFORNIA ON JUNE 30, 1913.

Northern Electric Railway Company	Northern Electric Railway Company (Marysville and Colusa Branch) <sup>3</sup>	Oakland and Antioch Railway <sup>2</sup>	Oakland, Antioch and Eastern Railway	Pacific Electric Railway Company	Peninsular Railway Company
<sup>1</sup> 115.04	22.38	34.63	55.79	526.114	82.53
7.70				307.843	8.85
20.32	1.90	1.10		96.693	4.45
143.06	24.28	35.73	55.79	930.050	95.83
6.19			34.63	28.532	1.62
					.57
			1.10	17.655	.18
6.19			35.73	46.187	2.37
				5.891	
				.329	
				6.220	
					.91
					.91
121.23	22.38	34.63	90.42	560.537	56.75
7.70				307.843	9.42
20.32	1.90	1.10	1.10	114.077	4.63
149.25	24.28	35.73	91.52	982.457	70.80
2.86		16	16	31.120	1.63
.07				4.969	.80
1.76		.50	.50	7.672	.79
4.69		16.50	16.50	43.761	3.22

TABLE No. 6

STATEMENT OF MILEAGE STATISTICS OF ELECTRIC RAILWAY

	Petaluma and Santa Rosa Railway Company	Point Loma Railroad Company	Presidio and Ferries Railway Company
<i>Line Owned.</i>			
Miles of single track.....	37.10	8.19	8.6723
Miles of second track.....			
Miles of sidings and turnouts.....	5.86	.26	.3766
Totals .....	42.96	8.45	9.0499
<i>Line of Proprietary Companies.</i>			
Miles of single track.....			
Miles of second track.....			
Miles of sidings and turnouts.....			
Totals .....			
<i>Line Operated Under Lease.</i>			
Miles of single track.....			
Miles of second track.....			
Miles of sidings and turnouts.....			
Totals .....			
<i>Line Operated Under Contract.</i>			
Miles of single track.....			
Miles of second track.....			
Miles of sidings and turnouts.....			
Totals .....			
<i>Line Operated Under Trackage Rights.</i>			
Miles of single track.....			
Miles of second track.....			
Miles of sidings and turnouts.....			
Totals .....			
<i>Total Mileage Operated.</i>			
Miles of single track.....	37.10	8.19	8.6733
Miles of second track.....			
Miles of sidings and turnouts.....	5.86	.26	.3766
Totals .....	42.96	8.45	9.0499
<i>New Line Constructed During Year</i>			
Miles of single track.....	5.50		
Miles of second track.....			
Miles of sidings and turnouts.....	.13		
Totals .....	5.63		

<sup>1</sup>Operated by Northern Electric Railway Company.

—Continued.

COMPANIES OPERATING IN CALIFORNIA ON JUNE 30, 1913.

Sacramento Gas and Electric Railway Company	Sacramento Terminal Company <sup>1</sup>	Sacramento and Woodland Railroad Company <sup>1</sup>	San Diego Electric Railway Company	San Francisco, Napa and Calistoga Railway Company	San Francisco- Oakland Terminal Railways.
22.49	6.19	17.11	38.87	41.596	148.99
15.51			22.27		87.91
1.79		2	2.35	2.926	19.28
39.82	6.19	19.11	63.49	44.522	256.18
2.21					
2.21					
24.70		17.11	38.87	41.596	148.99
15.54			22.27		87.91
1.79		.2	2.35	2.926	19.28
42.03		19.11	63.49	44.522	256.18
.93			.81		5.74
.90			1.82		4.57
		.61	.35		1.06
1.83		.61	2.98		11.37

TABLE No. 6

## STATEMENT OF MILEAGE STATISTICS OF ELECTRIC RAILWAY

	San Jose Railroads	Santa Barbara Consolidated Railroad Company	South San Francisco Railroad and Power Company
<i>Line Owned.</i>			
Miles of single track.....	27.55	5.62	3.84
Miles of second track.....	11.75		
Miles of sidings and turnouts.....	2.59	.34	.18
Totals .....	41.89	5.96	4.02
<i>Line of Proprietary Companies.</i>			
Miles of single track.....			
Miles of second track.....			
Miles of sidings and turnouts.....			
Totals .....			
<i>Line Operated Under Lease.</i>			
Miles of single track.....			
Miles of second track.....			
Miles of sidings and turnouts.....			
Totals .....			
<i>Line Operated Under Contract.</i>			
Miles of single track.....			
Miles of second track.....			
Miles of sidings and turnouts.....			
Totals .....			
<i>Line Operated Under Trackage Rights.</i>			
Miles of single track.....			
Miles of second track.....			
Miles of sidings and turnouts.....			
Totals .....			
<i>Total Mileage Operated.</i>			
Miles of single track.....	27.55	5.62	3.84
Miles of second track.....	11.75		
Miles of sidings and turnouts.....	2.59	.34	.18
Totals .....	41.89	5.96	4.02
<i>New Line Constructed During Year</i>			
Miles of single track.....			
Miles of second track.....			
Miles of sidings and turnouts.....			
Totals .....			

NOTE.—No statistics reported for Glendale and Eagle Rock Railway Company and Sacramento Valley Electric Railroad Company.



—Concluded.

COMPANIES OPERATING IN CALIFORNIA ON JUNE 30, 1913.

Stockton Electric Railroad Company	Tidewater Southern Railway Company	Union Traction Company	United Railroads of San Francisco	Visalia Electric Railroad Company	Total
7.29	35.20	11.71	134.65	23.48	1,698.5863
7.29		2.05	109.543		763.3860
.40	.85	.91	9.502	5.84	210.4726
14.98	36.05	14.67	253.695	29.32	2,672.4449
			9.685		85.817
			7.492		10.692
			.404		20.129
			17.581		116.638
				10.75	27.981
					9.180
				5.88	14.039
				16.63	51.200
	1.05				7.21
					5.24
	1.05				12.45
7.29	31.85	11.71	144.335	34.23	1,775.5343
7.29		2.05	117.035		785.8680
.40	.85	.91	9.906	11.72	243.8506
14.98	32.70	14.67	271.276	45.95	2,805.2529
1.04	30.80			1.29	115.960
1.04					16.049
.40	.85			.48	15.102
2.48	31.65			1.77	147.111

TABLE No. 7

STATEMENT SHOWING NUMBER OF PASSENGERS CARRIED, NUMBER  
ELECTRIC RAILWAY COMPANIES DURING

	Presidio and Ferries Railway Company <sup>1</sup>	Sacramento Gas and Electric Railway Company
<i>Passengers.</i>		
Number carried .....		11,580,981
Killed .....		
Injured .....		17
Totals .....		17
<i>Employees.</i>		
Number employed .....		264
Killed .....		
Injured .....		3
Totals .....		3
<i>Other persons.</i>		
Killed .....		
Injured .....		5
Totals .....		5
Total number of passengers, employees and other persons killed and injured.....		25

<sup>1</sup>No records kept.<sup>2</sup>Operated by Northern Electric Railway Company.

TABLE No. 7

STATEMENT SHOWING NUMBER OF PASSENGERS CARRIED, NUMBER  
ELECTRIC RAILWAY COMPANIES DURING

	Santa Barbara Consolidated Railroad Company	South San Francisco Railroad and Power Company
<i>Passengers.</i>		
Number carried .....	1,497,942	434,778
Killed .....		
Injured .....	5	6
Totals .....	5	6
<i>Employees.</i>		
Number employed .....	38	12
Killed .....		
Injured .....	1	1
Totals .....	1	1
<i>Other persons.</i>		
Killed .....		1
Injured .....		
Totals .....		1
Total number of passengers, employees and other persons killed and injured.....	6	8

NOTE.—No statistics reported for Glendale and Eagle Rock Railway Company, Monterey and Del Monte Heights Railway, and Sacramento Valley Electric Railroad Company.

—Continued.

OF EMPLOYEES, AND NUMBER OF PERSONS KILLED AND INJURED BY  
THE FISCAL YEAR ENDING JUNE 30, 1913.

Sacramento Terminal Company <sup>2</sup>	Sacramento and Woodland Railroad Company <sup>2</sup>	San Diego Electric Railway Company	San Francisco. Napa and Calis- toga Railway Company	San Francisco- Oakland Terminal Railways	San Jose Railroads
	477,908	26,013,307	667,423	98,272,591	8,846,378
		3	12	3	2
	2	210	74	59	7
	2	213	86	62	9
	<sup>1</sup>	731	109	1,850	126
	1		3	1	
	1	6	11	47	1
	2	6	14	48	1
	1	1	1	14	3
		49		104	15
	1	50	1	118	18
	5	269	101	228	28

—Concluded.

OF EMPLOYEES, AND NUMBER OF PERSONS KILLED AND INJURED BY  
THE FISCAL YEAR ENDING JUNE 30, 1913.

Stockton Electric Railroad Company	Tidewater Southern Railway Company	Union Traction Company	United Railroads of San Francisco	Visalia Electric Railroad Company	Total
4,410,102	18,653	2,355,007	245,181,605	154,512	683,228,905
			10		36
4		5	3,722		4,822
4		5	3,732		4,858
95	20	39	3,287	36	17,410
			2		20
			182	1	1,050
			184	1	1,070
		2	16		119
3		1			5,032
3		3	16		5,151
7		8	3,932	1	11,079

TABLE No. 7

STATEMENT SHOWING NUMBER OF PASSENGERS CARRIED, NUMBER  
ELECTRIC RAILWAY COMPANIES DURING

	Presidio and Ferries Railway Company <sup>1</sup>	Sacramento Gas and Electric Railway Company
<i>Passengers.</i>		
Number carried -----		11,580,981
Killed -----		
Injured -----		17
Totals -----		17
<i>Employees.</i>		
Number employed -----		264
Killed -----		
Injured -----		3
Totals -----		3
<i>Other persons.</i>		
Killed -----		
Injured -----		5
Totals -----		5
Total number of passengers, employees and other persons killed and injured -----		25

<sup>1</sup>No records kept.<sup>2</sup>Operated by Northern Electric Railway Company.

TABLE No. 7

STATEMENT SHOWING NUMBER OF PASSENGERS CARRIED, NUMBER  
ELECTRIC RAILWAY COMPANIES DURING

	Santa Barbara Consolidated Railroad Company	South San Francisco Railroad and Power Company
<i>Passengers.</i>		
Number carried -----	1,497,942	434,778
Killed -----		
Injured -----	5	6
Totals -----	5	6
<i>Employees.</i>		
Number employed -----	38	12
Killed -----		
Injured -----	1	1
Totals -----	1	1
<i>Other persons.</i>		
Killed -----		1
Injured -----		
Totals -----		1
Total number of passengers, employees and other persons killed and injured -----	6	8

NOTE.—No statistics reported for Glendale and Eagle Rock Railway Company, Monterey and Del Monte Heights Railway, and Sacramento Valley Electric Railroad Company.



—Continued.

OF EMPLOYEES, AND NUMBER OF PERSONS KILLED AND INJURED BY  
THE FISCAL YEAR ENDING JUNE 30, 1913.

Sacramento Terminal Company <sup>2</sup>	Sacramento and Woodland Railroad Company <sup>2</sup>	San Diego Electric Railway Company	San Francisco, Napa and Calis- toga Railway Company	San Francisco- Oakland Terminal Railways	San Jose Railroads
	477,908	26,013,307	667,423	98,272,591	8,846,378
		3	12	3	2
	2	210	74	59	7
	2	213	86	62	9
	1	731	109	1,850	126
	1		3	1	
	1	6	11	47	1
	2	6	14	48	1
	1	1	1	14	3
		49		104	15
	1	50	1	118	18
	5	269	101	228	28

—Concluded.

OF EMPLOYEES, AND NUMBER OF PERSONS KILLED AND INJURED BY  
THE FISCAL YEAR ENDING JUNE 30, 1913.

Stockton Electric Railroad Company	Tidewater Southern Railway Company	Union Traction Company	United Railroads of San Francisco	Visalia Electric Railroad Company	Total
4,410,102	18,653	2,355,007	245,181,605	154,512	683,228,905
			10		36
4		5	3,722		4,822
4		5	3,732		4,858
95	20	39	3,287	36	17,410
			2		20
			182	1	1,050
			184	1	1,070
		2	16		119
3		1			5,032
3		3	16		5,151
7		8	3,932	1	11,079



# WATER COMPANIES.

TABLES NOS. 1 TO 4, INCLUSIVE.

TABLE

ABSTRACT OF BALANCE SHEETS OF WATER COMPANIES OPER

	American Canyon Water Company	American Irrigation Company	Antelope Creek and Red Bluff Water Company
ASSETS.			
Fixed capital installed prior to January 1, 1913.....	\$893,971 66	\$258,246 42	\$134,834 55
Fixed capital installed subsequent to January 1, 1913.....	897 93	2,187 30	364 71
Total fixed capital.....	\$894,869 59	\$260,433 72	\$135,199 26
Cash and deposits.....	642 32	605 66	1,764 16
Notes receivable.....	1,992 40	217 00	-----
Accounts receivable.....	4,012 48	7,508 77	-----
Other current assets.....	11 81	-----	-----
Investments.....	-----	-----	-----
Working assets.....	-----	-----	-----
Prepaid expenses.....	-----	-----	-----
Unamortized discount on securities and expenses.....	-----	-----	-----
Miscellaneous.....	-----	-----	-----
Corporate deficit.....	37,652 49	49,718 59	21,510 25
Totals.....	\$939,181 09	\$318,483 74	\$158,473 67
LIABILITIES.			
Capital stock.....	\$500,011 00	\$126,007 00	\$150,000 00
Funded debt.....	300,000 00	100,000 00	6,000 00
Invested in plant.....	-----	-----	-----
Notes payable.....	88,583 68	30,000 00	2,000 09
Accounts payable.....	-----	12,456 09	-----
Interest and taxes accrued.....	39,011 08	11,185 86	266 66
Miscellaneous.....	-----	-----	-----
Reserves.....	11,575 33	38,834 79	207 01
Income invested since December 31, 1912, in fixed capital.....	-----	-----	-----
Corporate surplus.....	-----	-----	-----
Totals.....	\$939,181 09	\$318,483 74	\$158,473 67



## No. 1.

ATING IN CALIFORNIA FOR YEAR ENDING DECEMBER 31, 1913.

The Anderson Canal Company	Artesian Water Company	Auburn Springs Water Works	Bakersfield Water Company	Baldwin Park Domestic Water Company	Baldwin Park Water Company
\$7,834 83	\$1,104,374 47	\$2,500 00	\$118,178 84	\$16,846 37	\$7,443 07
-----	-----	-----	7,034 22	536 36	-----
\$7,834 83	\$1,104,374 47	\$2,500 00	\$125,213 06	\$17,382 73	\$7,443 07
-----	1,298 17	-----	2,125 97	241 94	113 19
-----	-----	-----	-----	-----	288 00
2,755 88	5,288 00	-----	785 66	140 12	58 35
-----	-----	-----	145 44	-----	-----
-----	-----	-----	41,429 34	46 75	-----
-----	-----	-----	-----	-----	-----
38,115 17	-----	-----	253 85	-----	-----
4,050 00	75 00	-----	-----	-----	-----
-----	-----	-----	1,076 55	-----	475 82
\$52,755 88	\$1,111,035 64	\$2,500 00	\$171,029 87	\$17,811 54	\$8,378 43
\$50,000 00	\$647,500 00	-----	\$100,000 00	-----	\$7,578 43
-----	96,506 00	-----	45,000 00	-----	-----
-----	-----	\$2,500 00	-----	\$10,739 59	-----
-----	-----	-----	8,000 00	5,395 00	800 00
-----	25 00	-----	7,301 49	3 54	-----
-----	-----	-----	279 00	-----	-----
-----	642 01	-----	53 03	-----	-----
-----	-----	-----	10,396 35	1,673 41	-----
-----	-----	-----	-----	-----	-----
2,755 88	366,368 63	-----	-----	-----	-----
\$52,755 88	\$1,111,035 64	\$2,500 00	\$171,029 87	\$17,811 54	\$8,378 43

TABLE NO. 1

## ABSTRACT OF BALANCE SHEETS OF WATER COMPANIES OPER

	Beach Land Water System	Bear Gulch Water Company	Beaverwyck Land Company
<b>ASSETS.</b>			
Fixed capital installed prior to January 1, 1913.....	\$9,833 61	\$767,801 15	\$12,275 73
Fixed capital installed subsequent to January 1, 1913.....		6,570 11	2,140 26
Total fixed capital.....	\$9,833 61	\$774,371 26	\$14,415 99
Cash and deposits.....	304 74	1,095 99	
Notes receivable.....		68 75	
Accounts receivable.....	10 00	14,493 52	
Other current assets.....			
Investments.....			
Working assets.....			
Prepaid expenses.....			
Unamortized discount on securities and expenses.....			
Miscellaneous.....			
Corporate deficit.....			
Totals.....	\$10,148 35	\$790,029 52	\$14,415 99
<b>LIABILITIES.</b>			
Capital stock.....		\$500,000 00	
Funded debt.....		205,000 00	
Invested in plant.....	\$10,115 85		\$14,415 99
Notes payable.....			
Accounts payable.....	32 50	1,084 65	
Interest and taxes accrued.....		5,125 00	
Miscellaneous.....			
Reserves.....		5,752 34	
Income invested since December 31, 1912, in fixed capital.....			
Corporate surplus.....		73,067 53	
Totals.....	\$10,148 35	\$790,029 52	\$14,415 99

—Continued.

ATING IN CALIFORNIA FOR YEAR ENDING DECEMBER 31, 1913.

Bell Water Company	Belvedere Land Company	Benicia Water Company	Black Diamond Water Company	J. W. Bloom	Bradbury Estate Company
\$23,969 79	\$90,797 68	\$493,834 15	\$52,864 55	\$48,982 55	\$18,125 72
-----	1,568 11	3,129 68	389 31	-----	1,653 39
\$23,969 79 597 45	\$92,365 79 3 33	\$496,963 83 6,717 59	\$53,253 86 287 98	\$48,982 55	\$19,779 11
-----	-----	-----	-----	-----	-----
49 90	3,524 56	2,409 99	2,946 50	139 95	-----
-----	261,340 36	-----	-----	-----	-----
-----	332,870 91	16,027 27	-----	617 63	-----
-----	3,935 12	165 29	157 44	-----	-----
-----	-----	43,400 00	10,000 00	-----	-----
-----	79,873 60	-----	2,085 33	-----	-----
-----	-----	-----	-----	-----	-----
\$24,617 14	\$773,913 67	\$565,683 97	\$68,731 11	\$49,740 13	\$19,779 11
\$10,581 50	\$500,000 00	\$343,400 00	\$50,000 00	-----	-----
-----	75,000 00	175,000 00	-----	-----	-----
-----	72,145 05	-----	-----	\$47,584 13	\$18,799 11
-----	3,080 09	712 65	5,477 71	1,567 00	-----
195 78	-----	1,333 32	1,642 69	589 00	-----
-----	47 10	-----	-----	-----	-----
12,865 64	58,533 77	28,951 00	4,163 43	-----	980 00
-----	1,568 11	-----	-----	-----	-----
974 22	63,539 55	16,287 00	7,447 28	-----	-----
-----	-----	-----	-----	-----	-----
\$24,617 14	\$773,913 67	\$565,683 97	\$68,731 11	\$49,740 13	\$19,779 11

TABLE No. 1

ABSTRACT OF BALANCE SHEETS OF WATER COMPANIES OPER

	Buena Vista Canal Company	The Central Canal Company	California- Michigan Land and Water Company
ASSETS.			
Fixed capital installed prior to January 1, 1913.....	\$32,567 38	\$511,349 61	\$37,489 68
Fixed capital installed subsequent to January 1, 1913.....			
Total fixed capital.....	\$32,567 38	\$511,349 61	\$37,489 68
Cash and deposits.....			2,707 10
Notes receivable.....			
Accounts receivable.....	1,683 51	6,579 59	65,190 32
Other current assets.....			
Investments.....			343,112 95
Working assets.....		3,858 84	25,950 00
Prepaid expenses.....			
Unamortized discount on securities and expenses.....	223,259 62	2,488,650 39	
Miscellaneous.....	4,173 00		
Corporate deficit.....		2,134 85	
Totals.....	\$261,683 51	\$3,012,573 28	\$474,450 05
LIABILITIES.			
Capital stock.....	\$260,000 00	\$3,000,000 00	\$300,000 00
Funded debt.....			
Invested in plant.....			
Notes payable.....			139,238 89
Accounts payable.....		12,573 28	5,756 22
Interest and taxes accrued.....			
Miscellaneous.....			27,405 00
Reserves.....			
Income invested since December 31, 1912, in fixed capital.....			
Corporate surplus.....	1,683 51		12,049 94
Totals.....	\$261,683 51	\$3,012,573 28	\$474,450 05

<sup>1</sup>Includes surplus of land department of \$1,883.28.



—Continued.

ATING IN CALIFORNIA FOR YEAR ENDING DECEMBER 31, 1913.

Calistoga Water Company	Callahan Water System	Campbell Water Company	Cherry Canon Water Company	Chico Water Supply Company	City Water Company of Banning
\$52,914 50	\$5,000 00	\$12,289 65	\$205,639 96	\$176,831 24	-----
2,143 10	-----	1,666 54	3,718 29	12,041 44	\$4,566 76
\$55,057 60	\$5,000 00	\$13,956 19	\$209,358 25	\$188,872 68	\$4,566 76
320 14	-----	73 11	151 43	670 77	611 04
987 06	-----	1 90	505 41	8 00	484 19
-----	-----	-----	-----	457 75	-----
-----	-----	-----	-----	-----	10,800 00
-----	-----	579 63	-----	459 24	-----
-----	-----	-----	-----	-----	-----
-----	-----	-----	-----	-----	-----
-----	-----	-----	-----	-----	-----
\$56,364 80	\$5,000 00	\$14,610 83	\$210,015 09	\$190,468 44	\$16,461 99
\$50,100 00	-----	\$6,000 00	\$200,000 00	\$100,000 00	\$14,849 83
-----	\$5,000 00	-----	-----	62,000 00	-----
1,500 00	-----	1,200 00	-----	600 00	-----
1,699 59	-----	-----	2,242 07	586 11	305 88
-----	-----	-----	-----	-----	-----
1,140 67	-----	700 00	-----	-----	-----
-----	-----	-----	-----	-----	-----
1,924 54	-----	6,710 83	7,773 02	27,282 33	1,306 28
\$56,364 80	\$5,000 00	\$14,610 83	\$210,015 09	\$190,468 44	\$16,461 99

TABLE No. 1

ABSTRACT OF BALANCE SHEETS OF WATER COMPANIES OPER

	Citizens Land and Water Company of Upland	Claremont Domestic Water Company	Citizens Water Company of Niles
<b>ASSETS.</b>			
Fixed capital installed prior to January 1, 1913.....	\$42,758 45	\$87,605 85	\$7,752 07
Fixed capital installed subsequent to January 1, 1913.....	1,315 13	1,064 28	941 38
Total fixed capital.....	\$44,073 58	\$88,670 13	\$8,693 45
Cash and deposits .....	547 49	2,157 66	704 98
Notes receivable .....		364 50	
Accounts receivable .....	947 45	923 88	102 85
Other current assets .....			
Investments .....			
Working assets .....	511 25	573 77	33,512 08
Prepaid expenses .....			
Unamortized discount on securities and expenses .....			8,255 00
Miscellaneous .....			
Corporate deficit .....			
Totals .....	\$46,079 77	\$92,689 94	\$51,268 36
<b>LIABILITIES.</b>			
Capital stock .....	\$5,000 00	\$70,050 00	\$50,000 00
Funded debt .....	15,000 00		
Invested in plant .....			
Notes payable .....	12,300 00	8,500 00	
Accounts payable .....	406 70	1,425 49	
Interest and taxes accrued .....	352 50	148 71	
Miscellaneous .....		2,101 50	
Reserves .....		2,020 10	
Income invested since December 31, 1912, in fixed capital .....			
Corporate surplus .....	13,020 57	8,444 14	1,268 36
Totals .....	\$46,079 77	\$92,689 94	\$51,268 36

—Continued.

ATING IN CALIFORNIA FOR YEAR ENDING DECEMBER 31, 1913.

Citizens Water Company of San Jacinto	City Water Company of Ocean Park	Clara Vista Water Company	Coachella Water Company	Coalinga Consolidated Water Company	Coalinga Domestic Water Company
\$1,606,048 91	\$288,701 30	\$87,975 75	\$15,000 00	\$297,791 15	\$2,805 25
29,493 88	22,291 04	-----	-----	1,504 79	-----
\$1,635,542 79	\$310,992 34	\$87,975 75	\$15,000 00	\$299,295 94	\$2,805 25
250 19	437 66	-----	106 75	1,455 03	145 62
905 00	-----	-----	-----	-----	-----
988 05	-----	-----	-----	5,378 66	7 45
113 94	-----	-----	-----	-----	-----
1,625 12	-----	-----	-----	47,973 00	-----
100,000 00	4,130 75	-----	-----	-----	-----
98 30	-----	-----	-----	-----	-----
-----	101,000 00	-----	-----	-----	-----
-----	9,000 00	-----	-----	-----	-----
33,831 89	-----	2,024 25	-----	3,809 77	237 06
\$1,773,355 28	\$425,560 75	\$90,000 00	\$15,106 75	\$357,912 40	\$3,195 38
\$1,400,000 00	\$200,000 00	\$30,000 00	\$15,000 00	\$250,000 00	\$2,687 00
300,000 00	150,000 00	60,000 00	-----	100,000 00	-----
-----	16,000 00	-----	-----	-----	-----
69,205 11	-----	-----	-----	3,597 75	-----
4,034 81	705 00	-----	-----	235 42	-----
-----	-----	-----	-----	-----	-----
115 36	9,000 00	-----	-----	4,079 23	508 38
-----	49,855 75	-----	106 75	-----	-----
\$1,773,355 28	\$425,560 75	\$90,000 00	\$15,106 75	\$357,912 40	\$3,195 38

TABLE NO. 1

ABSTRACT OF BALANCE SHEETS OF WATER COMPANIES OPER

	Colegrove Water Company	Compton Water and Lighting Company	Coneland Water Company
ASSETS.			
Fixed capital installed prior to Jan- uary 1, 1913.....	\$34,028 73	\$7,086 12	\$192,923 30
Fixed capital installed subsequent to January 1, 1913.....	832 63	448 68	22,859 77
Total fixed capital.....	\$34,861 36	\$7,534 80	\$215,783 07
Cash and deposits.....		348 61	
Notes receivable.....			
Accounts receivable.....			
Other current assets.....			
Investments.....			
Working assets.....	2,630 00		
Prepaid expenses.....			
Unamortized discount on securities and expenses.....			
Miscellaneous.....			
Corporate deficit.....	272 76		
Totals.....	\$37,764 12	\$7,883 41	\$215,783 07
LIABILITIES.			
Capital stock.....	\$30,000 00	\$5,600 00	\$200,000 00
Funded debt.....			
Invested in plant.....			
Notes payable.....		300 00	
Accounts payable.....	6,738 12		
Interest and taxes accrued.....			
Miscellaneous.....			10,017 75
Reserves.....	1,026 00	330 00	
Income invested since December 31, 1912, in fixed capital.....			
Corporate surplus.....		1,653 41	5,765 32
Totals.....	\$37,764 12	\$7,883 41	\$215,783 07

<sup>1</sup>Credit item.



—Continued.

ATING IN CALIFORNIA DURING YEAR ENDING DECEMBER 31, 1913.

Conservative Realty Company	Consolidated Canal Company	Consolidated Water Company of Pomona	Consumers' Water Company	Consolidated Securities Company	J. B. H. Cooper Water Company
\$103,789 51	\$156,759 35	\$519,937 63	\$13,862 77	-----	\$5,000 00
6,837 13	-----	15,391 67	2,909 75	\$202,947 88	183 75
\$110,626 64	\$156,759 35	\$535,329 30	\$16,772 52	\$202,947 88	\$5,183 75
150 59	3,396 43	487 25	1,237 33	47 97	53 16
-----	43,541 33	9,600 00	-----	-----	-----
1,898 04	45,806 08	5,989 93	1,886 66	4,891 23	-----
-----	-----	-----	-----	-----	-----
3,000 00	-----	-----	-----	6,568 40	-----
1,158 93	575,230 00	1,236 56	2,970 07	-----	-----
147 53	-----	-----	15 15	-----	-----
-----	-----	217,838 45	13,125 95	-----	-----
57 35	-----	-----	-----	-----	-----
18,178 21	-----	-----	-----	2,940 23	-----
-----	-----	-----	-----	-----	-----
\$135,016 11	\$824,733 19	\$770,481 49	\$33,533 02	\$217,395 71	\$5,236 91
-----	-----	-----	-----	-----	-----
\$100,000 00	\$500,000 00	\$500,000 00	\$25,000 00	-----	\$5,000 00
-----	120,000 00	175,000 00	-----	-----	-----
-----	-----	68,994 85	1,250 00	\$200,000 00	-----
35,016 11	6,944 00	11,997 09	3,865 00	14,531 54	-----
-----	-----	-----	-----	2,864 17	-----
-----	84,539 48	7,718 12	3,418 02	-----	200 00
-----	-----	-----	-----	-----	-----
-----	113,249 71	6,771 43	-----	-----	36 91
-----	-----	-----	-----	-----	-----
\$135,016 11	\$824,733 19	\$770,481 49	\$33,533 02	\$217,395 71	\$5,236 91

TABLE No. 1

ABSTRACT OF BALANCE SHEETS OF WATER COMPANIES OPER

	Corcoran Water and Gas Company	Corona City Water Company	Coronado Water Company
<b>ASSETS.</b>			
Fixed capital installed prior to Jan- uary 1, 1913.....	\$14,058 67	\$99,045 35	\$397,084 63
Fixed capital installed subsequent to January 1, 1913.....		4,369 67	13,129 08
Total fixed capital.....	\$14,058 67	\$103,415 02	\$410,213 71
Cash and deposits.....	106 74	246 40	342 28
Notes receivable.....			
Accounts receivable.....		2,067 44	6,996 62
Other current assets.....			
Investments.....			
Working assets.....		726 60	10,414 74
Prepaid expenses.....			486 34
Unamortized discount on securities and expenses.....			
Miscellaneous.....			812 75
Corporate deficit.....		39,630 27	215,823 62
Totals.....	\$14,165 41	\$146,085 73	\$645,090 06
<b>LIABILITIES.</b>			
Capital stock.....	\$11,208 00	\$75,000 00	\$480,000 00
Funded debt.....		50,000 00	
Invested in plant.....			
Notes payable.....	500 00	11,500 00	
Accounts payable.....	54 25	7,078 95	156,820 33
Interest and taxes accrued.....		106 78	
Miscellaneous.....			
Reserves.....		2,400 00	8,269 73
Income invested since December 31, 1912, in fixed capital.....			
Corporate surplus.....	2,406 16		
Totals.....	\$14,165 41	\$146,085 73	\$645,090 06

—Continued.

ATING IN CALIFORNIA DURING YEAR ENDING DECEMBER 31, 1913.

Crocker Tract Water System	Cottonwood Irrigation and Mining Company	Corina City Water Company	Crocker- Huffman Land and Water Company	Crown Water Company	Crystal Springs Water Company of Sawtelle
\$30,604 63	\$4,000 00	\$111,787 50	\$5,156,507 05	\$9,551 42	\$24,869 00
-----	-----	3,352 12	57,642 61	-----	-----
\$30,604 63	\$4,000 00	\$115,139 62	\$5,214,149 66	\$9,551 42	\$24,869 00
-----	20 10	1,139 00	13,345 13	-----	34 22
-----	573 70	555 23	241,718 87	-----	-----
-----	-----	-----	247,878 66	-----	-----
-----	-----	-----	502,000 00	-----	-----
-----	-----	862 84	79,859 15	-----	-----
-----	-----	-----	15,567 44	-----	-----
-----	2,400 00	185,358 12	-----	-----	-----
-----	-----	31,502 46	20,164 64	-----	697 59
\$30,604 63	\$6,993 80	\$334,557 27	\$6,334,683 55	\$9,551 42	\$25,600 81
-----	\$6,400 00	\$150,000 00	\$3,000,000 00	\$9,490 00	\$15,480 00
-----	-----	135,000 00	905,000 00	-----	-----
\$30,604 63	-----	6,500 00	-----	-----	-----
-----	22 90	24,197 83	7,861 37	-----	-----
-----	-----	18,859 44	343,965 12	-----	10,120 81
-----	-----	-----	1,709,623 06	-----	-----
-----	-----	-----	368,234 00	-----	-----
-----	570 90	-----	-----	61 42	-----
\$30,604 63	\$6,993 80	\$334,557 27	\$6,334,683 55	\$9,551 42	\$25,600 81

TABLE No. 1

ABSTRACT OF BALANCE SHEETS OF WATER COMPANIES OPER

	Cuyamaca Water Company	Cucamonga Water Company	Danville Water Company
ASSETS.			
Fixed capital installed prior to January 1, 1913.....	\$848,401 56	\$427,348 57	\$6,000 00
Fixed capital installed subsequent to January 1, 1913.....	53,117 34	10,000 00	7,097 50
Total fixed capital.....	\$901,518 90	\$437,348 57	\$13,097 50
Cash and deposits.....	2,825 08	1,698 50	63 47
Notes receivable.....	-----	-----	-----
Accounts receivable.....	7,078 61	-----	-----
Other current assets.....	-----	-----	-----
Investments.....	-----	15,250 00	-----
Working assets.....	3,389 00	1,880 86	-----
Prepaid expenses.....	-----	-----	-----
Unamortized discount on securities and expenses.....	-----	78,661 06	-----
Miscellaneous.....	71,532 26	-----	-----
Corporate deficit.....	21,129 81	25,806 01	-----
Totals.....	\$1,007,473 66	\$560,645 00	\$13,160 97
LIABILITIES.			
Capital stock.....	-----	\$307,230 00	\$6,000 00
Funded debt.....	-----	250,000 00	-----
Invested in plant.....	\$150,000 00	-----	-----
Notes payable.....	159,208 84	3,000 00	4,500 00
Accounts payable.....	72,635 49	-----	-----
Interest and taxes accrued.....	404 67	-----	-----
Miscellaneous.....	1625,224 66	-----	2,597 50
Reserves.....	-----	415 00	-----
Income invested since December 31, 1912, in fixed capital.....	-----	-----	-----
Corporate surplus.....	-----	-----	63 47
Totals.....	\$1,007,473 66	\$560,645 00	\$13,160 97

<sup>1</sup>Capital surplus.<sup>2</sup>Assessment.<sup>3</sup>Credit item.



—Continued.

ATING IN CALIFORNIA DURING YEAR ENDING DECEMBER 31, 1913.

Davis Water Company	Del Norte Water Company	Domestic Water Company	Domestic Water Company of Santa Maria	Eagle Rock Water Company	East Sacramento Water Company
\$6,596 50	\$41,556 18	\$6,202 06	-----	\$115,948 66	\$16,094 63
-----	-----	88 61	\$89,657 68	13,114 70	1,698 09
\$6,596 50	\$41,556 18	\$6,290 67	\$89,657 68	\$129,063 36	\$17,792 72
21 28	-----	168 02	430 83	3,861 89	18 47
-----	-----	-----	-----	1,249 20	350 00
1,294 00	35 00	1,869 78	1,157 14	6,828 98	1,150 25
-----	-----	-----	-----	1,300 00	-----
125 00	-----	548 95	1,082 73	2,845 96	-----
-----	-----	-----	147 83	-----	-----
-----	-----	-----	5,573 75	-----	-----
-----	-----	-----	-----	28 30	-----
459 94	3,111 24	-----	6,259 93	-----	168 44
-----	-----	-----	-----	-----	-----
\$8,496 72	\$44,702 42	\$8,541 38	\$104,309 89	\$145,177 69	\$19,419 88
-----	-----	-----	-----	-----	-----
\$7,825 00	\$25,000 00	-----	\$25,000 00	\$114,395 50	\$7,970 00
-----	-----	-----	55,000 00	15,000 00	-----
-----	-----	\$7,277 42	-----	-----	-----
-----	500 00	-----	16,538 95	-----	3,899 10
219 47	146 24	580 00	1,083 57	2,247 51	7,550 78
2 25	-----	-----	5 82	221 26	-----
450 00	17,500 00	-----	-----	715 01	-----
-----	1,556 18	683 96	6,681 55	2,147 99	-----
-----	-----	-----	-----	-----	-----
-----	-----	-----	-----	10,450 42	-----
-----	-----	-----	-----	-----	-----
\$8,496 72	\$44,702 42	\$8,541 38	\$104,309 89	\$145,177 69	\$19,419 88

TABLE No. 1

ABSTRACT OF BALANCE SHEETS OF WATER COMPANIES OPER

	East Side Canal and Irrigation Company	Electric Water Company	East Side Canal Company
<b>ASSETS.</b>			
Fixed capital installed prior to January 1, 1913.....	\$169,261 06	\$240,252 38	\$53,659 27
Fixed capital installed subsequent to January 1, 1913.....	209 89	7,898 44	-----
Total fixed capital.....	\$169,470 95	\$248,150 82	\$53,659 27
Cash and deposits .....	-----	-----	-----
Notes receivable .....	-----	-----	-----
Accounts receivable .....	259,336 62	460 05	1,364 25
Other current assets.....	-----	-----	-----
Investments .....	-----	-----	-----
Working assets .....	103 50	-----	-----
Prepaid expenses .....	-----	-----	-----
Unamortized discount on securities and expenses .....	-----	59,047 62	-----
Miscellaneous .....	-----	<sup>1</sup> 700 00	<sup>1</sup> 446,340 73
Corporate deficit .....	150,100 75	106,655 60	9,521 51
Totals .....	\$579,011 82	\$415,014 09	\$510,885 76
<b>LIABILITIES.</b>			
Capital stock .....	\$100,000 00	\$300,000 00	\$500,000 00
Funded debt .....	-----	-----	-----
Invested in plant.....	-----	-----	-----
Notes payable .....	317,131 37	-----	10,885 76
Accounts payable .....	119,561 58	18,729 52	-----
Interest and taxes accrued.....	42,318 87	-----	-----
Miscellaneous .....	-----	-----	-----
Reserves .....	-----	96,284 57	-----
Income invested since December 31, 1912, in fixed capital.....	-----	-----	-----
Corporate surplus .....	-----	-----	-----
Totals .....	\$579,011 82	\$415,014 09	\$510,885 76

<sup>1</sup>Subscriptions to capital stock.<sup>2</sup>Credit item.

—Continued.

ATING IN CALIFORNIA DURING YEAR ENDING DECEMBER 31, 1913.

Encanto Mutual Water Company	Escalon Water and Light Company	Etna Development Company	Euclid Avenue Water Company	The Eureka Water Company	Excelsior Water and Mining Company
\$25,000 00	\$7,140 01	\$31,998 64	\$23,950 40	\$285,015 17	\$1,128,031 24
708 36	216 60	300 00	-----	6,003 10	-----
\$25,708 36	\$7,356 61	\$31,698 64	\$23,950 40	\$291,018 27	\$1,128,031 24
88 26	288 37	1,827 75	398 31	2,184 14	3,908 04
-----	46 00	-----	1,750 00	-----	16 00
829 25	6 85	1,323 80	-----	4,739 35	2,153 82
-----	-----	-----	-----	1,125 00	-----
386 97	-----	-----	-----	6,405 00	-----
-----	-----	-----	-----	784 25	-----
-----	-----	-----	-----	333,241 52	-----
-----	-----	-----	-----	-----	-----
\$27,012 84	\$7,697 83	\$34,850 19	\$26,098 71	\$639,497 53	\$1,134,109 10
-----	\$4,420 00	\$30,000 00	\$15,910 00	\$500,000 00	-----
\$24,304 31	-----	-----	5,000 00	-----	\$1,130,782 42
600 00	3,150 00	642 19	-----	-----	-----
2,108 53	54	-----	-----	15,339 39	3,326 68
-----	80 00	-----	-----	-----	-----
-----	-----	-----	-----	6,336 89	-----
-----	47 29	4,208 00	5,188 71	117,821 25	-----
\$27,012 84	\$7,697 83	\$34,850 19	\$26,098 71	\$639,497 53	\$1,134,109 10

TABLE No. 1.

ABSTRACT OF BALANCE SHEETS OF WATER COMPANIES OPERAT

	Fairmount Water Company	Fairview Land and Water Company	Felton Water Company
ASSETS.			
Fixed capital installed prior to January 1, 1913-----	\$46,642 70	\$38,690 71	\$2,525 00
Fixed capital installed subsequent to January 1, 1913 -----	2,475 39	211 20	-----
Total fixed capital -----	\$49,118 09	\$38,901 91	\$2,525 00
Cash and deposits -----	2,442 78	10,068 40	363 46
Notes receivable -----		1,658 55	-----
Accounts receivable -----	1,376 30	254 93	-----
Other current assets -----			-----
Investments -----		61,387 75	-----
Working assets -----			-----
Prepaid expenses -----	65 48		-----
Unamortized discount on securities and expenses -----			-----
Miscellaneous -----		27 85	-----
Corporate deficit -----			-----
Totals -----	\$53,002 65	\$112,299 39	\$2,888 46
LIABILITIES.			
Capital stock -----		\$60,000 00	\$2,525 00
Funded debt -----			-----
Invested in plant -----			-----
Notes payable -----		20,000 00	-----
Accounts payable -----	<sup>1</sup> \$46,903 95		-----
Interest and taxes accrued -----		623 86	-----
Miscellaneous -----			-----
Reserves -----	1,865 70	1,159 08	50 00
Income invested since December 31, 1912, in fixed capital -----			-----
Corporate surplus -----	4,233 00	30,516 45	313 46
Totals -----	\$53,002 65	\$112,299 39	\$2,888 46

<sup>1</sup>Includes amount due Pacific Building Company—holding company—\$46,642.70.

<sup>2</sup>Assessment of \$35,000.00.



—Continued.

ING IN CALIFORNIA DURING YEAR ENDING DECEMBER 31, 1913.

Fort Bragg Water Company	Fortuna Water Company	Frederick Water Company	Farmers Canal Company	Fresno Canal and Irrigation Company	Fresno City Water Company
\$69,825 25	\$13,472 22	\$6,989 69	\$14,400 00	\$1,886,168 13	\$745,371 58
-----	344 25	302 75	-----	-----	7,679 32
\$69,825 25	\$13,816 47	\$7,292 44	\$14,400 00	\$1,886,168 13	\$753,050 90
-----	30 54	46 94	-----	2,472 44	2,624 12
-----	-----	-----	-----	49,852 65	-----
-----	246 93	-----	188 10	65,784 24	5,159 35
-----	-----	-----	-----	68,291 87	-----
-----	-----	-----	-----	355,782 79	-----
-----	-----	-----	-----	1,787 35	35,649 53
-----	-----	-----	-----	-----	2,679 87
-----	-----	18,415 76	-----	-----	4,396 95
-----	-----	-----	-----	16,793 02	19,699 18
-----	-----	-----	728 02	514,885 20	-----
\$69,825 25	\$14,093 94	\$25,755 14	\$15,316 12	\$2,961,817 69	\$823,259 90
-----	\$9,945 00	\$25,000 00	\$14,400 00	\$1,250,000 00	\$350,000 00
-----	-----	-----	-----	1,692,649 69	298,000 00
\$66,825 25	-----	-----	-----	-----	-----
-----	1,600 00	-----	-----	5,000 00	-----
-----	260 42	300 00	916 12	-----	13,829 86
-----	-----	-----	-----	14,168 00	235,397 10
3,000 00	-----	-----	-----	-----	96,498 77
-----	2,348 52	455 14	-----	-----	29,534 17
\$69,825 25	\$14,093 94	\$25,755 14	\$15,316 12	\$2,961,317 69	\$823,259 90

TABLE No. 1.

ABSTRACT OF BALANCE SHEETS OF WATER COMPANIES OPERAT

	Garden Grove Water Company	Glendale Consolidated Water Company	Glendora Water Company
ASSETS.			
Fixed capital installed prior to January 1, 1913.....	\$3,250 00	\$231,523 33	\$29,994 91
Fixed capital installed subsequent to January 1, 1913.....	434 25	14,049 33	-----
Total fixed capital .....	\$3,684 25	\$245,572 66	\$29,994 91
Cash and deposits .....		1,850 53	122 12
Notes receivable .....			
Accounts receivable .....			3,649 51
Other current assets .....			
Investments .....			19,447 00
Working assets .....			5,414 61
Prepaid expenses .....			
Unamortized discount on securities and expenses .....			900 00
Miscellaneous .....			
Corporate deficit .....		8,004 85	3,595 65
Totals .....	\$3,684 25	\$255,428 04	\$63,123 80
LIABILITIES.			
Capital stock .....			\$25,000 00
Funded debt .....			22,500 00
Invested in plant .....	\$3,684 25	\$223,000 00	-----
Notes payable .....			2,190 00
Accounts payable .....		2,328 04	13,433 80
Interest and taxes accrued .....			
Miscellaneous .....		15,050 00	-----
Reserves .....		15,050 00	-----
Income invested since December 31, 1912, in fixed capital .....			
Corporate surplus .....			
Totals .....	\$3,684 25	\$255,428 04	\$63,123 80

<sup>1</sup>Subscription to capital stock.

—Continued.

ING IN CALIFORNIA DURING YEAR ENDING DECEMBER 31, 1913.

Goose Lake Canal Company	Gates Canal Company	J. A. Graves	E. E. Hall	The Hanford Water Company	Happy Valley Land and Water Company
\$5,000 00	\$2,414 97	\$63,745 42	\$9,228 46	\$132,552 08	\$260,000 00
		4,810 98	495 26	3,917 41	1,735 30
\$5,000 00	\$2,414 97	\$68,556 40	\$9,723 72	\$136,469 49	\$261,735 30
		1,904 95		672 07	183 41
					1,111 99
					2,078 96
					78 88
				25 00	40,000 00
				7 15	
					18 60
290,050 00	42,835 03			58,250 00	
<sup>1</sup> 4,950 00	<sup>1</sup> 4,750 00				
969 48	611 04				
\$300,969 48	\$50,611 04	\$70,461 35	\$9,723 72	\$195,423 71	\$305,207 14
\$300,000 00	\$50,000 00			\$163,500 00	\$70,660 00
		\$67,397 97	\$9,723 72		
				8,650 00	8,500 00
969 48	611 04	3,063 38			1,607 83
				250 60	117 28
					600 00
				4,666 47	
				18,356 64	223,722 03
\$300,969 48	\$50,611 04	\$70,461 35	\$9,723 72	\$195,423 71	\$305,207 14

TABLE No. 1.

ABSTRACT OF BALANCE SHEETS OF WATER COMPANIES OPERAT

	Hawthorne Electric and Water Company	Hercules Water Company	Heck Bros. Water Supply
ASSETS.			
Fixed capital installed prior to January 1, 1913-----	\$36,679 94	\$151,995 76	\$3,500 00
Fixed capital installed subsequent to January 1, 1913-----	2,873 81	4,193 37	-----
Total fixed capital -----	\$39,553 75	\$156,189 13	\$3,500 00
Cash and deposits -----	59 54	4,032 90	-----
Notes receivable -----		20,000 00	-----
Accounts receivable -----	515 01	2,120 32	-----
Other current assets -----			-----
Investments -----			-----
Working assets -----	184 55	623 34	-----
Prepaid expenses -----		50 99	-----
Unamortized discount on securities and expenses -----			-----
Miscellaneous -----			-----
Corporate deficit -----	15,596 54		-----
Totals -----	\$55,909 39	\$183,016 68	\$3,500 00
LIABILITIES.			
Capital stock -----	\$13,805 00	\$165,000 00	-----
Funded debt -----			-----
Invested in plant -----			\$3,500 00
Notes payable -----	32,570 33		-----
Accounts payable -----	407 24		-----
Interest and taxes accrued -----			-----
Miscellaneous -----	2,968 24		-----
Reserves -----	6,158 58	15,474 90	-----
Income invested since December 31, 1912, in fixed capital -----			-----
Corporate surplus -----		2,541 78	-----
Totals -----	\$55,909 39	\$183,016 68	\$3,500 00



—Continued.

ING IN CALIFORNIA DURING YEAR ENDING DECEMBER 31, 1913.

Hemet Town Water Company	Hill Water Company	Hawthorne Water Company	Hermosa Beach Water Company	Highland Domestic Water Company	Hollister Water Company
\$30,439 06	\$34,340 91	\$59,505 78	\$114,351 62	\$45,093 18	\$279,643 00
1,714 95	514 43	1,081 63	-----	274 76	8,852 50
\$32,154 01	\$34,855 34	\$60,587 41	\$114,351 62	\$45,367 94	\$288,495 50
4,836 54	-----	6,739 21	881 59	371 62	-----
10,070 83	-----	-----	-----	-----	-----
603 87	2,593 82	150 00	1,603 35	1,149 40	1,108 65
4 20	-----	-----	-----	-----	-----
1,077 54	-----	-----	-----	-----	-----
-----	3,787 44	9,975 00	715 00	1,290 20	6,581 32
12 50	-----	145 49	-----	-----	336 59
-----	-----	-----	-----	-----	37,151 34
-----	-----	-----	-----	-----	-----
-----	412 75	-----	-----	-----	-----
\$48,759 49	\$41,649 35	\$77,597 11	\$117,551 56	\$48,179 16	\$333,733 40
\$25,000 00	\$30,000 00	\$50,000 00	\$100,000 00	\$45,990 00	\$100,000 00
-----	-----	-----	-----	-----	-----
-----	-----	4,250 00	-----	-----	5,000 00
854 32	11,649 35	47 00	6,388 16	81 10	4,934 76
110 75	-----	-----	-----	53 39	-----
-----	-----	-----	-----	-----	-----
354 10	-----	16,626 30	-----	609 32	58,135 00
-----	-----	-----	-----	-----	-----
22,440 32	-----	6,673 81	11,163 40	1,445 35	165,663 61
\$48,759 49	\$41,649 35	\$77,597 11	\$117,551 56	\$48,179 16	\$333,733 40

TABLE NO. 1.

## ABSTRACT OF BALANCE SHEETS OF WATER COMPANIES OPERAT

	Hollywood Water Company	Home Tract Water Company	Hornbrook Water Company
ASSETS.			
Fixed capital installed prior to January 1, 1913	\$31,194 14	\$4,470 00	\$12,452 90
Fixed capital installed subsequent to January 1, 1913	2,250 57	292 38	609 09
Total fixed capital	\$33,444 71	\$4,762 38	\$13,061 99
Cash and deposits	4,630 22	152 28	704 86
Notes receivable			
Accounts receivable	2,698 78	129 94	
Other current assets			
Investments			
Working assets	174,700 00	13,631 40	
Prepaid expenses			
Unamortized discount on securities and expenses	52,935 25	2,375 15	
Miscellaneous			
Corporate deficit			
Totals	\$268,408 96	\$21,051 15	\$13,766 85
LIABILITIES.			
Capital stock	\$250,000 00	\$20,000 00	\$12,000 00
Funded debt			
Invested in plant			
Notes payable			
Accounts payable	1,746 00	212 57	
Interest and taxes accrued			
Miscellaneous		392 50	
Reserves	6,498 40		
Income invested since December 31, 1912 in fixed capital			
Corporate surplus	10,164 56	446 08	1,766 85
Totals	\$268,408 96	\$21,051 15	\$13,766 85

—Continued.

ING IN CALIFORNIA DURING YEAR ENDING DECEMBER 31, 1913.

Hyde Park Water Company	Ione Water Works	Independence Water Company	Indio Light, Water and ice Company	Inglewood Water Company	Interurban Land Company
\$17,252 62	\$30,306 53	\$6,000 00	\$8,335 20	\$294 808 68	\$80,081 81
6,539 11	154 07			15,352 02	
\$23,791 73	\$30,460 60	\$6,000 00	\$8,335 20	\$310,160 70	\$80,031 81
323 74	1,773 29			1,012 85	3,226 89
				7,375 00	
14 28	637 63			8,294 92	
				1,324 12	44,930 54
	511 39	300 00		8,603 33	
	4 17			47 41	2,010 95
		3,036 51			
					93,319 00
	562 82		426 18	26,427 26	
\$24,129 75	\$33,949 90	\$9,336 51	\$8,761 38	\$363,245 59	\$223,569 19
\$5,470 00		\$7,620 00	\$7,200 00	\$125,000 00	\$191,150 00
	\$29,417 86				
7,681 83	2,000 00	1,300 00		206,882 12	
750 56	1,715 97		1,561 38	12,165 72	
	28 75			175 00	
2,764 15	787 32	400 00		19,022 75	
4,303 11					
3,160 10		16 51			32,419 19
\$24,129 75	\$33,949 90	\$9,336 51	\$8,761 38	\$363,245 59	\$223,569 19

TABLE No. 1

ABSTRACT OF BALANCE SHEETS OF WATER COMPANIES OPER

	Interurban Water Company	Irwin Heights Water Company	Jackson Water System
ASSETS.			
Fixed capital installed prior to January 1, 1913.....	\$45,504 45	\$177,452 46	\$6,500 00
Fixed capital installed subsequent to January 1, 1913.....	12,620 49	14,221 00	-----
Total fixed capital.....	\$58,124 94	\$191,673 46	\$6,500 00
Cash and deposits.....	-----	-----	-----
Notes receivable.....	-----	-----	-----
Accounts receivable.....	-----	830 35	-----
Other current assets.....	-----	-----	-----
Investments.....	-----	-----	-----
Working assets.....	-----	728 08	-----
Prepaid expenses.....	-----	5 00	-----
Unamortized discount on securities and expenses.....	-----	32,131 60	-----
Miscellaneous.....	-----	-----	-----
Corporate deficit.....	6,307 60	-----	-----
Totals.....	\$64,432 54	\$225,368 49	\$6,500 00
LIABILITIES.			
Capital stock.....	\$60,512 38	\$200,000 00	-----
Funded debt.....	-----	-----	-----
Invested in plant.....	-----	-----	\$6,500 00
Notes payable.....	-----	19,663 00	-----
Accounts payable.....	212 30	3,139 78	-----
Interest and taxes accrued.....	-----	1,115 81	-----
Miscellaneous.....	-----	-----	-----
Reserves.....	3,707 86	-----	-----
Income invested since December 31, 1912, in fixed capital.....	-----	869 99	-----
Corporate surplus.....	-----	579 91	-----
Totals.....	\$64,432 54	\$225,368 49	\$6,500 00

\*Subscription to capital stock.



—Continued.

ATING IN CALIFORNIA DURING YEAR ENDING DECEMBER 31, 1913.

The James Canal Company	The James and Dixon Canal Company	The Joyce Canal Company	Janess Water Company	Kennett Water Company	Kern Island Irrigating Company
\$26,311 12	\$4,975 29	\$5,000 00	\$116,494 90	\$81,246 21	\$220,227 05
			8,748 31	813 19	
\$26,311 12	\$4,975 29	\$5,000 00	\$125,243 21 7,213 98	\$82,059 40 27 59	\$220,227 05
15,789 20			403 72	20,448 32	1,985 22
			755 36	937 69 8 18	10,506 46
69,638 88 14,050 00	40,774 71 14,250 00 874 47	40,550 00 14,450 00 525 26		388 59	
\$115,789 20	\$50,874 47	\$50,525 26	\$133,616 27	\$103,869 77	\$232,718 73
\$100,000 00	\$50,000 00	\$50,000 00		\$100,000 00	\$150,000 00
			\$103,831 54		
	874 47	525 26		2,462 44 12 08 22 50	3,891 68
			29,784 73	1,372 75	
15,789 20					78,827 05
\$115,789 20	\$50,874 47	\$50,525 26	\$133,616 27	\$103,869 77	\$232,718 73

TABLE No. 1

ABSTRACT OF BALANCE SHEETS OF WATER COMPANIES OPER

	Kern River Canal and Irrigating Company	Kings River and Fresno Canal Company	Knapp Water Company
ASSETS.			
Fixed capital installed prior to Jan- uary 1, 1913.....	\$71,735 24	\$94,833 78	\$16,000 00
Fixed capital installed subsequent to January 1, 1913.....			
Total fixed capital.....	\$71,735 24	\$94,833 78	\$16,000 00
Cash and deposits .....			1,289 10
Notes receivable .....			
Accounts receivable .....	862 28	364 35	339 10
Other current assets.....			
Investments .....		12 00	
Working assets .....			
Prepaid expenses .....			
Unamortized discount on securities and expenses .....	178,264 76		
Miscellaneous .....			
Corporate deficit .....		14,231 91	
Totals .....	\$250,862 28	\$109,442 04	\$17,628 20
LIABILITIES.			
Capital stock .....	\$250,000 00	\$99,100 00	
Funded debt .....			
Invested in plant.....			\$17,531 70
Notes payable .....			
Accounts payable .....		10,342 04	96 50
Interest and taxes accrued.....			
Miscellaneous .....			
Reserves .....			
Income invested since December 31, 1912, in fixed capital.....			
Corporate surplus .....	862 28		
Totals .....	\$250,862 28	\$109,442 04	\$17,628 20

<sup>1</sup>Subscription to capital stock.

—Continued.

ATING IN CALIFORNIA DURING YEAR ENDING DECEMBER 31, 1913.

La Habra Valley Land and Water Company	Laguna Blanca Water Company	Laguna Cliffs Water Company	Lake Hemet Water Company	Lerdo Canal Company	Lawndale Land and Water Company
\$40,000 00	\$244,267 35	\$22,098 39	\$572,907 65	\$124,265 77	\$88,266 91
-----	2,833 88	1,509 75	11,915 46	-----	2,868 49
\$40,000 00	\$247,101 23	\$23,608 14	\$584,823 11	\$124,265 77	\$91,135 40
-----	-----	-----	7,442 70	-----	150 15
-----	-----	-----	760 00	1,435 50	-----
-----	400 70	1,865 81	9,269 47	-----	283 90
-----	-----	-----	-----	-----	-----
-----	-----	-----	3,188 91	-----	-----
-----	-----	-----	9,429 19	-----	574 57
-----	-----	-----	158 07	-----	46 17
-----	753,318 08	-----	1,528,059 50	123,646 73	125 00
-----	-----	-----	5 31	2,087 50	-----
-----	7,076 44	2,185 37	-----	-----	3,536 04
\$40,000 00	\$1,007,896 45	\$27,659 32	\$2,143,136 26	\$251,435 50	\$95,851 23
-----	\$1,000,000 00	\$15,200 00	\$2,000,000 00	\$250,000 00	\$75,000 00
\$40,000 00	-----	-----	-----	-----	-----
-----	-----	-----	20,000 00	-----	450 00
-----	7,856 61	2,205 00	2,195 38	1,413 97	16,990 05
-----	39 84	-----	1,492 74	-----	50 25
-----	-----	10,254 32	1,146 84	-----	-----
-----	-----	-----	11,937 24	-----	3,360 93
-----	-----	-----	-----	-----	-----
-----	-----	-----	106,364 06	21 53	-----
\$40,000 00	\$1,007,896 45	\$27,659 32	\$2,143,136 26	\$251,435 50	\$95,851 23

TABLE No. 1

ABSTRACT OF BALANCE SHEETS OF WATER COMPANIES OPER

	Los Altos Water Company	Lytte Creek Water Company	Madera Canal and Irrigation Company
ASSETS.			
Fixed capital installed prior to January 1, 1913-----	\$30,366 52	\$72,678 33	\$535,231 75
Fixed capital installed subsequent to January 1, 1913-----	2,424 48	-----	1,756 10
Total fixed capital-----	\$32,791 00	\$72,678 33	\$536,987 85
Cash and deposits-----	163 34	19 93	3,119 90
Notes receivable-----	-----	-----	-----
Accounts receivable-----	295 65	-----	7,675 13
Other current assets-----	-----	-----	-----
Investments-----	-----	-----	-----
Working assets-----	-----	-----	-----
Prepaid expenses-----	-----	-----	-----
Unamortized discount on securities and expenses-----	90,866 00	-----	-----
Miscellaneous-----	-----	-----	-----
Corporate deficit-----	13,985 43	-----	9,628 37
Totals-----	\$138,101 42	\$72,698 26	\$557,411 25
LIABILITIES.			
Capital stock-----	\$100,000 00	\$71,403 33	\$400,000 00
Funded debt-----	30,000 00	-----	100,000 00
Invested in plant-----	-----	-----	-----
Notes payable-----	-----	-----	-----
Accounts payable-----	1,079 18	359 57	511 25
Interest and taxes accrued-----	4,543 97	-----	2,500 00
Miscellaneous-----	-----	-----	54,400 00
Reserves-----	2,478 27	-----	-----
Income invested since December 31, 1912, in fixed capital-----	-----	-----	-----
Corporate surplus-----	-----	935 36	-----
Totals-----	\$138,101 42	\$72,698 26	\$557,411 25

<sup>1</sup>Credit item—plant sold.



—Continued.

ATING IN CALIFORNIA DURING YEAR ENDING DECEMBER 31, 1913.

Madera Electric Water Company	Marin Water and Power Company	Marian Water Company	The Marysville Water Company	Manteca Water Works	Miradero Water Company
\$30,822 55	\$1,274,617 56	\$24,926 50	\$261,742 00	\$8,000 00	\$45,000 00
-----	12,190 84	-----	4,437 87	438 80	124,899 94
\$30,822 55	\$1,286,808 40	\$24,926 50	\$266,179 87	\$8,438 80	\$20,100 06
586 08	5,248 69	-----	-----	-----	-----
197 20	81,646 99	5,650 00	355 60	-----	-----
-----	-----	-----	-----	-----	5,138 94
20,000 00	12,220 15	-----	5,454 20	-----	-----
54 99	801 25	-----	-----	-----	-----
-----	475,000 00	30,000 00	-----	-----	-----
-----	83 30	-----	-----	-----	-----
-----	-----	88 66	-----	-----	-----
\$51,660 82	\$1,861,808 78	\$60,665 16	\$271,989 67	\$8,438 80	\$25,239 00
\$50,000 00	\$1,100,500 00	\$500 00	\$200,000 00	-----	\$20,000 00
-----	600,000 00	50,600 00	40,000 00	-----	-----
-----	-----	-----	-----	\$8,438 80	-----
-----	40,500 00	-----	-----	-----	-----
170 74	5,887 43	5,581 83	329 44	-----	-----
-----	3,379 71	4,583 33	-----	-----	-----
393 14	36,742 07	-----	3,413 88	-----	-----
-----	-----	-----	-----	-----	-----
1,096 94	74,799 57	-----	28,246 35	-----	5,239 00
\$51,660 82	\$1,861,808 78	\$60,665 16	\$271,989 67	\$8,438 80	\$25,239 00

TABLE NO. 1

ABSTRACT OF BALANCE SHEETS OF WATER COMPANIES OPER

	Minnehaha Oil Company	Mokelumne River Power and Water Company	Montecito Valley Water Company
ASSETS.			
Fixed capital installed prior to January 1, 1913.....	\$218,625 87	\$1,500,000 00	\$30,000 00
Fixed capital installed subsequent to January 1, 1913.....		17,220 50	
Total fixed capital.....	\$218,625 87	\$1,517,220 50	\$30,000 00
Cash and deposits.....	54 64	118 98	2,905 30
Notes receivable.....			
Accounts receivable.....	7,097 11	51 98	
Other current assets.....			
Investments.....		20,469 98	
Working assets.....	25,369 00		
Prepaid expenses.....			
Unamortized discount on securities and expenses.....			
Miscellaneous.....			
Corporate deficit.....			
Totals.....	\$251,146 62	\$1,537,861 44	\$32,905 30
LIABILITIES.			
Capital stock.....	\$200,000 00	\$1,500,000 00	\$30,000 00
Funded debt.....			
Invested in plant.....			
Notes payable.....	13,000 00	10,414 39	
Accounts payable.....	2,823 41	7,612 54	
Interest and taxes accrued.....		723 32	
Miscellaneous.....	19,209 41		
Reserves.....	13,866 41	12,720 00	
Income invested since December 31, 1912, in fixed capital.....			
Corporate surplus.....	2,247 39	6,391 19	2,905 30
Totals.....	\$251,146 62	\$1,537,861 44	\$32,905 30

\*Installments on stock subscription.

—Continued.

ATING IN CALIFORNIA DURING YEAR ENDING DECEMBER 31, 1913.

Monterey County Water Company	Monterey County Water Works	Mt. Jackson Water and Power Company	Mountain Power Company	Mountain Springs Water Company	Moorpark Water, Light and Power Company
\$56,114 05	\$1,326,142 97	\$13,148 82	\$391,375 72	\$118,562 26	\$2,826 51
100 00	37,819 04	2,142 37	1,029 88	7 20	348 03
\$56,214 05	\$1,362,962 01	\$15,291 19	\$392,405 60	\$118,569 46	\$3,174 54
-----	4,283 17	-----	1,708 63	34 63	10 00
693 00	5,388 47	-----	26,790 40	42,775 40	-----
-----	132,202 45	-----	870 50	-----	-----
-----	-----	-----	805 07	-----	-----
69 87	3,005 02	-----	-----	125 95	-----
-----	797,008 86	13,236 16	-----	-----	-----
-----	467 05	-----	9,934 78	-----	-----
51,760 13	-----	1,755 17	-----	-----	-----
\$108,737 05	\$2,306,317 03	\$30,282 52	\$432,514 98	\$161,505 44	\$3,184 54
\$85,000 00	\$2,000,000 00	\$20,000 00	\$365,000 00	\$50,000 00	\$1,500 00
-----	-----	-----	-----	-----	1,250 00
-----	-----	9,088 58	-----	-----	-----
23,737 05	82,868 72	-----	-----	2,408 08	-----
-----	827 99	-----	-----	-----	-----
-----	16,194 55	964 55	64,000 00	-----	-----
-----	106,952 44	229 39	-----	53,569 52	-----
-----	-----	-----	-----	-----	-----
-----	99,473 33	-----	3,514 98	55,527 84	434 54
\$108,737 05	\$2,306,317 03	\$30,282 52	\$432,514 98	\$161,505 44	\$3,184 54

TABLE No. 1

ABSTRACT OF BALANCE SHEETS OF WATER COMPANIES OPER

	Natomas Water Company	Newman Water Works Company	North Coast Water Company
ASSETS.			
Fixed capital installed prior to January 1, 1913-----	\$5,006,700 86	\$40,146 66	\$471,421 27
Fixed capital installed subsequent to January 1, 1913-----	87,204 17	2,184 71	<sup>1</sup> 2,785 21
Total fixed capital-----	\$5,093,905 03	\$42,331 37	\$468,636 06
Cash and deposits-----	5,130 94	334 48	1,035 86
Notes receivable-----			1,400 00
Accounts receivable-----	9,898 94		
Other current assets-----			
Investments-----			
Working assets-----			1,257 30
Prepaid expenses-----	103 95		
Unamortized discount on securities and expenses-----			340,000 00
Miscellaneous-----			
Corporate deficit-----			
Totals-----	\$5,109,038 86	\$42,665 85	\$812,329 22
LIABILITIES.			
Capital stock-----	\$5,000,000 00	\$30,000 00	\$600,000 00
Funded debt-----			200,000 00
Invested in plant-----			
Notes payable-----	4,664 35	5,500 00	10,000 00
Accounts payable-----	3,828 72		44 15
Interest and taxes accrued-----			
Miscellaneous-----	81,500 00		
Reserves-----	1,096 62		
Income invested since December 31, 1912, in fixed capital-----			
Corporate surplus-----	17,949 17	7,165 85	2,285 07
Totals-----	\$5,109,038 86	\$42,665 85	\$812,329 22

<sup>1</sup>Credit item.



—Continued.

ATING IN CALIFORNIA DURING YEAR ENDING DECEMBER 31, 1913.

North Meneta Garden Lands Water Company	Northern Oil Company	Northern Water and Power Company	Oak Park Water Company	Ocean Park Water Company	Ocean View Land and Water Company
\$61,944 96	\$62,688 47	\$6,081,323 94	\$159,510 75	\$41,818 14	\$72,855 74
78 02	13,502 39	9,559 94	8,961 12	13,498 72	245 06
\$62,022 98	\$59,186 08	\$6,090,883 88	\$168,471 87	\$55,316 86	\$73,100 80
-----	6,110 69	838 43	5,784 46	71 91	15 52
-----	4,706 73	-----	-----	-----	125 00
135 20	17,159 83	7,886 23	-----	-----	120 44
-----	4,314 62	-----	-----	-----	-----
-----	-----	-----	200,000 00	50,000 00	112 59
-----	-----	-----	-----	-----	-----
-----	-----	-----	140,489 25	86,000 00	28,900 00
-----	-----	-----	-----	8,000 00	-----
8,250 85	-----	27,623 81	-----	16,896 43	13,025 97
\$70,409 03	\$91,477 95	\$6,127,232 35	\$514,745 58	\$216,288 20	\$115,400 32
\$35,000 00	\$50,000 00	\$5,000,000 00	\$500,000 00	\$100,000 00	\$58,500 00
-----	-----	1,000,000 00	-----	100,000 00	-----
-----	-----	-----	-----	6,000 00	-----
35,409 03	3,360 67	92,232 35	-----	235 00	56,900 32
-----	-----	25,000 00	-----	-----	-----
-----	-----	-----	-----	1,832 82	-----
-----	-----	-----	-----	8,220 38	-----
-----	-----	10,000 00	-----	-----	-----
-----	38,117 28	-----	14,745 58	-----	-----
\$70,409 03	\$91,477 95	\$6,127,232 35	\$514,745 58	\$216,288 20	\$115,400 32

TABLE NO. 1

ABSTRACT OF BALANCE SHEETS OF WATER COMPANIES OPER

	Orange Home Water Company	Owensmouth Water Company	Puente City Water Company
ASSETS.			
Fixed capital installed prior to January 1, 1913.....	\$5,000 00	\$22,001 04	\$14,702 03
Fixed capital installed subsequent to January 1, 1913.....		2,142 13	272 12
Total fixed capital.....	\$5,000 00	\$24,143 17	\$14,974 15
Cash and deposits.....			277 30
Notes receivable.....			
Accounts receivable.....	480 80	8,268 64	88 14
Other current assets.....			
Investments.....			
Working assets.....			137 90
Prepaid expenses.....			
Unamortized discount on securities and expenses.....		30,000 00	
Miscellaneous.....			
Corporate deficit.....	1,778 49	73 46	
Totals.....	\$7,259 29	\$62,485 27	\$15,477 49
LIABILITIES.			
Capital stock.....	\$5,000 00	\$500 00	\$11,350 00
Funded debt.....		50,000 00	
Invested in plant.....			
Notes payable.....			3,300 00
Accounts payable.....	2,259 29	7,401 94	
Interest and taxes accrued.....		4,583 33	
Miscellaneous.....			
Reserves.....			628 25
Income invested since December 31, 1912, in fixed capital.....			
Corporate surplus.....			199 24
Totals.....	\$7,259 29	\$62,485 27	\$15,477 49

<sup>1</sup>Credit item.

—Continued.

ATING IN CALIFORNIA DURING YEAR ENDING DECEMBER 31, 1913.

Palm Valley Water Company	Pasadena Consolidated Water Company	Peninsula Water Company	Peoples Water Company	Peoples Water Company of Palms	Petaluma Power and Water Company
\$55,500 00	\$126,609 17	\$265,921 32	\$36,041,175 36	\$129,938 72	\$439,007 51
-----	9,564 72	2,939 21	199,771 07	3,328 46	14,079 05
\$55,500 00	\$136,173 89	\$268,860 53	\$36,240,946 43	\$133,267 18	\$453,086 56
1362 46	2,394 16	8,627 50	12,684 91	413 43	4,625 39
-----	-----	-----	7,113 00	-----	-----
-----	624 91	-----	90,094 73	318 54	3,776 20
-----	-----	-----	12,500 00	-----	-----
-----	99,285 00	-----	-----	-----	-----
374,775 00	145 30	-----	1,154,150 63	178 60	6,517 66
-----	-----	-----	-----	34 65	506 85
-----	-----	-----	-----	-----	-----
-----	-----	-----	6,506,988 96	-----	-----
172,587 46	-----	-----	-----	3,090 94	-----
-----	-----	-----	-----	-----	-----
\$602,500 00	\$238,623 26	\$277,488 03	\$44,024,478 66	\$137,303 34	\$468,512 66
-----	-----	-----	-----	-----	-----
\$600,000 00	\$142,500 00	\$50,000 00	\$20,000,000 00	\$100,000 00	\$300,000 00
-----	65,000 00	207,000 00	19,711,668 00	20,000 00	100,000 00
-----	-----	-----	-----	-----	-----
-----	20,400 00	-----	2,716,147 09	15,000 00	12,000 00
-----	1,268 26	-----	407,893 64	-----	418 65
-----	3,165 00	-----	308,268 00	2,303 34	2,750 00
-----	-----	-----	120,921 38	-----	66 67
2,500 00	3,455 65	-----	333,576 00	-----	44,714 50
-----	-----	-----	-----	-----	-----
-----	2,834 35	20,488 03	426,004 55	-----	8,562 84
-----	-----	-----	-----	-----	-----
\$602,500 00	\$238,623 26	\$277,488 03	\$44,024,478 66	\$137,303 34	\$468,512 66

TABLE NO. 1

ABSTRACT OF BALANCE SHEETS OF WATER COMPANIES OPER

	Pinal Dome Oil Company <sup>1</sup>	Placerville Water Works	Pleasant Valley Water Company
ASSETS.			
Fixed capital installed prior to Jan- uary 1, 1913.....	\$22,869 82	\$52,167 60	\$90,307 76
Fixed capital installed subsequent to January 1, 1913.....	14,651 31	239 56	1,700 73
Total fixed capital.....	\$37,521 13	\$52,407 16	\$92,008 49
Cash and deposits.....		1,138 53	126 00
Notes receivable.....			
Accounts receivable.....			6,209 37
Other current assets.....			
Investments.....			540 00
Working assets.....			
Prepaid expenses.....			
Unamortized discount on securities and expenses.....			
Miscellaneous.....			
Corporate deficit.....			1,303 05
Totals.....	\$37,521 13	\$53,545 69	\$100,186 91
LIABILITIES.			
Capital stock.....		\$48,000 00	\$67,580 00
Funded debt.....			
Invested in plant.....	\$36,312 81		
Notes payable.....			
Accounts payable.....			5,013 75
Interest and taxes accrued.....			
Miscellaneous.....			379 50
Reserves.....	1,208 32		27,213 66
Income invested since December 31, 1912, in fixed capital.....			
Corporate surplus.....		5,545 69	
Totals.....	\$37,521 13	\$53,545 69	\$100,186 91

<sup>1</sup>Includes gas plant.



—Continued.

ATING IN CALIFORNIA DURING YEAR ENDING DECEMBER 31, 1913.

Plunkett Canal Company	Port Costa Water Company	Pioneer Canal Company	Randsburg Water Company	Redondo Water Company	Redwood City Water Company
\$5,000 00	\$626,331 19	\$41,600 00	\$100,000 00	\$1,506,707 57	\$24,273 75
-----	14,754 19	-----	-----	3,727 94	783 03
\$5,000 00	\$641,085 38	\$41,600 00	\$100,000 00	\$1,510,435 51	\$25,056 78
-----	2,556 35	-----	1,044 78	5,408 61	1,270 09
2,613 27	30,968 83	1,441 42	2 67	799 39	534 20
-----	-----	-----	-----	-----	-----
-----	1,934 63	-----	-----	1,934 94	288 74
-----	-----	-----	-----	-----	-----
40,225 00	-----	195,346 00	-----	-----	-----
4,775 00	-----	3,054 00	-----	-----	-----
-----	53,150 90	-----	3,574 89	4,542 81	-----
\$52,613 27	\$729,696 09	\$241,441 42	\$104,622 34	\$1,523,121 26	\$27,149 81
\$50,000 00	\$500,000 00	\$240,000 00	\$100,000 00	\$1,000,000 00	\$25,000 00
-----	-----	-----	-----	517,000 00	-----
-----	220,436 66	-----	-----	-----	-----
-----	9,259 43	76 00	4,622 34	-----	-----
-----	-----	-----	-----	-----	-----
-----	-----	-----	-----	6,121 26	1,875 00
-----	-----	-----	-----	-----	-----
2,613 27	-----	1,365 42	-----	-----	274 81
\$52,613 27	\$729,696 09	\$241,441 42	\$104,622 34	\$1,523,121 26	\$27,149 81

TABLE No. 1

ABSTRACT OF BALANCE SHEETS OF WATER COMPANIES OPER

	Rialto Domestic Water Company	Riverbank Water Company	Mrs. M. A. Rohner
ASSETS.			
Fixed capital installed prior to January 1, 1913.....	\$129,323 09	\$40,245 19	\$5,636 15
Fixed capital installed subsequent to January 1, 1913.....	126 65	17,256 60	-----
Total fixed capital .....	\$129,449 74	\$57,501 79	\$5,636 15
Cash and deposits.....	577 22	354 92	-----
Notes receivable .....	-----	-----	-----
Accounts receivable .....	566 15	811 14	-----
Other current assets.....	-----	-----	-----
Investments .....	173 39	-----	-----
Working assets .....	-----	-----	-----
Prepaid expenses .....	-----	-----	-----
Unamortized discount on securities and expenses .....	-----	-----	-----
Miscellaneous .....	-----	-----	-----
Corporate deficit .....	-----	1,486 66	-----
Totals .....	\$130,766 50	\$60,154 51	\$5,636 15
LIABILITIES.			
Capital stock .....	\$75,000 00	\$20,000 00	-----
Funded debt .....	53,000 00	-----	-----
Invested in plant.....	-----	-----	\$5,636 15
Notes payable .....	-----	15,000 00	-----
Accounts payable .....	1,847 71	25,154 51	-----
Interest and taxes accrued.....	-----	-----	-----
Miscellaneous .....	-----	-----	-----
Reserves .....	-----	-----	-----
Income invested since December 31, 1912, in fixed capital.....	-----	-----	-----
Corporate surplus .....	918 79	-----	-----
Totals .....	\$130,766 50	\$60,154 51	\$5,636 15

<sup>1</sup>Credit item.

—Continued.

ATING IN CALIFORNIA DURING YEAR ENDING DECEMBER 31, 1913.

Roseville Water Company	Reedley Water Works	San Dimas Water Company	San Benito County Land and Water Company	San Dimas Charter Oak Domestic Water Company	San Gabriel Valley Water Company
\$120,000 00	\$16,855 43	\$368,087 45	\$98,073 24	-----	\$1,455,943 70
-----	2,556 45	18,870 80	12,780 15	\$24,275 91	11,075 07
\$120,000 00	\$19,411 88	\$386,958 25	\$95,293 09	\$24,275 91	\$1,467,018 77
2,677 49	147 73	5,148 12	640 83	700 24	13,014 63
-----	-----	111 34	-----	-----	-----
198 00	389 25	36,495 52	839 58	1,435 98	8,618 14
-----	-----	29,100 00	-----	5,500 00	-----
99,700 00	1,727 78	3,000 00	-----	61 08	7,318 91
-----	84 71	-----	-----	-----	130 20
80,000 00	-----	10,800 00	183,500 00	-----	1,089,720 68
-----	-----	16,179 19	-----	-----	1,635 47
\$302,575 49	\$21,761 35	\$487,792 42	\$280,273 50	\$31,973 21	\$2,571,427 54
\$200,000 00	-----	\$201,700 00	\$200,000 00	\$25,000 00	\$2,500,000 00
100,000 00	-----	108,000 00	50,000 00	-----	-----
-----	\$17,005 07	-----	-----	-----	-----
-----	4,000 00	47,021 87	25,000 00	-----	10,000 00
-----	223 06	9,898 91	2,302 50	760 40	456 06
1,750 00	-----	-----	-----	28 66	179 96
-----	-----	118,081 64	-----	2,801 29	-----
-----	533 22	3,090 00	-----	-----	11,747 68
825 49	-----	-----	2,971 00	3,382 86	49,043 84
\$302,575 49	\$21,761 35	\$487,792 42	\$280,273 50	\$31,973 21	\$2,571,427 54

TABLE No. 1.

ABSTRACT OF BALANCE SHEETS OF WATER COMPANIES OPERAT

	San Geronio Water Company	San Joaquin and Kings River Canal and Irriga- tion Company. Incorporated	San Jose Water Company
ASSETS.			
Fixed capital installed prior to Jan- uary 1, 1913 -----	\$327,149 36	\$1,301,247 05	\$1,305,948 56
Fixed capital installed subsequent to January 1, 1913 -----	325 50	6,728 09	138,251 67
Total fixed capital -----	\$327,474 86	\$1,307,975 14	\$1,444,200 23
Cash and deposits -----	122 56	138,493 24	1,952 33
Notes receivable -----	325 00	86 89	-----
Accounts receivable -----	1,543 10	80,631 14	13,285 01
Other current assets -----	-----	13,930 11	5,317 25
Investments -----	-----	66,945 47	-----
Working assets -----	421 41	10,312 47	15,320 19
Prepaid expenses -----	-----	-----	156 75
Unamortized discount on securities and expenses -----	-----	-----	141,743 85
Miscellaneous -----	-----	-----	1,479 67
Corporate deficit -----	-----	-----	-----
Totals -----	\$329,886 93	\$1,618,374 46	\$1,623,455 28
LIABILITIES.			
Capital stock -----	\$50,000 00	\$1,000,000 00	\$1,250,000 00
Funded debt -----	117,500 00	-----	-----
Invested in plant -----	-----	-----	-----
Notes payable -----	-----	-----	120,000 00
Accounts payable -----	202 58	21,335 24	7,020 65
Interest and taxes accrued -----	729 15	-----	-----
Miscellaneous -----	-----	145,946 03	81 90
Reserves -----	1,856 85	326,572 72	29,090 21
Income invested since December 31, 1912, in fixed capital -----	-----	6,728 09	-----
Corporate surplus -----	159,598 35	117,792 38	217,262 52
Totals -----	\$329,886 93	\$1,618,374 46	\$1,623,455 28

<sup>1</sup>Leased property.



—Continued.

ING IN CALIFORNIA DURING YEAR ENDING DECEMBER 31, 1913.

San Lorenzo Water Company	San Francisco- Oakland Terminal Power Company	Santa Clara Valley Water Company	Santa Clara Water and Irrigation Company	Santa Monica Water Company	Santa Paula Water Works
-----	\$42,024.967 29	\$106,106 74	\$276,448 14	\$903,562 88	\$184,035 56
-----	3,253 91	1,350 00	10,390 90	54,232 98	169 96
-----	\$42,028,221 20	\$107,456 74	\$286,839 04	\$957,795 86	\$184,205 52
\$43 20	2,608 75	25 40	270 28	1,364 86	1,606 15
-----	-----	-----	-----	3,650 00	14,600 00
2,499 95	4,031 53	171 30	7,969 24	23,759 85	3,124 72
-----	5,451 25	-----	15,598 06	-----	1,300 00
660 36	1,674 20	-----	65,229 32	5,754 53	-----
-----	1,042 42	-----	-----	185 18	-----
130,872 00	-----	-----	-----	-----	-----
-----	-----	-----	-----	14 14	-----
18,373 55	2,953 95	3,403 46	25,898 40	-----	-----
-----	-----	-----	-----	-----	-----
\$52,449 06	\$42,045,983 30	\$111,056 90	\$401,804 34	\$992,524 42	\$204,836 39
-----	-----	-----	-----	-----	-----
\$50,000 00	\$30,000,000 00	\$98,200 00	\$250,000 00	\$500,000 00	\$150,000 00
-----	12,000,000 00	-----	100,000 00	250,000 00	-----
2,000 00	-----	-----	-----	93,271 62	14,700 00
449 06	45,983 30	12,856 90	4 34	54,339 19	223 23
-----	-----	-----	-----	6,250 00	-----
-----	-----	-----	51,800 00	-----	-----
-----	-----	-----	-----	-----	3,976 57
-----	-----	-----	-----	-----	-----
-----	-----	-----	-----	88,663 61	35,936 59
-----	-----	-----	-----	-----	-----
\$52,449 06	\$42,045,983 30	\$111,056 90	\$401,804 34	\$992,524 42	\$204,836 39

TABLE No. 1.

ABSTRACT OF BALANCE SHEETS OF WATER COMPANIES OPERAT

	Santa Rosa Water Works	Sawtelle Water Company	Saticoy Water Company
ASSETS.			
Fixed capital installed prior to January 1, 1913 -----	\$210,076 69	\$57,420 24	\$25,997 96
Fixed capital installed subsequent to January 1, 1913 -----	1,335 92	8,427 49	1,499 96
Total fixed capital -----	\$211,412 61	\$65,847 73	\$27,497 92
Cash and deposits -----	834 68	151 41	501 81
Notes receivable -----			
Accounts receivable -----		16,116 73	1,749 65
Other current assets -----			
Investments -----			
Working assets -----		45 42	4,075 00
Prepaid expenses -----		24 56	
Unamortized discount on securities and expenses -----	90,000 00		
Miscellaneous -----			
Corporate deficit -----			10,143 27
Totals -----	\$302,247 29	\$82,185 85	\$43,967 65
LIABILITIES.			
Capital stock -----	\$250,000 00	\$50,000 00	\$15,000 00
Funded debt -----			
Invested in plant -----			
Notes payable -----	48,000 00		7,250 00
Accounts payable -----		14,385 94	1,159 99
Interest and taxes accrued -----			
Miscellaneous -----			20,557 66
Reserves -----			
Income invested since December 31, 1912, in fixed capital -----			
Corporate surplus -----	4,247 29	17,799 91	
Totals -----	\$302,247 29	\$82,185 85	\$43,967 65

—Continued.

ING IN CALIFORNIA DURING YEAR ENDING DECEMBER 31, 1913.

Sausalito Spring Water Company	Sherman Water Company	Sierra Park Water Company	Soledad Land and Water Company	Sonoma Valley Water, Light and Power Company	South Feather Land and Water Company
\$62,472 90	\$27,500 00	\$14,819 00	\$12,593 75	\$100,000 00	\$282,982 67
-----	-----	1,229 37	410 64	9,417 20	-----
\$62,472 90	\$27,500 00	\$16,048 37	\$13,004 39	\$109,417 20	\$282,982 67
155 00	-----	-----	648 40	-----	-----
425 96	-----	3,053 15	669 46	250 00	7,415 59
-----	3,514 70	-----	-----	-----	1,198 70
-----	-----	-----	-----	-----	-----
-----	-----	-----	-----	-----	282 63
-----	-----	-----	-----	12 50	-----
-----	-----	-----	-----	-----	-----
522 12	-----	-----	-----	679 69	-----
\$63,575 98	\$31,014 70	\$19,101 52	\$14,322 25	\$110,359 39	\$291,879 59
\$59,964 00	-----	-----	\$4,650 00	\$100,000 00	\$250,000 00
-----	\$31,014 70	\$16,750 73	-----	-----	-----
480 00	-----	-----	-----	5,150 00	16,000 00
3,131 98	-----	60 60	-----	5,033 89	1,926 39
-----	-----	-----	-----	175 50	-----
-----	-----	2,290 19	7,943 75	-----	5,243 33
-----	-----	-----	410 65	-----	-----
-----	-----	-----	1,317 85	-----	18,709 87
\$63,575 98	\$31,014 70	\$19,101 52	\$14,322 25	\$110,359 39	\$291,879 59

TABLE No. 1.

ABSTRACT OF BALANCE SHEETS OF WATER COMPANIES OPERAT

	South Los Angeles Water Company	South San Francisco Water Company	Southern California Mountain Water Company
<b>ASSETS.</b>			
Fixed capital installed prior to Jan- uary 1, 1913 -----	\$249,841 83	\$170,207 20	\$1,049,500 05
Fixed capital installed subsequent to January 1, 1913 -----	7,824 48	8,399 36	924 30
Total fixed capital -----	\$257,666 31	\$178,606 56	\$1,050,424 38
Cash and deposits -----	2,619 47	1 52	782 00
Notes receivable -----		15,000 00	
Accounts receivable -----	4,443 76	4,654 01	129,838 33
Other current assets -----			
Investments -----			
Working assets -----	810 75	769 40	9,041 15
Prepaid expenses -----		203 30	202 35
Unamortized discount on securities and expenses -----			
Miscellaneous -----			3,900 00
Corporate deficit -----			
Totals -----	\$265,540 29	\$199,234 79	\$1,194,188 21
<b>LIABILITIES.</b>			
Capital stock -----	\$250,000 00	\$150,000 00	\$1,153,275 00
Funded debt -----			
Invested in plant -----			
Notes payable -----			
Accounts payable -----	7,240 92	417 15	688 35
Interest and taxes accrued -----	703 54		
Miscellaneous -----			
Reserves -----		40,621 47	12,782 97
Income invested since December 31, 1912, in fixed capital -----			
Corporate surplus -----	7,595 83	8,196 17	27,441 89
Totals -----	\$265,540 29	\$199,234 79	\$1,194,188 21



—Continued.

ING IN CALIFORNIA DURING YEAR ENDING DECEMBER 31, 1913.

St. Helena Water Company	Spring Valley Water Company	Stockton and Mokelumne Canal Company	Stoll Water Company	Stratton Water Company	Stine Canal Company
\$99,817 10	\$60,832,598 42	\$418,326 07	\$9,050 00	\$345,043 20	\$81,433 05
468 54	171,885 99	3,953 95	-----	-----	-----
\$100,285 64	\$61,004,484 41	\$422,280 02	\$9,050 00	\$345,043 20	\$81,433 05
309 36	129,818 97	4,686 57	-----	25 48	-----
-----	13,176 92	-----	-----	-----	-----
1,487 57	85,221 06	4,836 00	-----	4,293 32	-----
-----	535 32	-----	382 33	-----	-----
-----	4,274,575 13	-----	-----	100,000 00	-----
-----	3,776,186 49	2,000 00	-----	-----	-----
191 58	-----	-----	-----	-----	-----
-----	23,677 50	-----	-----	-----	199,998 75
-----	2,033,198 18	-----	-----	-----	3,568 20
-----	-----	-----	-----	-----	3,632 05
\$102,274 15	\$71,340,873 98	\$433,802 59	\$9,432 33	\$449,362 00	\$288,632 05
\$40,250 00	\$28,000,000 00	\$200,000 00	-----	\$250,000 00	\$285,000 00
-----	22,636,896 25	106,000 00	-----	100,000 00	-----
-----	-----	-----	\$9,432 33	-----	-----
-----	75,000 00	5,300 00	-----	24,559 19	-----
-----	248,525 69	1,984 00	-----	55,471 38	3,632 05
-----	73,256 74	3,485 00	-----	3,000 00	-----
-----	17,619,311 73	107,445 37	-----	-----	-----
2,507 14	2,324,923 22	3,954 48	-----	12,098 81	-----
-----	-----	-----	-----	-----	-----
59,517 01	362,960 35	5,633 79	-----	4,232 62	-----
\$102,274 15	\$71,340,873 98	\$433,802 59	\$9,432 33	\$449,362 00	\$288,632 05

TABLE No. 1.

ABSTRACT OF BALANCE SHEETS OF WATER COMPANIES OPERAT

	Summit Lake Irrigation Company	Sunnyvale Water Company	Susanville Water Works
<b>ASSETS.</b>			
Fixed capital installed prior to Jan- uary 1, 1913 -----	\$61,510 50	\$14,867 77	\$43,935 23
Fixed capital installed subsequent to January 1, 1913 -----		829 77	1,575 37
Total fixed capital -----	\$61,510 50	\$15,697 54	\$45,510 60
Cash and deposits -----	38 74	378 47	1,625 06
Notes receivable -----			
Accounts receivable -----	4,062 55		311 40
Other current assets -----			
Investments -----			
Working assets -----	38,189 50	81,908 00	
Prepaid expenses -----			
Unamortized discount on securities and expenses -----		9,046 00	
Miscellaneous -----			
Corporate deficit -----	12,640 30		
Totals -----	\$116,441 59	\$107,030 01	\$47,447 06
<b>LIABILITIES.</b>			
Capital stock -----	\$100,000 00	\$100,000 00	
Funded debt -----			
Invested in plant -----			\$33,308 95
Notes payable -----		5,500 00	10,000 00
Accounts payable -----	16,441 59	204 50	
Interest and taxes accrued -----			92 68
Miscellaneous -----			
Reserves -----			4,045 43
Income invested since December 31, 1912, in fixed capital -----			
Corporate surplus -----		1,325 51	
Totals -----	\$116,441 59	\$107,030 01	\$47,447 06

<sup>1</sup>Pledged as collateral, \$53,000.00.

—Continued.

ING IN CALIFORNIA DURING YEAR ENDING DECEMBER 31, 1913.

Sutter and Amador Water Works	Sutter- Butte Canal Company	The Sweetwater Water Company	Terra Bella City Water Company	Tehama Water Works	Torrance Water, Light and Power Company
\$57,573 33	\$1,089,221 32	\$1,281,653 73	-----	\$2,000 00	-----
1,513 66	16,478 63	6,599 06	\$15,705 14	-----	\$139,424 17
\$59,086 99	\$1,105,699 95	\$1,288,252 79	\$15,705 14	\$2,000 00	\$139,424 17
1,048 14	1,851 42	13,865 65	-----	544 35	-----
-----	106 50	4,189 15	-----	-----	62 02
4,717 98	25,333 00	3,406 97	21 60	-----	4,900 79
-----	12,169 30	176 37	-----	-----	-----
-----	377,008 55	23,700 94	-----	-----	-----
1,425 79	23,288 37	16,024 63	10,000 00	-----	396 77
4 16	-----	-----	-----	-----	100 00
-----	-----	-----	-----	-----	6,208 70
-----	153,810 38	-----	-----	-----	-----
-----	676,910 57	770,576 92	1,908 86	-----	5,605 15
\$66,283 06	\$2,276,178 04	\$2,120,193 42	\$27,635 60	\$2,544 35	\$156,697 60
-----	\$1,250,000 00	\$1,200,000 00	\$25,000 00	-----	\$34,009 00
-----	671,784 65	200,000 00	-----	-----	115,000 00
\$59,155 71	-----	-----	-----	\$2,544 35	-----
3,800 00	65,000 00	7,000 00	-----	-----	-----
1,165 82	1,306 11	3,041 95	1,735 60	-----	430 75
284 37	40,347 28	209,416 02	-----	-----	1,150 00
-----	247,740 00	-----	-----	-----	-----
1,877 16	-----	500,735 45	900 00	-----	6,107 85
-----	-----	-----	-----	-----	-----
-----	-----	-----	-----	-----	-----
\$66,283 06	\$2,276,178 04	\$2,120,193 42	\$27,635 60	\$2,544 35	\$156,697 60

TABLE No. 1

ABSTRACT OF BALANCE SHEETS OF WATER COMPANIES OPER

	Ukiah Water and Improvement Company	Union Hollywood Water Company	Union Water Company
ASSETS.			
Fixed capital installed prior to January 1, 1913.....	\$97,600 00	\$1,561,091 08	\$49,020 53
Fixed capital installed subsequent to January 1, 1913.....	120 00	60,745 72	1,004 63
Total fixed capital.....	\$97,720 00	\$1,624,836 80	\$50,025 16
Cash and deposits.....	62 98	50,594 63	420 77
Notes receivable.....	346 88	5,921 40	-----
Accounts receivable.....	-----	3,684 98	-----
Other current assets.....	-----	-----	-----
Investments.....	-----	2,118 34	-----
Working assets.....	-----	-----	-----
Prepaid expenses.....	-----	6,598 64	-----
Unamortized discount on securities and expenses.....	-----	-----	-----
Miscellaneous.....	-----	100 00	-----
Corporate deficit.....	-----	-----	-----
Totals.....	\$98,129 86	\$1,693,854 79	\$50,445 93
LIABILITIES.			
Capital stock.....	\$50,000 00	\$1,000,000 00	\$25,000 00
Funded debt.....	-----	200,000 00	-----
Invested in plant.....	-----	-----	-----
Notes payable.....	46,250 00	60,507 40	-----
Accounts payable.....	-----	53,914 75	-----
Interest and taxes accrued.....	1,588 00	15,545 13	-----
Miscellaneous.....	-----	-----	-----
Reserves.....	-----	87,138 98	-----
Income invested since December 31, 1912, in fixed capital.....	120 00	-----	-----
Corporate surplus.....	171 86	276,748 53	25,445 93
Totals.....	\$98,129 86	\$1,693,854 79	\$50,445 93



—Continued.

ATING IN CALIFORNIA DURING YEAR ENDING DECEMBER 31, 1913.

The Union Water Company of California	Valley View Land and Water Company	Vacaville Water and Light Company	Edmund Varney Water System	Van Nuys Water Company	Venice Water Company
\$9,851,460 36	\$3,347 60	\$39,262 16	\$8,020 55	\$30,262 02	\$24,250 00
51,166 88	-----	5,606 73	1,960 00	1,761 27	6,821 83
\$9,902,627 24	\$3,347 60	\$44,868 89	\$9,980 55	\$32,023 29	\$31,071 83
1,789 92	-----	50 18	250 54	-----	-----
281,373 45	-----	2,641 22	73 60	6,068 20	75 00
377,166 85	-----	-----	-----	-----	-----
8,468 95	3,500 00	761 60	212 74	-----	-----
1,815 09	-----	-----	-----	-----	-----
106,293 60	-----	-----	-----	20,000 00	-----
78 89	-----	-----	-----	-----	-----
162,372 24	152 40	-----	-----	-----	-----
\$10,841,986 23	\$7,000 00	\$48,321 89	\$10,517 43	\$58,091 49	\$31,146 83
\$5,000,000 00	\$6,500 00	\$25,000 00	-----	\$500 00	-----
5,071,164 94	-----	-----	-----	50,000 00	-----
299,913 54	500 00	1,500 00	\$9,493 09	-----	\$31,146 83
391,121 73	-----	-----	371 14	2,781 03	-----
31,113 42	-----	-----	-----	4,583 33	-----
45,672 60	-----	-----	-----	-----	-----
3,000 00	-----	938 54	653 20	-----	-----
-----	-----	-----	-----	-----	-----
-----	-----	20,883 35	-----	227 13	-----
\$10,841,986 23	\$7,000 00	\$48,321 89	\$10,517 43	\$58,091 49	\$31,146 83

TABLE No. 1

ABSTRACT OF BALANCE SHEETS OF WATER COMPANIES OPER

	Verdugo Pipe and Reservoir Company	Verdugo Springs Water Company
ASSETS.		
Fixed capital installed prior to January 1, 1913.....	\$19,281 38	
Fixed capital installed subsequent to January 1, 1913.....		\$80,974 11
Total fixed capital.....	\$19,281 38	\$80,974 11
Cash and deposits.....	485 40	533 66
Notes receivable.....		
Accounts receivable.....	484 49	852 31
Other current assets.....		
Investments.....		75 00
Working assets.....	1,750 00	
Prepaid expenses.....		52 22
Unamortized discount on securities and expenses.....		
Miscellaneous.....		
Corporate deficit.....		
Totals.....	\$22,001 27	\$82,487 30
LIABILITIES.		
Capital stock.....	\$15,000 00	\$66,600 00
Funded debt.....		
Invested in plant.....		
Notes payable.....	1,500 00	138 70
Accounts payable.....	105 45	1,594 67
Interest and taxes accrued.....		
Miscellaneous.....		
Reserves.....		1,190 56
Income invested since December 31, 1912, in fixed capital.....		
Corporate surplus.....	5,395 82	12,963 37
Totals.....	\$22,001 27	\$82,487 30

—Continued.

ATING IN CALIFORNIA DURING YEAR ENDING DECEMBER 31, 1913.

Vineyard Ditch Company	Visalia City Water Company	Vista Grande Water Company	W. G. Wadley	Walgrove Water Company	Walnut Creek Water Company
\$6,645 82	\$137,909 74	\$26,479 73	\$4,000 00	\$5,170 00	\$225,005 00
7,502 85	1,709 77	1,759 69	-----	-----	5,149 47
\$14,148 67	\$139,619 51	\$28,239 42	\$4,000 00	\$5,170 00	\$230,154 47
200 33	2,700 81	646 54	-----	-----	983 50
175 00	-----	-----	-----	-----	-----
75 38	796 75	2,562 10	-----	-----	-----
-----	-----	-----	398 40	114 30	-----
-----	3,446 46	-----	-----	-----	25,872 00
-----	-----	167 93	-----	-----	-----
-----	38,545 13	-----	-----	-----	2,452 44
174 89	-----	-----	-----	-----	4,817 90
\$14,774 27	\$185,108 66	\$31,615 99	\$4,398 40	\$5,284 30	\$264,280 31
\$6,320 00	\$100,000 00	-----	-----	-----	\$200,000 00
-----	80,000 00	-----	-----	-----	-----
-----	-----	\$31,608 63	\$4,398 40	\$5,284 30	-----
600 00	-----	-----	-----	-----	52,000 00
1,669 27	303 66	-----	-----	-----	10,992 48
-----	-----	7 36	-----	-----	1,287 83
6,185 00	-----	-----	-----	-----	-----
-----	-----	-----	-----	-----	-----
-----	4,805 00	-----	-----	-----	-----
\$14,774 27	\$185,108 66	\$31,615 99	\$4,398 40	\$5,284 30	\$264,280 31

TABLE No. 1

ABSTRACT OF BALANCE SHEETS OF WATER COMPANIES OPER

	Washington Water and Light Company	Weaverville Town Water Works
<b>ASSETS.</b>		
Fixed capital installed prior to January 1, 1913.....	\$24,720 65	\$8,082 32
Fixed capital installed subsequent to January 1, 1913.....	926 65	6 88
Total fixed capital.....	\$25,647 30	\$8,089 20
Cash and deposits.....	2,194 82	
Notes receivable.....		
Accounts receivable.....		969 78
Other current assets.....		
Investments.....		
Working assets.....		
Prepaid expenses.....		
Unamortized discount on securities and expenses.....		
Miscellaneous.....		
Corporate deficit.....		
Totals.....	\$27,842 12	\$9,058 98
<b>LIABILITIES.</b>		
Capital stock.....	\$6,000 00	
Funded debt.....		
Invested in plant.....		\$9,058 98
Notes payable.....		
Accounts payable.....		
Interest and taxes accrued.....		
Miscellaneous.....		
Reserves.....		
Income invested since December 31, 1912, in fixed capital.....	926 65	
Corporate surplus.....	20,915 47	
Totals.....	\$27,842 12	\$9,058 98

<sup>1</sup>Capital surplus.<sup>2</sup>Surplus invested in fixed capital.



—Continued.

ATING IN CALIFORNIA DURING YEAR ENDING DECEMBER 31, 1913.

West San Joaquin Valley Water Company	West Side Irrigation Company	West Side Water Company	Western Water Company	Whittier Water Company	Williams Water Company
\$52,850 08 1,636 35	\$6,231 10	\$18,000 00	\$460,174 34 90,091 85	\$322,457 86 75,218 69	\$7,849 26 379 13
\$54,486 43 2,573 31	\$6,231 10 228 10	\$18,000 00	\$550,266 19 3,086 50 6,553 48 32,057 93	\$397,676 55 7,465 40 57,175 07 20,859 64 52,747 24 77,207 50	\$8,228 39
284 51					
1,515 75			4,419 22 1,412 02	122,071 59 1,152 48	
1,078 50				171 20	
\$59,938 50	\$6,454 20	\$18,000 00	\$597,795 34	\$736,526 67	\$8,228 39
\$50,000 00	\$4,450 00 950 00	\$18,000 00	\$200,000 00	\$200,000 00 254,000 00	\$4,351 00
668 20			58,927 35 49,072 78	30,000 00 9,152 74 2,073 34	
15,000 00 2,376 84			94,101 50		\$3,487 37 207 00
1,893 46	1,054 20		90,091 85 105,601 86	218,151 31	183 02
\$59,938 50	\$6,454 20	\$18,000 00	\$597,795 34	\$736,526 67	\$8,228 39

TABLE No. 1

ABSTRACT OF BALANCE SHEETS OF WATER COMPANIES OPER

	Willits Water and Power Company	Windsor Water Company
<b>ASSETS.</b>		
Fixed capital installed prior to January 1, 1913.....	\$44,218 50	\$21,148 82
Fixed capital installed subsequent to January 1, 1913.....	1,000 00	1,556 35
Total fixed capital.....	\$45,218 50	\$22,705 17
Cash and deposits.....	3,980 34	1,000 00
Notes receivable.....		
Accounts receivable.....	318 13	
Other current assets.....		
Investments.....		
Working assets.....	1,111 67	134 16
Prepaid expenses.....	1 08	
Unamortized discount on securities and expenses.....		
Miscellaneous.....		
Corporate deficit.....		
Totals.....	\$50,629 72	\$23,839 33
<b>LIABILITIES.</b>		
Capital stock.....	\$44,200 00	
Funded debt.....		
Invested in plant.....		\$22,839 33
Notes payable.....		
Accounts payable.....	1,565 03	1,000 00
Interest and taxes accrued.....	60 00	
Miscellaneous.....		
Reserves.....		
Income invested since December 31, 1912, in fixed capital.....		
Corporate surplus.....	4,804 69	
Totals.....	\$50,629 72	\$23,839 33

NOTE.—Reports of Cosumnes Irrigation Company and Napa City Water Company omitted, as same were incomplete.

--Concluded.

ATING IN CALIFORNIA DURING YEAR ENDING DECEMBER 31, 1913.

Yolo County Consolidated Water Company	Totals
\$1,205,993 62	\$211,642,229 46
-----	2,283,820 78
\$1,205,993 62	\$213,926,050 24
1,215 31	599,455 46
-----	538,516 49
6,648 55	2,096,510 34
-----	437,368 51
-----	7,073,533 15
-----	7,743,287 28
160 12	45,553 98
-----	11,382,513 23
-----	9,407,900 34
25,165 93	3,538,894 32
-----	
\$1,239,183 53	\$256,789,583 34
-----	
\$1,000,000 00	\$143,013,072 97
225,000 00	70,693,863 53
-----	2,574,964 90
-----	5,584,988 70
11,121 03	2,652,168 22
3,062 50	1,245,274 97
-----	19,531,342 73
-----	6,597,090 87
-----	
-----	483,252 45
-----	4,413,564 00
-----	
\$1,239,183 53	\$256,789,583 34

TABLE

ABSTRACT OF INCOME AND PROFIT AND LOSS ACCOUNT OF  
ENDING DECEMBER

	American Canyon Water Company	American Irrigation Company
Operating revenues .....	\$11,197 50	\$10,876 95
Operating expenses .....	20,455 54	12,873 19
Net operating revenue .....		
Net operating loss .....	9,258 04	1,996 24
Non-operating revenue .....		
Gross corporate income .....		
Gross corporate loss .....	9,258 04	1,996 24
<i>Deductions.</i>		
Non-operating revenue deductions .....		
Interest accrued on funded debt .....	\$18,000 00	\$6,000 00
Other interest deductions .....	5,455 33	2,844 85
Rent deductions .....		
Miscellaneous deductions .....		
Total deductions .....	\$23,455 33	\$8,844 85
Net corporate income for year .....		
Net corporate loss for year .....	\$32,713 37	\$10,841 09
Dividends .....		
Miscellaneous additions to income .....		
Miscellaneous deductions from income .....	5,650 09	366 86
Surplus on December 31, 1912 .....	710 97	
Deficit on December 31, 1912 .....		38,510 64
Surplus on December 31, 1913 .....		
Deficit on December 31, 1913 .....	37,652 49	49,718 59



## No. 2.

WATER COMPANIES OPERATING IN CALIFORNIA DURING YEAR  
ENDING 31, 1913.

Antelope Creek and Red Bluff Water Company	The Anderson Canal Company	Artesian Water Company	Auburn Springs Water Works	Bakersfield Water Company	Baldwin Park Domestic Water Company
\$20,365 45	\$2,938 75	\$4,944 80	\$500 85	\$26,338 00	\$2,865 00
13,087 71	1,678 37	12,941 03	135 60	21,813 55	4,492 38
7,277 74	1,260 38		365 25	4,524 45	
		7,996 23			1,627 38
		17,834 97		145 44	
7,277 74	1,260 38	9,838 74	365 25	4,669 89	
					1,627 38
		\$5,019 63		\$2,850 00	
\$720 00					
\$720 00		\$5,019 63		\$2,850 00	
\$6,557 74	\$1,260 38	\$4,819 11	\$365 25	\$1,819 89	
3,375 00					\$1,627 38
	1,495 50	361,549 52			
24,692 99	2,755 88	366,368 63	365 25	2,896 44	2,010 37
21,510 25				1,076 55	3,637 75

TABLE No. 2

ABSTRACT OF INCOME AND PROFIT AND LOSS ACCOUNT OF  
ENDING DECEM

	Baldwin Park Water Company	Bay Point Light and Water Company <sup>1</sup>
Operating revenues .....	\$1,844 81	\$3,479 21
Operating expenses .....	2,320 63	2,998 79
Net operating revenue .....		480 42
Net operating loss .....	475 82	
Non-operating revenue .....		
Gross corporate income .....		480 42
Gross corporate loss .....	475 82	
<i>Deductions.</i>		
Non-operating revenue deductions .....		
Interest accrued on funded debt .....		
Other interest deductions .....		
Rent deductions .....		
Miscellaneous deductions .....		
Total deductions .....		
Net corporate income for year .....		
Net corporate loss for year .....	\$475 82	
Dividends .....		
Miscellaneous additions to income .....		
Miscellaneous deductions from income .....		
Surplus on December 31, 1912 .....		
Deficit on December 31, 1912 .....		
Surplus on December 31, 1913 .....		
Deficit on December 31, 1913 .....	475 82	

<sup>1</sup>See electric report.

—Continued.

WATER COMPANIES OPERATING IN CALIFORNIA DURING YEAR  
PER 31, 1913.

Bench Land Water System	Bear Gulch Water Company	Beaverwyck Land Company	Bell Water Company	Belvedere Land Company	Benicia Water Company
\$1,104 56	\$20,992 76	\$2,701 28	\$4,056 00	\$7,449 91	\$23,220 67
1,822 32	13,445 58	4,856 99	3,170 75	7,071 03	32,249 98
	7,547 18		885 25	378 88	
717 76		2,155 71			9,029 31
	240 00				1,608 35
	7,787 18		885 25	378 88	
717 76		2,155 71			7,420 96
	\$10,250 00				\$8,010 93
	5,125 00		\$38 11		
	\$15,375 00		\$38 11		\$8,010 93
			\$847 14	\$378 88	
\$717 76	\$7,587 82	\$2,155 71			\$15,431 89
				70,894 62	
	80,655 35		127 08	134,055 29	31,718 89
		3,811 47			
	73,067 53		974 22	63,539 55	16,287 00
717 76		5,967 18			

TABLE No. 2

ABSTRACT OF INCOME AND PROFIT AND LOSS ACCOUNT OF  
ENDING DECEMBER

	Black Diamond Water Company	J. W. Bloom
Operating revenues .....	\$11,947 37	\$2,510 26
Operating expenses .....	9,458 76	3,608 44
Net operating revenue .....	2,488 61	
Net operating loss .....		1,098 18
Non-operating revenue .....	35 25	
Gross corporate income .....	2,523 86	
Gross corporate loss .....		1,098 18
<i>Deductions.</i>		
Non-operating deductions .....		
Interest accrued on funded debt .....		
Other interest deductions .....		
Rent deductions .....		
Miscellaneous deductions .....		
Total deductions .....		
Net corporate income for year .....	\$2,523 86	
Net corporate loss for year .....		\$1,098 18
Dividends .....		
Miscellaneous additions to income .....		
Miscellaneous deductions from income .....		
Surplus on December 31, 1912 .....	4,923 42	
Deficit on December 31, 1912 .....		
Surplus on December 31, 1913 .....	7,447 28	
Deficit on December 31, 1913 .....		1,098 18

<sup>1</sup>See electric report.





TABLE No. 2

ABSTRACT OF INCOME AND PROFIT AND LOSS ACCOUNT OF  
ENDING DECEMBER

	Calistoga Water Company	Callahan Water System
Operating revenues .....	\$4,245 93	\$216 55
Operating expenses .....	3,399 87	58 50
Net operating revenue .....	846 06	158 05
Net operating loss .....		
Non-operating revenue .....		
Gross corporate income .....	846 06	158 05
Gross corporate loss .....		
<i>Deductions.</i>		
Non-operating revenue deductions .....		
Interest accrued on funded debt .....		
Other interest deductions .....	\$105 00	
Rent deductions .....		
Miscellaneous deductions .....		
Total deductions .....	\$105 00	
Net corporate income for year .....	\$741 06	\$158 05
Net corporate loss for year .....		
Dividends .....		
Miscellaneous additions to income .....		
Miscellaneous deductions from income .....		
Surplus on December 31, 1912 .....	1,183 48	
Deficit on December 31, 1912 .....		
Surplus on December 31, 1913 .....	1,924 54	158 05
Deficit on December 31, 1913 .....		

<sup>1</sup>See electric report.

—Continued.

WATER COMPANIES OPERATING IN CALIFORNIA DURING YEAR  
BER 31, 1913.

Campbell Water Company	Cherry Canon Water Company	Chico Water Supply Company	City Water Company of Banning	California- Oregon Power Company <sup>1</sup>	Citizens Land and Water Company of Upland
\$5,832 80	\$2,267 46	\$34,340 67	\$3,835 08	\$33,439 20	\$9,873 67
3,895 94	999 18	18,874 62	2,528 80	6,278 81	5,477 03
1,936 86	1,268 28	15,466 05	1,306 28	27,160 39	4,396 64
26 50		236 42			
1,963 36	1,268 28	15,702 47	1,306 28	27,160 39	4,396 64
		\$3,209 73			\$750 00
					1,105 73
					58 93
		\$3,209 73			\$1,914 66
\$1,963 36	\$1,268 28	12,492 74	\$1,306 28		\$2,481 98
1,500 00		2,000 00			
		500 00			
6,247 47	6,504 74	17,289 59			10,538 59
6,710 83	7,773 02	27,282 33	1,306 28		13,020 57

TABLE No. 2

ABSTRACT OF INCOME AND PROFIT AND LOSS ACCOUNT OF  
ENDING DECEMBER

	Claremont Domestic Water Company	Citizens Water Company of Niles
Operating revenues .....	\$9,113 45	\$5,705 07
Operating expenses .....	6,700 32	3,267 76
Net operating revenue .....	2,413 13	2,437 31
Net operating loss .....		
Non-operating revenue .....	450 55	
Gross corporate income .....	2,863 68	2,437 31
Gross corporate loss .....		
<i>Deductions.</i>		
Non-operating revenue deductions .....	\$100 00	
Interest accrued on funded debt .....		
Other interest deductions .....		
Rent deductions .....		
Miscellaneous deductions .....		\$13 25
Total deductions .....	\$100 00	\$13 25
Net corporate income for year .....	\$2,763 68	\$2,424 06
Net corporate loss for year .....		
Dividends .....	2,101 50	1,155 70
Miscellaneous additions to income .....		
Miscellaneous deductions from income .....		
Surplus on December 31, 1912 .....	7,781 96	
Deficit on December 31, 1912 .....		
Surplus on December 31, 1913 .....	8,444 14	1,268 36
Deficit on December 31, 1913 .....		



—Continued.

WATER COMPANIES OPERATING IN CALIFORNIA DURING YEAR  
BER 31, 1913.

Citizens Water Company of San Jacinto	City Water Company of Ocean Park	Clara Vista Water Company	Coachella Water Company	Coalinga Consolidated Water Company	Coalinga Domestic Water Company
\$13,631 03	\$46,365 44	\$2,888 15	\$765 26	\$36,647 67	\$9,328 55
14,111 67	32,418 06	1,312 40	88 51	24,629 41	8,705 81
-----	13,947 38	1,575 75	676 75	12,018 26	622 74
480 64	-----	-----	-----	-----	-----
67 86	-----	-----	-----	2,512 15	-----
-----	13,947 38	1,575 75	676 75	14,530 41	622 74
412 78	-----	-----	-----	-----	-----
-----	-----	-----	-----	-----	-----
\$44 70	-----	-----	-----	-----	-----
12,000 00	\$8,460 00	\$3,600 00	-----	\$6,000 00	-----
2,449 97	-----	-----	-----	-----	-----
-----	-----	-----	-----	-----	-----
-----	-----	-----	-----	-----	-----
\$14,494 67	\$8,460 00	\$3,600 00	-----	\$6,000 00	-----
-----	\$5,487 38	-----	\$676 75	\$8,530 41	\$622 74
\$14,907 45	-----	\$2,024 25	-----	-----	-----
-----	-----	-----	570 00	8,750 00	806 10
10 00	-----	-----	-----	-----	-----
545 43	44,368 37	-----	-----	-----	-----
-----	-----	-----	-----	3,590 18	53 70
18,389 01	49,855 75	-----	106 75	-----	-----
-----	-----	2,024 25	-----	3,809 77	237 06
33,831 89	-----	-----	-----	-----	-----

TABLE No. 2

ABSTRACT OF INCOME AND PROFIT AND LOSS ACCOUNT OF  
ENDING DECEMBER

	Colegrove Water Company	Compton Water and Lighting Company
Operating revenues .....	\$2,566 85	\$2,783 66
Operating expenses .....	2,844 28	1,840 75
Net operating revenue.....		942 91
Net operating loss.....	277 43	
Non-operating revenue .....		
Gross corporate income.....		942 91
Gross corporate loss.....	277 43	
<i>Deductions.</i>		
Non-operating revenue deductions.....		
Interest accrued on funded debt.....		
Other interest deductions.....	355 50	
Rent deductions .....		
Miscellaneous deductions .....		
Total deductions .....	\$355 50	
Net corporate income for year.....		\$942 91
Net corporate loss for year.....	\$632 93	
Dividends .....		448 00
Miscellaneous additions to income.....		
Miscellaneous deductions from income.....		
Surplus on December 31, 1912.....	360 17	1,158 50
Deficit on December 31, 1912.....		
Surplus on December 31, 1913.....		1,653 41
Deficit on December 31, 1913.....	272 76	

<sup>1</sup>See electric report.

—Continued.

WATER COMPANIES OPERATING IN CALIFORNIA DURING YEAR  
BER 31, 1913.

Coneland Water Company	Conservative Realty Company	Consolidated Canal Company	Consolidated Water Company of Pomona	Consumers Water Company	Coast Valleys Gas and Electric Company†
\$12,076 66	\$14,198 00	\$65,848 42	\$63,402 38	\$13,555 27	\$21,315 11
9,027 34	13,098 22	35,549 88	40,612 97	9,781 47	16,779 63
3,049 32	1,099 78	30,298 54	22,789 41	3,773 80	4,535 48
	48 10	4,070 48		197 15	
3,049 32	1,147 88	34,369 02	22,789 41	3,970 95	4,535 48
				\$467 33	
		\$6,000 00	\$10,500 00		
		955 31	5,517 98		
		4,000 00			
	\$415 40	415 50		6,374 05	
	\$415 40	\$11,370 81	\$16,017 98	\$6,841 38	
\$3,049 32	\$732 48	\$22,998 21	\$6,771 43		
				\$2,870 43	
		20,000 00			
	50,422 25				
	29,818 16				
2,716 00		110,251 50		2,870 43	
	39,514 78				
5,765 32		113,249 71	6,771 43		
	18,178 21				

TABLE No. 2

ABSTRACT OF INCOME AND PROFIT AND LOSS ACCOUNT OF  
ENDING DECEMBER

	J. B. H. Cooper Water Company	Consolidated Securities Company
Operating revenues -----	\$257 00	\$16,786 20
Operating expenses -----	242 27	15,029 48
Net operating revenue -----	14 73	1,756 72
Net operating loss -----		
Non-operating revenue -----		12 25
Gross corporate income -----	14 73	1,768 97
Gross corporate loss -----		
<i>Deductions.</i>		
Non-operating revenue -----		
Interest accrued on funded debt -----		
Other interest deductions -----		\$4,320 00
Rent deductions -----		
Miscellaneous deductions -----		
Total deductions -----		\$4,320 00
Net corporate income for year -----	\$14 73	
Net corporate loss for year -----		\$2,551 03
Dividends -----		
Miscellaneous additions to income -----		
Miscellaneous deductions from income -----		
Surplus on December 31, 1912 -----	22 18	
Deficit on December 31, 1912 -----		
Surplus on December 31, 1913 -----	36 91	
Deficit on December 31, 1913 -----		12,940 23

Includes electric net loss of \$319.58—telephone net loss of \$69.62.



—Continued.

WATER COMPANIES OPERATING IN CALIFORNIA DURING YEAR  
BER 31, 1913.

Coreoran Water and Gas Company	Corona City Water Company	Coronado Water Company	Crocker Tract Water System	Cottonwood Irrigation and Mining Company	Corvina City Water Company
\$2,961 68	\$20,257 27	\$39,963 50	\$6,173 45	\$761 25	\$10,739 05
2,528 60	16,804 30	32,291 84	6,695 83	382 90	10,376 22
433 08	3,452 97	7,671 66	522 38	378 35	362 83
		5 00			477 26
433 08	3,452 97	7,676 66	522 38	378 35	840 09
	\$100 30				\$4 00
	3,150 00				6,666 67
	597 89				393 50
					180 00
					2,286 40
	\$3,848 19				\$9,530 57
\$433 08		\$7,676 66		\$378 35	
	\$395 22		\$522 38		\$8,690 48
				512 00	
		18 55		335 35	10,297 90
		951 69			25,332 39
1,970 08				369 20	
	39,235 05	222,567 14	5,139 41		7,777 49
2,403 16				570 90	
	39,630 27	215,823 62	5,661 79		31,502 46

TABLE NO. 2

ABSTRACT OF INCOME AND PROFIT AND LOSS ACCOUNT OF  
ENDING DECEM

	Crocker- Huffman Land and Water Company	Crown Water Company
Operating revenues -----	\$62,724 93	\$1,027 28
Operating expenses -----	44,906 57	980 19
Net operating revenue -----	17,818 36	47 09
Net operating loss -----		
Non-operating revenue -----		
Gross corporate income -----	17,818 36	47 09
Gross corporate loss -----		
<i>Deductions.</i>		
Non-operating revenue deductions -----		
Interest accrued on funded debt -----		
Other interest deductions -----		
Rent deductions -----		
Miscellaneous deductions -----		
Total deductions -----		
Net corporate income for year -----	\$17,818 66	\$47 09
Net corporate loss for year -----		
Dividends -----		
Miscellaneous additions to income -----	18,294 00	
Miscellaneous deductions from income -----		
Surplus on December 31, 1912 -----		14 33
Deficit on December 31, 1912 -----	56,277 00	
Surplus on December 31, 1913 -----		61 42
Deficit on December 31, 1913 -----	20,164 64	

—Continued.

WATER COMPANIES OPERATING IN CALIFORNIA DURING YEAR  
ENDING 31, 1913.

Crystal Springs Water Company of Sawtelle	Cucamonga Water Company	Cuyamaca Water Company	Danville Water Company	Davis Water Company	Del Norte Water Company
\$4,661 75	\$2,201 30	\$24,641 43	\$419 50	\$372 80	\$4,776 84
5,359 34	13,489 31	40,775 94	244 32	832 74	4,727 19
			175 18		49 65
697 59	11,288 01	16,134 51		459 94	
	512 00	423 75			
			175 18		49 65
697 59	10,776 01	15,710 76		459 94	
					\$491 90
	\$15,000 00				
	30 00		\$157 50		
		\$11 47			
	\$15,030 00	\$11 47	\$157 50		\$491 90
			\$17 68		
\$697 59	\$25,806 01	\$15,722 23		\$459 94	\$442 25
		120 33			
			45 79		
		5,287 25			2,668 99
			63 47		
697 59	25,806 01	21,129 81		459 94	3,111 24

TABLE No. 2

ABSTRACT OF INCOME AND PROFIT AND LOSS ACCOUNT OF  
ENDING DECEM

	Domestic Water Company of Santa Maria	Domestic Water Company
Operating revenues -----	\$13,179 50	\$6,426 84
Operating expenses -----	19,439 43	5,166 92
Net operating revenue -----		1,259 92
Net operating loss -----	6,259 93	
Non-operating revenue -----		58 33
Gross corporate income -----		1,318 25
Gross corporate loss -----	6,259 93	
<i>Deductions.</i>		
Non-operating revenue deductions -----		\$242 89
Interest accrued on funded debt -----		
Other interest deductions -----		
Rent deductions -----		
Miscellaneous deductions -----		
Total deductions -----		\$242 89
Net corporate income for year -----		\$1,075 36
Net corporate loss for year -----	\$6,259 93	
Dividends -----		
Miscellaneous additions to income -----		
Miscellaneous deductions from income -----		
Surplus on December 31, 1912 -----		
Deficit on December 31, 1912 -----		
Surplus on December 31, 1913 -----		1,075 36
Deficit on December 31, 1913 -----	6,259 93	



—Continued.

WATER COMPANIES OPERATING IN CALIFORNIA DURING YEAR  
BER 31, 1913.

Eagle Rock Water Company	East Sacramento Water Company	East Side Canal and Irrigation Company	Electric Water Company	East Side Canal Company	Encanto Mutual Water Company
\$24,388 39	\$4,306 95	\$17,007 28	\$64,487 44	\$4,878 80	\$3,967 58
23,207 25	3,299 87	24,652 01	42,894 14	8,696 32	4,388 12
1,181 14	1,007 08		21,593 30		
		7,644 73		3,817 52	420 54
3,667 28		247 32	160 00		
4,848 42	1,007 08		21,753 30		
		7,397 41		3,817 52	420 54
\$68 95		\$87 62			
1,256 73					
	\$795 47	22,382 02			
\$1,325 68	\$795 47	\$22,469 64			
\$3,522 74	\$211 61		\$21,753 30		
		\$29,867 05		\$3,817 52	\$420 54
5,339 96					
23,495 81					
2,721 29		39 15			
8,506 88	320 05	120,194 55	128,408 90	5,703 99	275 15
10,450 42					
	108 44	150,100 75	106,655 60	9,521 51	695 69

TABLE No. 2

ABSTRACT OF INCOME AND PROFIT AND LOSS ACCOUNT OF  
ENDING DECEMBER

	Escalon Water and Light Company	Etna Development Company
Operating revenues -----	\$927 90	\$3,513 20
Operating expenses -----	452 25	2,273 68
Net operating revenue -----	475 65	1,239 52
Net operating loss -----		
Non-operating revenue -----		
Gross corporate income -----	475 65	1,239 52
Gross corporate loss -----		
<i>Deductions.</i>		
Non-operating revenue deduction -----	\$10 65	\$127 80
Interest accrued on funded debt -----		
Other interest deductions -----	210 00	
Rent deductions -----		
Miscellaneous deductions -----		12 00
Total deductions -----	\$220 65	\$139 80
Net corporate income -----	\$255 00	\$1,099 72
Net corporate loss for year -----		
Dividends -----		900 00
Miscellaneous additions to income -----		161 02
Miscellaneous deductions from income -----		
Surplus on December 31, 1912 -----		3,847 26
Deficit on December 31, 1912 -----	207 71	
Surplus on December 31, 1913 -----	47 29	4,208 00
Deficit on December 31, 1913 -----		

—Continued.

WATER COMPANIES OPERATING IN CALIFORNIA DURING YEAR  
PER 31, 1913.

Euclid Avenue Water Company	The Eureka Water Company	Excelsior Water and Mining Company	Fairmont Water Company	Fairview Land and Water Company	Felton Water Company
\$4,273 60	\$52,951 74	\$12,073 41	\$17,620 81	\$643 79	\$719 50
3,248 39	30,949 36	16,049 22	13,387 81	6,703 49	430 54
1,025 21	22,002 38	-----	4,233 00	-----	288 96
-----	-----	3,975 81	-----	6,059 70	-----
12 07	28 50	-----	-----	831 79	-----
1,037 28	22,030 88	-----	4,233 00	-----	288 96
-----	-----	3,975 81	-----	5,227 91	-----
-----	-----	-----	-----	684 33	-----
\$525 00	-----	-----	-----	1,600 00	-----
-----	-----	-----	-----	-----	-----
-----	\$30 20	-----	-----	-----	-----
\$525 00	\$30 20	-----	-----	\$2,284 33	-----
\$512 28	\$22,000 68	-----	\$4,233 00	-----	\$288 96
-----	-----	\$3,975 81	-----	\$7,512 24	-----
-----	-----	-----	-----	-----	252 50
300 00	15,000 00	-----	-----	33 20	-----
4,976 43	110,820 57	-----	-----	12 95	-----
-----	-----	-----	-----	38,008 44	277 00
5,188 71	117,821 25	-----	4,233 00	30,516 45	313 46
-----	-----	3,975 81	-----	-----	-----

TABLE No. 2

ABSTRACT OF INCOME AND PROFIT AND LOSS ACCOUNT OF  
ENDING DECEMBER

	Fort Bragg Water Company	Fortuna Water Company
Operating revenues -----	\$5,247 85	\$2,204 35
Operating expenses -----	5,539 00	1,606 81
Net operating revenue -----		597 54
Net operating loss -----	291 15	
Non-operating revenue -----		
Gross corporate income -----		597 54
Gross corporate loss -----	291 15	
<i>Deductions.</i>		
Non-operating revenue deductions -----		\$96 00
Interest accrued on funded debt -----		
Other interest deductions -----		
Rent deductions -----		
Miscellaneous deductions -----		19 75
Total deductions -----		\$115 75
Net corporate income for year -----		\$481 79
Net corporate loss for year -----	\$291 15	
Dividends -----		
Miscellaneous additions to income -----		
Miscellaneous deductions from income -----		22 90
Surplus on December 31, 1912 -----		1,889 63
Deficit on December 31, 1912 -----		
Surplus on December 31, 1913 -----		2,348 52
Deficit on December 31, 1913 -----	291 15	



—Continued.

WATER COMPANIES OPERATING IN CALIFORNIA DURING YEAR  
ENDING 31, 1913.

Frederick Water Company	Farmers Canal Company	Fresno Canal and Irrigation Company	Fresno City Water Company	Garden Grove Water Company	Glendale Consolidated Water Company
\$769 54	\$3,671 76	\$121,408 37	\$159,439 85	\$960 50	\$62,764 29
582 16	4,155 37	78,183 26	116,965 45	852 20	51,318 52
187 38	-----	43,225 11	42,474 40	108 30	11,445 77
-----	483 61	-----	-----	-----	-----
-----	-----	13,180 49	4,213 99	-----	-----
187 38	-----	56,405 60	46,688 39	108 30	11,445 77
-----	483 61	-----	-----	-----	-----
24 62	-----	2,213 57	202 08	-----	-----
-----	-----	\$87,225 47	\$12,926 39	-----	\$2,097 75
-----	-----	-----	519 90	-----	15,050 00
-----	-----	212 60	125 50	-----	-----
\$24 62	-----	\$89,651 64	\$13,773 87	-----	\$17,147 75
\$162 76	-----	-----	\$32,914 52	\$108 30	-----
-----	\$483 61	\$33,246 04	35,000 00	-----	\$5,701 98
-----	-----	-----	7,405 55	-----	-----
292 38	-----	-----	39,025 20	-----	-----
-----	244 41	481,639 16	-----	-----	2,302 87
455 14	-----	-----	29,534 17	108 30	-----
-----	728 02	514,885 20	-----	-----	8,004 85

TABLE No. 2

ABSTRACT OF INCOME AND PROFIT AND LOSS ACCOUNT OF  
ENDING DECEMBER

	Glendora Water Company	Goose Lake Canal Company
Operating revenues -----	\$15,210 89	-----
Operating expenses -----	13,594 24	\$155 52
Net operating revenue -----	1,616 65	-----
Net operating loss -----	-----	155 52
Non-operating revenue -----	-----	-----
Gross corporate income -----	1,616 65	-----
Gross corporate loss -----	-----	155 52
<i>Deductions.</i>		
Non-operating revenue deductions -----	\$430 77	-----
Interest accrued on funded debt -----	1,387 50	-----
Other interest deductions -----	-----	-----
Rent deductions -----	-----	-----
Miscellaneous deductions -----	-----	-----
Total deductions -----	\$1,818 27	-----
Net corporate income for year -----	-----	-----
Net corporate loss for year -----	\$201 62	\$155 52
Dividends -----	-----	-----
Miscellaneous additions to income -----	-----	-----
Miscellaneous deductions from income -----	3,746 00	-----
Surplus on December 31, 1912 -----	351 97	-----
Deficit on December 31, 1912 -----	-----	813 96
Surplus on December 31, 1913 -----	-----	-----
Deficit on December 31, 1913 -----	3,595 65	969 48

—Continued.

WATER COMPANIES OPERATING IN CALIFORNIA DURING YEAR  
BER 31, 1913.

Gates Canal Company	J. A. Graves	E. E. Hall	The Hanford Water Company	Happy Valley Land and Water Company	Hawthorne Electric and Water Company
	\$6,890 95	\$2,706 62	\$30,647 07	\$3,750 67	\$5,639 32
\$105 50	3,189 85	2,592 85	20,057 68	7,723 01	12,323 04
	3,701 10	113 77	10,589 39		
105 50				3,972 34	6,683 72
				231 62	2,102 30
	3,701 10	113 77	10,589 39		
105 50				3,740 72	4,581 42
	\$48 55		\$466 26	\$662 19	
				66 70	\$18 00
	\$48 55		\$466 26	\$728 89	\$18 00
	\$3,652 55	\$113 77	\$10,123 13		
\$105 50				\$4,469 61	\$4,599 42
			9,905 00		
			976 55	91 22	
				53 85	741 60
		43 33	17,161 96	228,154 27	
505 54					10,255 52
	3,652 55	157 10	18,356 64	223,722 03	
611 04					15,596 54

TABLE No. 2

ABSTRACT OF INCOME AND PROFIT AND LOSS ACCOUNT OF  
ENDING DECEMBER

	Hercules Water Company	Heck Bros. Water System
Operating revenues .....	\$14,815 82	\$3,548 39
Operating expenses .....	13,755 18	2,190 93
Net operating revenue .....	1,060 64	1,357 46
Net operating loss .....		
Non-operating revenue .....	461 51	
Gross corporate income .....	1,522 15	1,357 46
Gross corporate loss .....		
<i>Deductions.</i>		
Non-operating revenue deductions .....		
Interest accrued on funded debt .....		
Other interest deductions .....		
Rent deductions .....		
Miscellaneous deductions .....		
Total deductions .....		
Net corporate income for year .....	\$1,522 15	\$1,357 46
Net corporate loss for year .....		
Dividends .....		
Miscellaneous additions to income .....		
Miscellaneous deductions from income .....		
Surplus on December 31, 1912 .....	1,019 63	
Deficit on December 31, 1912 .....		
Surplus on December 31, 1913 .....	2,541 78	1,357 46
Deficit on December 31, 1913 .....		

<sup>1</sup>See electric report.



—Continued.

WATER COMPANIES OPERATING IN CALIFORNIA DURING YEAR  
BER 31, 1913.

Hemet Town Water Company	Huntington Beach Company <sup>1</sup>	Hihn Water Company	Hawthorne Water Company	Hermosa Beach Water Company	Highland Domestic Water Company
\$4,998 30	\$6,835 26	\$16,955 64	\$14,536 44	\$19,592 67	\$5,574 39
2,043 38	18,617 19	13,819 80	11,935 24	15,463 01	2,972 96
2,954 92	-----	3,135 84	2,601 20	4,129 66	2,601 43
	11,781 93	-----			
605 20			75 80	-----	
3,560 12	-----	3,135 84	2,677 00	4,129 66	2,601 43
	11,781 93	-----			
\$242 20	-----		\$354 00	-----	
		\$5,000 00			
356 95	-----	111 54	-----		
\$599 15	-----	\$5,111 54	\$354 00	-----	
\$2,960 97	-----		\$2,323 00	\$4,129 66	\$2,601 43
		\$1,975 70			
					2,759 40
				7,033 74	-----
936 00	-----	10 66	6,444 10	-----	
20,415 35	-----	1,573 61	10,794 91	-----	1,603 32
22,440 32	-----		6,673 81	11,163 40	1,445 35
		412 75	-----		

TABLE No. 2

ABSTRACT OF INCOME AND PROFIT AND LOSS ACCOUNT OF  
ENDING DECEMBER

	Hollister Water Company	Hollywood Water Company
Operating revenues .....	\$20,482 35	\$15,509 38
Operating expenses .....	13,784 42	13,125 71
Net operating revenue.....	6,697 93	2,383 67
Net operating loss.....		
Non-operating revenue .....	250 00	6,334 48
Gross corporate income.....	6,947 93	8,718 15
Gross corporate loss.....		
<i>Deductions.</i>		
Non-operating revenue deductions.....		
Interest accrued on funded debt.....	\$387 50	
Other interest deductions.....		
Rent deductions .....		
Miscellaneous deductions .....		
Total deductions .....	\$387 50	
Net corporate income for year.....	\$6,560 43	\$8,718 15
Net corporate loss for year.....		
Dividends .....		7,530 00
Miscellaneous additions to income.....		
Miscellaneous deductions from income.....		
Surplus on December 31, 1912.....	159,103 21	8,976 41
Deficit on December 31, 1912.....		
Surplus on December 31, 1913.....	165,663 64	10,164 56
Deficit on December 31, 1913.....		

—Continued.

WATER COMPANIES OPERATING IN CALIFORNIA DURING YEAR  
BER 31, 1913.

Home Tract Water Company	Hornbrook Water Company	Hyde Park Water Company	Ione Water Works	Independence Water Company	Indio Light, Water and Ice Company
\$1,320 70	\$1,903 00	\$8,632 84	\$3,410 98	\$1,207 25	\$1,307 72
874 62	590 30	5,075 07	3,450 84	1,062 82	942 73
446 08	1,312 70	3,557 77	-----	144 43	364 99
-----	-----	-----	39 86	-----	-----
-----	-----	-----	-----	-----	119 14
446 08	1,312 70	3,557 77	-----	144 43	484 13
-----	-----	-----	39 86	-----	-----
-----	-----	-----	-----	\$139 92	\$745 96
-----	-----	\$398 57	\$141 93	-----	-----
-----	-----	-----	-----	-----	-----
-----	-----	\$398 57	\$141 93	\$139 92	\$745 96
\$446 08	\$1,312 70	\$3,159 20	-----	\$4 51	-----
-----	-----	-----	\$181 79	-----	\$261 83
-----	-----	90	-----	-----	-----
-----	-----	4,303 11	381 03	-----	-----
-----	454 15	4,303 11	-----	12 00	-----
-----	-----	-----	-----	-----	164 35
446 08	1,766 85	3,160 10	-----	16 51	-----
-----	-----	-----	562 82	-----	426 18

TABLE No. 2

ABSTRACT OF INCOME AND PROFIT AND LOSS ACCOUNT OF  
ENDING DECEMBER

	Inglewood Water Company	Interurban Land Company
Operating revenues .....	\$23,214 84	\$2,593 85
Operating expenses .....	18,847 23	5,317 44
Net operating revenue .....	4,367 61	
Net operating loss .....		2,723 59
Non-operating revenue .....		3,018 98
Gross corporate income .....	4,367 61	295 39
Gross corporate loss .....		
<i>Deductions.</i>		
Non-operating revenue deductions .....		\$3,202 19
Interest accrued on funded debt .....		
Other interest deductions .....	\$10,660 14	
Rent deductions .....		
Miscellaneous deductions .....	227 47	
Total deductions .....	\$10,887 61	\$3,202 19
Net corporate income for year .....		
Net corporate loss for year .....	\$6,520 00	\$2,906 80
Dividends .....		
Miscellaneous additions to income .....	247 47	
Miscellaneous deductions from income .....	20,154 73	
Surplus on December 31, 1912 .....		35,325 99
Deficit on December 31, 1912 .....		
Surplus on December 31, 1913 .....		32,419 19
Deficit on December 31, 1913 .....	26,427 26	



—Continued.

WATER COMPANIES OPERATING IN CALIFORNIA DURING YEAR  
PER 31, 1913.

Interurban Water Company	Irwin Heights Water Company	Jackson Water System	Janss Water Company	James Canal Company	James and Dixon Canal Company
\$5,771 69	\$10,286 25	\$620 80	\$39,961 74	\$11,910 18	\$33 78
12,079 29	7,365 53	614 23	29,635 28	1,036 67	161 95
-----	2,920 72	6 57	10,326 46	10,873 51	-----
6,307 60	-----	-----	-----	-----	128 17
-----	2,920 72	6 57	10,326 46	10,873 51	-----
6,307 60	-----	-----	-----	-----	128 17
-----	\$130 00	-----	-----	-----	-----
-----	1,920 73	-----	-----	-----	-----
-----	-----	-----	-----	-----	-----
-----	-----	-----	-----	-----	-----
-----	\$2,050 73	-----	-----	-----	-----
-----	\$869 99	\$6 57	\$10,326 46	\$10,873 51	-----
\$6,307 60	-----	-----	-----	10,000 00	\$128 17
-----	-----	-----	-----	-----	-----
290 24	-----	-----	18,532 62	-----	-----
290 24	-----	164 76	8,206 16	14,915 69	-----
-----	290 08	-----	-----	-----	746 30
-----	579 91	171 33	-----	15,789 20	-----
6,307 60	-----	-----	-----	-----	874 47

TABLE No. 2

ABSTRACT OF INCOME AND PROFIT AND LOSS ACCOUNT OF  
ENDING DECEMBER

	Joyce Canal Company	Kennett Water Company
Operating revenues .....	\$70 89	\$14,360 20
Operating expenses .....	110 43	11,510 29
Net operating revenue .....		2,849 91
Net operating loss .....	39 54	
Non-operating revenue .....		18 00
Gross corporate income .....		2,867 91
Gross corporate loss .....	39 54	
<i>Deductions.</i>		
Non-operating revenue deductions .....		
Interest accrued on funded debt .....		
Other interest deductions .....		
Rent deductions .....		
Miscellaneous deductions .....		\$5 37
Total deductions .....		\$5 37
Net corporate income for year .....		\$2,862 54
Net corporate loss for year .....	\$39 54	
Dividends .....		4,235 00
Miscellaneous additions to income .....		2 12
Miscellaneous deductions from income .....		
Surplus on December 31, 1912 .....		981 75
Deficit on December 31, 1912 .....	485 72	
Surplus on December 31, 1913 .....		
Deficit on December 31, 1913 .....	525 26	388 59

—Continued.

WATER COMPANIES OPERATING IN CALIFORNIA DURING YEAR  
BER 31, 1913.

Kern Island Irrigating Company	Kern River Canal and Irrigating Company	Kings River and Fresno Canal Company	Knapp Water Company	La Habra Valley Land and Water Company	Laguna Blanca Water Company
\$36,528 88	\$6,194 11	\$2,475 10	\$1,289 10	\$1,033 62	\$829 65
33,555 72	8,803 85	1,876 00	1,739 83	10,519 37	3,474 72
2,973 16	-----	599 10	-----	-----	-----
-----	2,609 74	-----	450 73	9,485 75	2,645 07
2,973 16	-----	599 10	-----	-----	569 00
-----	2,609 74	-----	450 73	9,485 75	2,076 07
-----	-----	-----	-----	-----	-----
-----	-----	-----	-----	-----	-----
-----	-----	-----	-----	-----	-----
-----	-----	-----	-----	-----	-----
-----	-----	-----	-----	-----	-----
\$2,973 16	-----	\$599 10	-----	-----	-----
-----	\$2,609 74	-----	\$450 73	\$9,485 75	\$2,076 07
-----	-----	-----	-----	-----	-----
75,853 89	3,472 02	-----	-----	-----	-----
-----	-----	14,831 01	-----	-----	5,000 37
78,827 05	862 28	-----	-----	-----	-----
-----	-----	14,231 91	450 73	9,485 75	7,076 44
-----	-----	-----	-----	-----	-----

TABLE No. 2

ABSTRACT OF INCOME AND PROFIT AND LOSS ACCOUNT OF  
ENDING DECEMBER

	Laguna Cliffs Water Company	Lake Hemet Water Company
Operating revenues -----	\$432 00	\$23,205 97
Operating expenses -----	1,047 50	35,853 74
Net operating revenue -----		
Net operating loss -----	615 50	12,647 77
Non-operating revenue -----		13,866 43
Gross corporate income -----		1,218 66
Gross corporate loss -----	615 50	
<i>Deductions.</i>		
Non-operating revenue deductions -----		\$12,925 63
Interest accrued on funded debt -----		
Other interest deductions -----		711 11
Rent deductions -----		960 00
Miscellaneous deductions -----		
Total deductions -----		\$14,596 74
Net corporate income for year -----		
Net corporate loss for year -----	\$615 50	\$13,378 08
Dividends -----		
Miscellaneous additions to income -----		1,662 80
Miscellaneous deductions from income -----		1,779 70
Surplus on December 31, 1912 -----		119,859 04
Deficit on December 31, 1912 -----	1,569 87	
Surplus on December 31, 1913 -----		106,364 06
Deficit on December 31, 1913 -----	2,185 37	



—Continued.

WATER COMPANIES OPERATING IN CALIFORNIA DURING YEAR  
ENDING 31, 1913.

Lerdo Canal Company	Lawndale Land and Water Company	Los Altos Water Company	Lytle Creek Water Company	Madera Canal and Irrigation Company	Madera Electric Water Company
\$1,416 40	\$3,309 68	\$2,308 19		\$10,132 86	\$2,219 20
3,060 32	6,646 53	6,951 86	\$249 57	6,289 58	2,044 42
				3,843 28	174 78
1,643 92	3,336 85	4,643 67	249 57		
				501 59	
				4,344 87	174 78
1,643 92	3,336 85	4,643 67	249 57		
				\$1,205 75	
		\$1,800 00			
	\$7 10			5,000 00	
	37 33				
	\$44 43	\$1,800 00		\$6,205 75	
					\$174 78
\$1,643 92	\$3,381 28	\$6,443 67	\$249 57	\$1,860 88	
	295 67				750 00
1,665 45	140 91		1,184 93		1,672 16
		7,541 76		7,767 49	
21 53			935 36		1,096 94
	3,536 04	13,985 43		9,628 37	

TABLE No. 2

ABSTRACT OF INCOME AND PROFIT AND LOSS ACCOUNT OF  
ENDING DECEMBER

	Marin Water and Power Company	Marian Water Company
Operating revenues -----	\$132,384 43	\$5,864 82
Operating expenses -----	64,084 92	269 99
Net operating revenue -----	68,299 51	5,594 83
Net operating loss -----		
Non-operating revenue -----	1,020 00	
Gross corporate income -----	69,319 51	5,594 83
Gross corporate loss -----		
<i>Deductions.</i>		
Non-operating revenue deductions -----	\$174 85	
Interest accrued on funded debt -----	29,251 40	\$2,500 00
Other interest deductions -----	3,310 85	
Rent deductions -----		
Miscellaneous deductions -----		
Total deductions -----	\$32,737 10	\$2,500 00
Net corporate income for year -----	\$36,582 41	\$3,094 83
Net corporate loss for year -----		
Dividends -----		
Miscellaneous additions to income -----	1,145 76	146 20
Miscellaneous deductions from income -----	21,643 97	219 00
Surplus on December 31, 1912 -----	58,715 37	
Deficit on December 31, 1912 -----		3,110 69
Surplus on December 31, 1913 -----	74,799 57	
Deficit on December 31, 1913 -----		88 66

<sup>1</sup>See electric report.

---Continued.

WATER COMPANIES OPERATING IN CALIFORNIA DURING YEAR  
BER 31, 1913.

The Marysville Water Company	Manteca Water Works	Midland County Public Service Corporation <sup>1</sup>	Mitadero Water Company	Minnehaha Oil Company	Mokelumne River Power and Water Company
\$33,755 40	\$530 90	\$10,836 96	\$17,000 00	\$12,264 34	\$4,115 50
16,366 00	471 18	7,272 40	12,444 33	15,888 72	14,090 47
17,389 40	59 72	3,564 56	4,555 67		
				3,624 38	9,974 97
3,794 43				12 05	
21,183 83	59 72	3,564 56	4,555 67		
				3,612 33	9,974 97
\$2,281 14					
			\$937 50	\$1,252 30	
			2,500 00	6 00	
\$2,281 14			\$3,437 50	\$1,258 30	
\$18,902 69	\$59 72		\$1,118 17		
				\$4,870 63	\$9,974 97
10,500 00	1 00				
19,843 66			4,120 83	7,118 02	16,366 16
28,246 35	58 72		5,239 00	2,247 39	6,391 19

TABLE No. 2

ABSTRACT OF INCOME AND PROFIT AND LOSS ACCOUNT OF  
ENDING DECEM

	Montecito Valley Water Company	Monterey County Water Company
Operating revenues -----	\$3,073 25	\$1,916 10
Operating expenses -----	896 10	6,610 78
Net operating revenue -----	2,177 15	
Net operating loss -----		4,694 68
Non-operating revenue -----	20 30	
Gross corporate income -----	2,197 45	
Gross corporate loss -----		4,694 68
<i>Deductions.</i>		
Non-operating revenue deductions -----		
Interest accrued on funded debt -----		
Other interest deductions -----		\$869 46
Rent deductions -----		
Miscellaneous deductions -----		
Total deductions -----		\$869 46
Net corporate income for year -----	\$2,197 45	
Net corporate loss for year -----		\$5,564 14
Dividends -----		
Miscellaneous additions to income -----		
Miscellaneous deductions from income -----		45 83
Surplus on December 31, 1912 -----	707 85	
Deficit on December 31, 1912 -----		46,150 16
Surplus on December 31, 1913 -----	2,905 30	
Deficit on December 31, 1913 -----		51,760 13



—Continued.

WATER COMPANIES OPERATING IN CALIFORNIA DURING YEAR  
BER 31, 1913.

Monterey County Water Works	Mt. Jackson Water and Power Company	Mountain Power Company	Mountain Springs Water Company	Moorpark Water, Light and Power Company	Natomas Water Company
\$81,323 14	\$1,402 45	\$6,033 92	\$16,040 59	\$685 58	\$30,459 39
52,893 26	1,386 97	3,422 52	26,198 41	675 58	8,913 82
28,429 88	15 48	2,611 40	-----	10 00	21,545 57
-----	-----	-----	10,157 82	-----	-----
3,571 98	-----	-----	2,150 31	-----	-----
32,001 86	15 48	2,611 40	-----	10 00	21,545 57
-----	-----	-----	8,007 51	-----	-----
-----	-----	-----	-----	-----	-----
-----	\$541 95	\$128 83	\$130 99	-----	\$2,547 43
-----	-----	-----	124 07	-----	1,048 97
-----	\$541 95	\$128 83	\$255 06	-----	\$3,596 40
\$32,001 86	-----	\$2,482 57	-----	\$10 00	\$17,949 17
-----	\$526 47	-----	\$8,262 57	-----	15,897 54
1,271 82	-----	-----	-----	-----	-----
68,964 32	-----	-----	-----	-----	-----
135,163 97	-----	1,032 41	63,790 41	424 54	15,897 54
-----	1,228 70	-----	-----	-----	-----
99,473 33	-----	3,514 98	55,527 84	434 54	17,949 17
-----	1,755 17	-----	-----	-----	-----

TABLE No. 2

ABSTRACT OF INCOME AND PROFIT AND LOSS ACCOUNT OF  
ENDING DECEMBER

	Newman Water Works Company	North Coast Water Company
Operating revenues .....	\$7,374 85	\$24,017 30
Operating expenses .....	4,383 44	10,956 64
Net operating revenue .....	2,991 41	13,060 66
Net operating loss .....		
Non-operating revenue .....		237 48
Gross corporate income .....	2,991 41	13,298 14
Gross corporate loss .....		
<i>Deductions.</i>		
Non-operating revenue deductions .....	\$640 08	
Interest accrued on funded debt .....	334 60	\$8,704 60
Other interest deductions .....		
Rent deductions .....		
Miscellaneous deductions .....		
Total deductions .....	\$974 68	\$8,704 60
Net corporate income for year .....	\$2,016 73	\$4,593 54
Net corporate loss for year .....		
Dividends .....	900 00	3,000 00
Miscellaneous additions to income .....		
Miscellaneous deductions from income .....		
Surplus on December 31, 1912 .....	6,049 12	691 53
Deficit on December 31, 1912 .....		
Surplus on December 31, 1913 .....	7,165 85	2,285 07
Deficit on December 31, 1913 .....		

<sup>1</sup>See electric report.

—Continued.

WATER COMPANIES OPERATING IN CALIFORNIA DURING YEAR  
BER 31, 1913.

North Moneta Garden Lands Water Company	Northern Cal- ifornia Power Company, Consolidated <sup>1</sup>	Northern Oil Company	Northern Water and Power Company	Oak Park Water Company	Ocean Park Water Company
\$1,116 05	\$39,727 02	\$25,048 39	\$8,277 89	\$32,852 82	\$17,710 79
2,980 55	27,848 76	19,622 90	24,300 52	17,447 46	17,326 38
-----	11,878 26	5,425 49	-----	15,405 36	384 41
1,864 50	-----	-----	16,022 63	-----	-----
-----	-----	-----	794 57	79 00	720 00
-----	11,878 26	5,425 49	-----	15,484 36	1,104 41
1,864 50	-----	-----	15,228 06	-----	-----
-----	-----	-----	-----	-----	-----
-----	-----	-----	\$50,000 00	-----	\$2,855 69
\$2,199 47	-----	-----	4,567 80	-----	-----
-----	-----	-----	-----	-----	-----
31 93	-----	\$1,005 28	-----	-----	-----
-----	-----	-----	-----	-----	-----
\$2,231 40	-----	\$1,005 28	\$54,567 80	-----	\$2,855 69
-----	-----	-----	-----	-----	-----
-----	-----	\$4,420 21	-----	\$15,484 36	-----
\$4,095 90	-----	-----	\$69,795 86	-----	\$1,751 28
-----	-----	-----	-----	3,000 00	-----
-----	-----	-----	-----	-----	-----
-----	-----	-----	22,388 82	-----	5,368 39
-----	-----	33,697 07	64,560 87	2,261 22	-----
4,154 95	-----	-----	-----	-----	9,776 76
-----	-----	38,117 28	-----	14,745 58	-----
8,250 85	-----	-----	27,623 81	-----	16,896 43

TABLE No. 2

ABSTRACT OF INCOME AND PROFIT AND LOSS ACCOUNT OF  
ENDING DECEM

	Ocean View Land and Water Company	Orange Home Water Company	Oro Water, Light and Power Company <sup>1</sup>
Operating revenues -----	\$2,207 60	\$776 40	\$35,546 83
Operating expenses -----	2,685 37	1,276 06	32,818 35
Net operating revenue -----			2,728 48
Net operating loss -----	477 77	499 66	
Non-operating revenue -----			
Gross corporate income -----			2,728 48
Gross corporate loss -----	477 77	499 66	
<i>Deductions.</i>			
Non-operating revenue deductions -----			
Interest accrued on funded debt -----			
Other interest deductions -----			
Rent deductions -----			
Miscellaneous deductions -----	\$2 98		
Total deductions -----	\$2 98		
Net corporate income for year -----			
Net corporate loss for year -----	\$480 75	\$499 66	
Dividends -----			
Miscellaneous additions to income -----			
Miscellaneous deductions from income -----			
Surplus on December 31, 1912 -----			
Deficit on December 31, 1912 -----	12,545 22	1,278 83	
Surplus on December 31, 1913 -----			
Deficit on December 31, 1913 -----	13,025 97	1,778 49	

<sup>1</sup>See electric report.



—Continued.

WATER COMPANIES OPERATING IN CALIFORNIA DURING YEAR  
BER 31, 1913.

Owensmouth Water Company	Pacific Gas and Electric Company <sup>1</sup>	Palm Valley Water Company	Puente City Water Company	Pasadena Consolidated Water Company	Peninsula Water Company
\$6,741 33	\$385,957 88	\$657 72	\$2,185 79	\$13,189 59	\$42,056 09
1,925 69	204,746 56	4,180 10	1,986 29	12,364 81	21,503 82
4,815 64	181,211 32	-----	199 50	824 78	20,552 27
		3,522 38	-----	-----	-----
				6,922 90	-----
4,815 64	181,211 32	-----	199 50	7,747 68	20,552 27
-----	-----	3,522 38	-----	-----	-----
\$2,500 00	-----	-----	-----	\$3,900 00	\$13,950 00
-----	-----	-----	\$199 50	1,558 73	-----
-----	-----	-----	-----	-----	-----
\$2,500 00	-----	-----	\$199 50	\$5,458 73	\$13,950 00
\$2,315 64	-----	-----	-----	\$2,288 95	\$6,602 27
-----	-----	\$3,522 38	-----	-----	-----
-----	-----	20,900 00	-----	-----	-----
323 13	-----	-----	-----	-----	3,000 00
432 98	-----	-----	\$199 24	545 40	16,885 76
2,279 25	-----	189,965 08	-----	-----	-----
-----	-----	-----	199 24	2,834 35	20,488 03
73 46	-----	172,587 46	-----	-----	-----

TABLE No. 2

ABSTRACT OF INCOME AND PROFIT AND LOSS ACCOUNT OF  
ENDING DECEMBER

	Peoples Water Company of Oakland	Peoples Water Company of Palms
Operating revenues .....	\$1,604,721 29	\$2,951 13
Operating expenses .....	952,421 13	2,142 14
Net operating revenue .....	652,300 16	808 99
Net operating loss .....		
Non-operating revenue .....	55,338 45	
Gross corporate income .....	707,638 61	808 99
Gross corporate loss .....		
<i>Deductions.</i>		
Non-operating revenue deductions .....	\$10,013 97	
Interest accrued on funded debt .....	612,079 17	\$1,200 00
Other interest deductions .....	209,247 97	789 47
Rent deductions .....		
Miscellaneous deductions .....		
Total deductions .....	\$831,341 11	\$1,989 47
Net corporate income for year .....		
Net corporate loss for year .....	\$123,702 50	\$1,180 48
Dividends .....		
Miscellaneous additions to income .....	5,966 85	
Miscellaneous deductions from income .....	26,826 56	
Surplus on December 31, 1912 .....	570,566 76	
Deficit on December 31, 1912 .....		1,910 46
Surplus on December 31, 1913 .....	426,004 55	
Deficit on December 31, 1913 .....		3,090 94

<sup>1</sup>Includes net revenue \$1,645.61 gas.

—Continued.

WATER COMPANIES OPERATING IN CALIFORNIA DURING YEAR  
BER 31, 1913.

Petaluma Power and Water Company	Pinal Dome Oil Company	Placerville Water Works	Pleasant Valley Water Company	Plunkett Canal Company	Port Costa Water Company
\$34,737 00	\$8,712 49	\$6,365 61	\$31,553 28	\$1,307 43	\$63,081 92
14,716 69	7,240 47	4,007 53	28,468 90	110 45	23,059 69
20,020 31	1,472 02	2,358 08	3,084 38	1,196 98	40,022 23
203 05			164 50		
20,223 36	1,472 02	2,358 08	3,248 88	1,196 98	40,022 23
			\$1,163 60		
\$5,000 00					
600 00			150 21		\$13,882 34
166 55					
\$5,766 55			\$1,313 81		\$13,882 34
\$14,456 81	\$1,472 02	\$2,358 08	\$1,935 07	\$1,196 98	\$26,139 89
			3,379 00		
283 55					
15,181 32		2,808 00	42 00		
9,003 80		5,995 61	182 88	1,416 29	
					79,290 79
8,562 84	13,117 63	5,545 69		2,613 27	
			1,303 05		53,150 90

TABLE No. 2

ABSTRACT OF INCOME AND PROFIT AND LOSS ACCOUNT OF  
ENDING DECEMBER

	Pioneer Canal Company	Randsburg Water Company
Operating revenues .....	\$1,392 21	\$11,369 55
Operating expenses .....	2,523 19	14,944 44
Net operating revenue .....		
Net operating loss .....	1,130 98	3,574 89
Non-operating revenue .....		
Gross corporate income .....		
Gross corporate loss .....	1,130 98	3,574 89
<i>Deductions.</i>		
Non-operating revenue deductions .....		
Interest accrued on funded debt .....		
Other interest deductions .....		
Rent deductions .....		
Miscellaneous deductions .....		
Total deductions .....		
Net corporate income for year .....		
Net corporate loss for year .....	\$1,130 98	\$3,574 89
Dividends .....		
Miscellaneous additions to income .....		
Miscellaneous deductions from income .....	4,800 00	
Surplus on December 31, 1912 .....	7,296 40	
Deficit on December 31, 1912 .....		
Surplus on December 31, 1913 .....	1,365 42	
Deficit on December 31, 1913 .....		3,574 89



—Continued.

WATER COMPANIES OPERATING IN CALIFORNIA DURING YEAR  
BER 31, 1913.

Redondo Water Company	Redwood City Water Company	Rialto Domestic Water Company	Riverbank Water Company	Mrs. M. A. Rohner	Roseville Water Company
\$25,420 43	\$10,405 98	\$5,287 56	\$9,346 00	\$613 05	\$17,404 31
20,251 09	5,952 58	1,240 99	9,125 67	261 00	10,612 53
5,169 34	4,453 40	4,046 57	220 33	352 05	6,791 78
-----	-----	-----	-----	-----	-----
5,169 34	4,453 40	4,046 57	220 33	352 05	6,791 78
-----	-----	-----	-----	-----	-----
-----	-----	-----	\$146 96	-----	\$198 00
-----	-----	\$3,180 00	-----	-----	6,000 00
-----	-----	-----	-----	-----	-----
-----	-----	-----	-----	-----	-----
-----	-----	\$3,180 00	\$146 96	-----	\$6,198 00
\$5,169 34	\$4,453 40	\$866 57	\$73 37	\$352 05	\$593 78
-----	2,500 00	-----	-----	-----	-----
-----	-----	-----	-----	-----	-----
1,224 88	2,228 90	250 00	-----	-----	-----
-----	550 31	302 22	-----	-----	231 71
8,487 32	-----	-----	1,560 03	-----	-----
-----	274 81	918 79	-----	352 05	825 49
4,542 81	-----	-----	1,486 66	-----	-----
-----	-----	-----	-----	-----	-----

TABLE No. 2

ABSTRACT OF INCOME AND PROFIT AND LOSS ACCOUNT OF  
ENDING DECEMBER

	Reedley Water Works	San Joaquin Light and Power Corporation <sup>1</sup>
Operating revenues .....	\$6,781 23	\$15,063 79
Operating expenses .....	5,563 14	12,721 03
Net operating revenue .....	1,218 09	2,342 76
Net operating loss .....		
Non-operating revenue .....		
Gross corporate income .....	1,218 09	2,342 76
Gross corporate loss .....		
<i>Deductions.</i>		
Non-operating revenue deductions .....	\$291 25	
Interest accrued on funded debt .....		
Other interest deductions .....		
Rent deductions .....		
Miscellaneous deductions .....		
Total deductions .....	\$291 25	
Net corporate income for year .....	\$926 84	
Net corporate loss for year .....		
Dividends .....		
Miscellaneous additions to income .....		
Miscellaneous deductions from income .....		
Surplus on December 31, 1912 .....		
Deficit on December 31, 1912 .....		
Surplus on December 31, 1913 .....	926 84	
Deficit on December 31, 1913 .....		

<sup>1</sup>See electric report.

—Continued.

WATER COMPANIES OPERATING IN CALIFORNIA DURING YEAR  
ENDING 31, 1913.

San Dimas Water Company	San Benito County Land and Water Company	San Dimas Charter Oak Domestic Water Company	San Gabriel Valley Water Company	San Geronimo Water Company	San Joaquin and Kings River Canal and Irrigation Company
\$36,189 98	\$2,113 05	\$7,293 24	\$68,935 90	\$13,082 70	\$209,161 08
36,523 48	2,186 84	3,962 00	47,402 15	10,344 15	100,228 66
		3,331 24	21,533 75	2,738 55	108,932 42
333 50	73 79				
300 00			266 96		3,081 22
		3,331 24	21,800 71	2,738 55	112,013 64
33 50	73 79				
			\$3,350 70		\$262 74
\$5,528 17	\$3,000 00			\$1,312 97	
1,406 81	1,125 00		1,507 24		
			223 46		
\$6,934 98	\$4,125 00		\$5,081 40	\$1,312 97	\$262 74
		\$3,331 24	\$16,719 31	\$1,425 58	\$111,750 90
\$6,968 48	\$4,198 79				40,000 00
		51 62	2,135 50		
3,090 00			1,520 22		40,109 00
	7,169 79		31,709 25	158,172 77	86,150 48
6,120 71					
	2,971 00	3,382 86	49,043 84	159,598 35	117,792 38
16,179 19					

TABLE No. 2

ABSTRACT OF INCOME AND PROFIT AND LOSS ACCOUNT OF  
ENDING DECEMBER

	San Jose Water Company	San Lorenzo Water Company
Operating revenues .....	\$204,548 09	\$18,960 19
Operating expenses .....	130,322 56	15,052 52
Net operating revenue.....	74,225 53	3,907 67
Net operating loss.....		
Non-operating revenue .....	981 51	138 37
Gross corporate income.....	75,207 04	4,046 04
Gross corporate loss.....		
<i>Deductions.</i>		
Non-operating revenue deductions.....	\$837 06	
Interest accrued on funded debt.....		
Other interest deductions.....	4,120 28	\$160 35
Rent deductions .....		3,150 00
Miscellaneous deductions .....		
Total deductions .....	\$4,957 34	\$3,310 35
Net corporate income for year.....	\$70,249 70	\$735 69
Net corporate loss for year.....		
Dividends .....	75,000 00	
Miscellaneous additions to income.....	5,814 32	
Miscellaneous deductions from income.....	405 75	
Surplus on December 31, 1912.....	216,604 25	
Deficit on December 31, 1912.....		19,109 24
Surplus on December 31, 1913.....	217,262 52	
Deficit on December 31, 1913.....		18,373 55

<sup>1</sup>See electric report.



—Continued.

WATER COMPANIES OPERATING IN CALIFORNIA DURING YEAR  
 FEB 31, 1913.

Santa Catalina Island Company <sup>1</sup>	Santa Clara Valley Water Company	Santa Clara Water and Irrigation Company	San Francisco- Oakland Terminal Power Company	Santa Monica Water Company	Santa Paula Water Works
\$2,601 35	\$275 60	\$10,443 47	\$21,725 31	\$52,083 65	\$17,741 21
3,907 41	898 54	12,404 98	20,124 88	41,715 01	8,308 69
-----	-----	-----	1,600 43	10,368 64	9,432 52
1,306 06	622 94	1,961 51	-----	-----	-----
-----	-----	-----	-----	900 73	-----
-----	-----	-----	1,600 43	11,269 37	9,432 52
1,306 06	622 94	1,961 51	-----	-----	-----
-----	-----	-----	-----	-----	-----
-----	-----	\$225 99	-----	-----	-----
-----	-----	6,000 00	-----	\$12,500 00	-----
-----	\$588 45	1,195 42	\$319 32	4,276 11	\$655 41
-----	-----	-----	-----	2,840 75	-----
-----	-----	-----	-----	34 40	-----
-----	-----	-----	-----	-----	-----
-----	\$588 45	\$7,421 41	\$319 32	\$19,651 26	\$655 41
-----	-----	-----	-----	-----	-----
-----	-----	-----	\$1,281 11	-----	\$8,777 11
-----	\$1,211 39	\$9,382 92	-----	\$8,381 89	-----
-----	-----	-----	-----	-----	6,750 00
-----	-----	-----	-----	427 26	-----
-----	-----	31	-----	255 54	-----
-----	-----	-----	-----	96,873 78	33,909 48
-----	2,192 07	16,515 17	4,235 06	-----	-----
-----	-----	-----	-----	88,663 61	35,936 59
-----	3,403 46	25,898 40	2,953 95	-----	-----

TABLE No. 2

ABSTRACT OF INCOME AND PROFIT AND LOSS ACCOUNT OF  
ENDING DECEMBER

	Santa Rosa Water Works	Sawtelle Water Company	Saticoy Water Company
Operating revenues -----	\$15,953 10	\$9,338 84	\$5,091 24
Operating expenses -----	8,562 67	8,704 11	4,544 48
Net operating revenue -----	7,390 43	634 73	546 76
Net operating loss -----			
Non-operating revenue -----	50 00	844 68	
Gross corporate income -----	7,440 43	1,479 41	546 76
Gross corporate loss -----			
<i>Deductions.</i>			
Non-operating revenue deductions -----			
Interest accrued on funded debt -----			
Other interest deductions -----	\$5,238 00	\$534 45	
Rent deductions -----			
Miscellaneous deductions -----			
Total deductions -----	\$5,238 00	\$534 45	
Net corporate income for year -----	\$2,202 43	\$944 96	\$546 76
Net corporate loss for year -----			
Dividends -----			
Miscellaneous additions to income -----		11 55	9 41
Miscellaneous deductions from income -----		18 55	35 29
Surplus on December 31, 1912 -----	2,044 86	16,861 95	
Deficit on December 31, 1912 -----			10,664 15
Surplus on December 31, 1913 -----	4,247 29	17,799 91	
Deficit on December 31, 1913 -----			10,143 27

<sup>1</sup>See electric report.

—Continued.

WATER COMPANIES OPERATING IN CALIFORNIA DURING YEAR  
ENDING 31, 1913.

Sausalito Spring Water Company	Sherman Water Company	Sierra and San Francisco Power Company <sup>1</sup>	Sierra Park Water Company	Soledad Land and Water Company	Sonoma Valley Water, Light and Power Company
\$1,139 16	\$4,410 65	\$42,597 88	\$928 34	\$4,943 00	\$1,394 69
1,661 28	3,426 95	27,470 26	2,834 05	3,933 28	1,284 22
-----	983 70	15,127 62	-----	1,009 72	110 47
522 12	-----	-----	1,905 71	-----	-----
-----	983 70	15,127 62	-----	1,009 72	153 00
522 12	-----	-----	1,905 71	-----	263 47
-----	-----	-----	-----	-----	-----
-----	-----	-----	-----	-----	\$832 36
-----	-----	-----	-----	-----	-----
-----	-----	-----	-----	-----	110 80
-----	-----	-----	-----	-----	-----
-----	-----	-----	-----	-----	-----
-----	-----	-----	-----	-----	\$943 16
-----	\$983 70	-----	-----	\$1,009 72	-----
\$522 12	-----	-----	\$1,905 71	-----	\$679 69
-----	-----	-----	-----	-----	-----
-----	-----	-----	-----	410 64	-----
-----	2,531 00	-----	-----	718 77	-----
-----	-----	-----	1,491 51	-----	-----
-----	3,514 70	-----	-----	1,317 85	-----
522 12	-----	-----	3,397 22	-----	679 69
-----	-----	-----	-----	-----	-----

TABLE NO. 2

ABSTRACT OF INCOME AND PROFIT AND LOSS ACCOUNT OF  
ENDING DECEMBER

	South Feather Land and Water Company	South Los Angeles Water Company
Operating revenues .....	\$14,295 36	\$33,042 84
Operating expenses .....	14,073 81	16,732 02
Net operating revenue .....	221 55	16,310 82
Net operating loss .....		
Non-operating revenue .....		17 49
Gross corporate income .....	221 55	16,328 31
Gross corporate loss .....		
<i>Deductions.</i>		
Non-operating revenue deductions .....		
Interest accrued on funded debt .....		
Other interest deductions .....		
Rent deductions .....		
Miscellaneous deductions .....		
Total deductions .....		
Net corporate income for year .....	\$221 55	\$16,328 31
Net corporate loss for year .....		
Dividends .....		8,732 48
Miscellaneous additions to income .....		
Miscellaneous deductions from income .....		
Surplus on December 31, 1912 .....	18,488 32	
Deficit on December 31, 1912 .....		
Surplus on December 31, 1913 .....	18,709 87	7,595 83
Deficit on December 31, 1913 .....		



—Continued.

WATER COMPANIES OPERATING IN CALIFORNIA DURING YEAR  
BER 31, 1913.

South San Francisco Water Company	Southern California Mountain Water Company	Spring Valley Water Company	Stockton and Mokelumne Canal Company	Stoll Water Company	Stratton Water Company
\$35,136 32	\$21,763 24	\$3,252,459 66	\$22,166 10	\$2,353 60	\$13,070 81
36,209 76	68,421 98	1,462,948 08	9,800 83	1,971 27	24,100 16
-----	-----	1,789,511 58	12,365 27	382 33	-----
1,073 44	46,658 74	-----	-----	-----	11,029 35
675 69	64,417 60	141,492 13	-----	-----	-----
-----	17,758 86	1,931,003 71	12,365 27	382 33	-----
397 75	-----	-----	-----	-----	11,029 35
-----	-----	47,875 78	-----	-----	-----
-----	-----	743,934 35	\$6,240 00	-----	-----
-----	\$4,612 50	32,461 02	439 63	-----	-----
-----	-----	-----	-----	-----	-----
\$54 94	-----	388,576 70	-----	-----	\$9,385 40
-----	-----	-----	-----	-----	-----
\$54 94	\$4,612 50	\$1,212,847 85	\$6,679 63	-----	\$9,385 40
-----	-----	-----	-----	-----	-----
-----	\$13,146 36	\$718,155 86	\$5,685 64	\$382 33	-----
\$452 69	-----	-----	-----	-----	\$20,414 75
-----	1,176,340 50	595,000 00	-----	-----	-----
7 10	241,651 43	6,727 87	-----	-----	-----
61 29	3,794 18	525,853 47	51 85	-----	-----
8,703 05	952,778 78	758,930 09	-----	-----	24,647 37
-----	-----	-----	-----	-----	-----
8,196 17	27,441 89	362,960 35	5,633 79	382 33	4,232 62
-----	-----	-----	-----	-----	-----

TABLE NO. 2

ABSTRACT OF INCOME AND PROFIT AND LOSS ACCOUNT OF  
ENDING DECEMBER

	St. Helena Water Company	Summit Lake Irrigation Company
Operating revenues -----	\$7,806 18	\$3,903 80
Operating expenses -----	3,041 55	3,193 05
Net operating revenue -----	4,764 63	710 75
Net operating loss -----		
Non-operating revenue -----		
Gross corporate income -----	4,764 63	710 75
Gross corporate loss -----		
<i>Deductions.</i>		
Non-operating revenue deductions -----	\$138 01	\$1,438 48
Interest accrued on funded debt -----		
Other interest deductions -----		829 73
Rent deductions -----		
Miscellaneous deductions -----		373 15
Total deductions -----	\$138 01	\$2,641 36
Net corporate income for year -----	\$4,626 62	
Net corporate loss for year -----		\$1,930 61
Dividends -----	4,025 00	
Miscellaneous additions to income -----		
Miscellaneous deductions from income -----	2,000 00	
Surplus on December 31, 1912 -----	60,915 39	
Deficit on December 31, 1912 -----		10,709 69
Surplus on December 31, 1913 -----	59,517 01	
Deficit on December 31, 1913 -----		12,640 30

—Continued.

WATER COMPANIES OPERATING IN CALIFORNIA DURING YEAR  
ENDING 31, 1913.

Sunnyvale Water Company	Susanville Water Works	Sutter and Amador Water Works	Sutter and Butte Canal Company	The Sweetwater Water Company	Stine Canal Company
\$3,803 12	\$6,944 39	\$9,061 75	\$50,617 20	\$66,730 50	\$6,057 05
2,762 74	5,518 02	7,506 40	25,943 49	68,134 59	4,533 59
1,040.38	1,426 37	1,555 35	24,673 71		1,523 46
				1,404 09	
			8,229 95	69 10	
1,040 38	1,426 37	1,555 35	32,903 66		1,523 46
				1,334 99	
			\$922 51	\$31 92	
			37,278 00	11,790 00	
	\$700 00	\$228 00	3,793 15		
			42 00		
	19 60	157 00	28,747 75		
	\$719 60	\$385 00	\$70,783 41	\$11,821 92	
\$1,040 38	\$706 77	\$1,170 35			\$1,523 46
			\$37,879 75	\$13,156 91	
536 76		1,155 35			
		691 50	69 41		
		910 86	605,160 60		
821 89					
	844 35		33,939 63	757,420 01	5,155 51
1,325 51					
	137 58	204 36	676,910 57	770,576 92	3,632 05

TABLE No. 2

ABSTRACT OF INCOME AND PROFIT AND LOSS ACCOUNT OF  
ENDING DECEMBER

	Terra Bella City Water Company	Torrance Water, Light and Power Company
Operating revenues -----	\$901 45	\$6,554 70
Operating expenses -----	2,810 31	11,009 85
Net operating revenue -----		
Net operating loss -----	1,908 86	4,455 15
Non-operating revenue -----		
Gross corporate income -----		
Gross corporate loss -----	1,908 86	4,455 15
<i>Deductions.</i>		
Non-operating revenue deductions -----		
Interest accrued on funded debt -----		\$1,150 00
Other interest deductions -----		
Rent deductions -----		
Miscellaneous deductions -----		
Total deductions -----		\$1,150 00
Net corporate income for year -----		
Net corporate loss for year -----	\$1,908 86	\$5,605 15
Dividends -----		
Miscellaneous additions to income -----		
Miscellaneous deductions from income -----		
Surplus on December 31, 1912 -----		
Deficit on December 31, 1912 -----		
Surplus on December 31, 1913 -----		
Deficit on December 31, 1913 -----	1,908 86	5,605 15

<sup>1</sup>See electric report.



—Continued.

WATER COMPANIES OPERATING IN CALIFORNIA DURING YEAR  
BER 31, 1913.

Tehama Water Works	The Truckee River General Electric Company <sup>1</sup>	Ukiah Water and Improvement Company	Union Hollywood Water Company	Union Water Company	The Union Water Company of California
\$451 35	\$5,142 41	\$10,310 25	\$298,405 04	\$7,080 12	\$35,424 86
178 15	4,845 65	6,173 42	186,188 28	2,745 82	37,644 27
273 20	296 76	4,136 83	112,216 76	4,334 30	-----
					2,219 41
			2,416 34	-----	17,450 00
273 20	296 76	4,136 83	114,633 10	4,334 30	15,230 59
			-----		-----
					\$380 89
			\$10,000 00	-----	52,008 65
		\$4,385 50	6,273 89	-----	17,883 66
			3,573 96	-----	-----
			1,528 46	-----	2,520 80
			-----		-----
		\$4,385 50	\$21,376 31	-----	\$72,794 00
					-----
\$273 20			\$93,256 79	\$4,334 30	-----
		\$248 67	-----		\$57,563 41
				3,000 00	-----
			5,019 67	-----	730 75
			1,688 33	-----	5,623 68
		420 53	180,160 40	24,111 63	-----
					99,915 90
273 20		171 86	276,748 53	25,445 93	-----
			-----		162,372 24
			-----		-----

TABLE No. 2

ABSTRACT OF INCOME AND PROFIT AND LOSS ACCOUNT OF  
ENDING DECEMBER

	Valley View Land and Water Company	Vacaville Water and Light Company
Operating revenues .....	\$1,479 85	\$6,425 25
Operating expenses .....	1,448 35	5,286 12
Net operating revenue .....	31 50	1,139 13
Net operating loss .....		
Non-operating revenue .....		
Gross corporate income .....	31 50	1,139 13
Gross corporate loss .....		
<i>Deductions.</i>		
Non-operating revenue deductions .....		
Interest accrued on funded debt .....		
Other interest deductions .....		\$1 00
Rent deductions .....		
Miscellaneous deductions .....		275 60
Total deductions .....		\$276 60
Net corporate income for year .....	\$31 50	\$862 53
Net corporate loss for year .....		
Dividends .....		2,250 00
Miscellaneous additions to income .....		
Miscellaneous deductions from income .....		
Surplus on December 31, 1912 .....		18,986 64
Deficit on December 31, 1912 .....	183 90	
Surplus on December 31, 1913 .....		<sup>1</sup> 20,883 35
Deficit on December 31, 1913 .....	152 40	

<sup>1</sup>Includes net revenue electric, \$3,284.18.

<sup>2</sup>See electric report.

—Continued.

WATER COMPANIES OPERATING IN CALIFORNIA DURING YEAR  
BER 31, 1913.

Edmund Varney Water System	Van Nuys Water Company	Venice Water Company	Ventura County Power Company <sup>2</sup>	Verdugo Pipe and Reservoir Company	Verdugo Springs Water Company
\$2,156 67	\$6,875 38	\$10,696 63	\$37,215 65	\$3,013 15	\$11,742 23
1,970 53	2,589 00	21,208 81	21,244 32	3,080 15	5,860 20
186 14	4,286 38	-----	15,971 33	-----	5,882 03
-----	-----	10,512 18	-----	67 00	-----
186 14	4,286 38	-----	15,971 33	-----	5,882 03
-----	-----	10,512 18	-----	67 00	-----
-----	-----	-----	-----	-----	-----
-----	\$2,500 00	-----	-----	-----	-----
-----	-----	-----	-----	-----	-----
-----	-----	-----	-----	-----	-----
-----	\$2,500 00	-----	-----	-----	-----
\$186 14	\$1,786 38	-----	-----	-----	\$5,882 03
-----	-----	\$10,512 18	-----	\$67 00	4,309 02
-----	-----	-----	-----	-----	-----
-----	-----	-----	-----	5,462 82	11,390 36
36 65	1,559 25	-----	-----	-----	-----
149 49	227 13	-----	-----	5,395 82	12,963 37
-----	-----	10,512 18	-----	-----	-----

TABLE No. 2

ABSTRACT OF INCOME AND PROFIT AND LOSS ACCOUNT OF  
ENDING DECEMBER

	Vineyard Ditch Company	Visalia City Water Company	Vista Grande Water Company
Operating revenues -----	\$923 58	\$28,934 69	\$6,049 30
Operating expenses -----	1,633 98	19,114 48	4,424 60
Net operating revenue -----		9,820 21	1,624 70
Net operating loss -----	710 40		
Non-operating revenue -----			
Gross corporate income -----		9,820 21	1,624 70
Gross corporate loss -----	710 40		
<i>Deductions.</i>			
Non-operating revenue deductions -----			
Interest accrued on funded debt -----		\$4,800 00	
Other interest deductions -----	\$45 86		
Rent deductions -----			
Miscellaneous deductions -----	2 50		
Total deductions -----	\$48 36	\$4,800 00	
Net corporate income for year -----		\$5,020 21	\$1,624 70
Net corporate loss for year -----	\$758 76		
Dividends -----			
Miscellaneous additions to income -----			
Miscellaneous deductions from income -----		5,221 64	
Surplus on December 31, 1912 -----	583 87	5,006 43	
Deficit on December 31, 1912 -----			
Surplus on December 31, 1913 -----		4,805 00	1,624 70
Deficit on December 31, 1913 -----	174 89		



—Continued.

WATER COMPANIES OPERATING IN CALIFORNIA DURING YEAR  
END 31, 1913.

W. G. Wadley	Walgrove Water Company	Walnut Creek Water Company	Washington Water and Light Company	Weaverville Town Water Works	West San Joaquin Valley Water Company
\$2,349 11	\$1,000 40	\$983 50	\$4,228 60	\$2,180 35	\$11,738 60
1,950 71	886 10	2,687 04	2,676 17	1,607 14	9,845 14
398 40	114 30	1,703 54	1,552 43	573 21	1,893 46
			443 99		
398 40	114 30	1,703 54	1,996 42	573 21	1,893 46
			\$926 65		
		\$1,826 53			
		\$1,826 53	\$926 65		
\$398 40	\$114 30	\$3,530 07	\$1,069 77	\$573 21	\$1,893 46
			720 00		
		1,287 83			
			20,565 70		
398 40	114 30	4,817 90	20,915 47	573 21	1,893 46

TABLE No. 2

ABSTRACT OF INCOME AND PROFIT AND LOSS ACCOUNT OF  
ENDING DECEMBER

	West Side Irrigation Company	West Side Water Company	Western Water Company
Operating revenues -----	\$2,875 75	\$18,639 88	\$296,185 64
Operating expenses -----	1,930 31	20,188 32	136,258 41
Net operating revenue -----	945 44		159,927 23
Net operating loss -----		1,548 44	
Non-operating revenue -----			1,641 06
Gross corporate income -----	945 44		161,568 29
Gross corporate loss -----		1,548 44	
<i>Deductions.</i>			
Non-operating revenue deductions -----	\$127 30		\$7,682 22
Interest accrued on funded debt -----	101 50		
Other interest deductions -----			
Rent deductions -----			16,950 00
Miscellaneous deductions -----			338 17
Total deductions -----	\$228 80		\$24,970 39
Net corporate income for year -----	\$716 64		\$136,597 90
Net corporate loss for year -----		\$1,548 44	
Dividends -----			58,000 00
Miscellaneous additions to income -----			
Miscellaneous deductions from income -----			90,091 85
Surplus on December 31, 1912 -----	337 56		117,095 81
Deficit on December 31, 1912 -----			
Surplus on December 31, 1913 -----	1,054 20		105,601 86
Deficit on December 31, 1913 -----		1,548 44	

<sup>1</sup>Net revenue of various utilities amounting to \$252,799.70 not included, as same appears on electric and gas reports.

<sup>2</sup>Net revenue of various utilities amounting to \$4,540.59 included in this amount. Same being electric and gas.

NOTE.—Reports of Cosumnes Irrigation Company and Napa City Water Company omitted, as same were incomplete.

--Concluded.

WATER COMPANIES OPERATING IN CALIFORNIA DURING YEAR  
BER 31, 1913.

Whittier Water Company	Williams Water Company	Willits Water and Power Company	Windsor Water Company	Yolo County Consolidated Water Company	Total
\$80,631 26	\$1,745 70	\$9,982 47	\$8,092 99	\$51,623 55	\$9,919,851 21
88,807 19	1,562 68	5,859 71	5,254 97	45,421 00	6,190,385 28
	183 02	4,122 76	2,838 02	6,202 55	3,729,465 93
8,175 93					
9,746 41		144 00		259 55	408,206 10
1,570 48	183 02	4,266 76	2,838 02	6,462 10	4,137,672 03
\$3,707 50				\$19 75	\$106,908 73
9,327 50		\$60 00		11,250 00	1,895,591 04
2,257 64					429,459 19
500 00		450 00			37,646 71
8,517 30					456,439 42
\$24,309 94		\$510 00		\$11,269 75	\$2,926,045 09
	\$183 02	\$3,756 76	\$2,838 02		\$958,827 24
\$22,739 46				\$4,807 65	
		2,652 00			2,124,287 81
101,628 52		954 20		143 86	509,194 16
19,586 32		86 70		2,870 16	1,714,160 70
158,848 57		2,832 43			3,210,752 25
				17,631 98	
218,151 31	183 02	4,804 69	2,838 02		\$844,865 73
				25,165 93	

TABLE

ABSTRACT OF OPERATING REVENUES OF WATER COMPANIES OPERATING

	American Canyon Water Company	American Irrigation Company
Commercial earnings—flat rate.....		
Commercial earnings—metered rate.....		
Earnings from industrial sales—flat rate.....		
Earnings from industrial sales—metered rate.....		
Earnings from municipal hydrants rental.....		
Earnings from sales for street sprinkling.....		
Earnings from sales to municipal departments.....		
Earnings from sale for irrigation.....	\$9,631 50	\$10,713 50
Miscellaneous earnings from operation.....	1,566 00	163 45
Profit on merchandise sales.....		
Profit on piping and connections.....		
Total revenues .....	\$11,197 50	\$10,876 95

Not segregated.

TABLE No. 3

ABSTRACT OF OPERATING REVENUES OF WATER COMPANIES OPERATING

	Baldwin Park Water Company	Bay Point Light and Water Company
Commercial earnings—flat rate.....	\$1,844 81	\$3,479 21
Commercial earnings—metered rate.....		
Earnings from industrial sales—flat rate.....		
Earnings from industrial sales—metered rate.....		
Earnings from municipal hydrants rental.....		
Earnings from sales for street sprinkling.....		
Earnings from sales to municipal departments.....		
Earnings from sale for irrigation.....		
Miscellaneous earnings from operation.....		
Profit on merchandise sales.....		
Profit on piping and connections.....		
Total earnings .....	\$1,844 81	\$3,479 21



## No. 3.

ATING IN CALIFORNIA DURING THE YEAR ENDING DECEMBER 31, 1913.

Antelope Creek and Red Bluff Water Company	The Anderson Canal Company	Artesian Water Company <sup>1</sup>	Auburn Springs Water Works	Bakersfield Water Company	Baldwin Park Domestic Water Company
\$19,518 40			\$500 85	\$25,719 25	\$16 00 1,269 42
				200 06	
200 00					
144 00					
414 50	\$2,938 75				1,465 59
88 55				120 10	
				187 07	
				111 58	113 99
\$20,365 45	\$2,938 75	\$4,944 80	\$500 85	\$26,338 00	\$2,865 00

## —Continued.

ATING IN CALIFORNIA DURING THE YEAR ENDING DECEMBER 31, 1913.

Beach Land Water System	Bear Gulch Water Company	Beaverwyck Land Company	Bell Water Company	Belvedere Land Company	Benicia Water Company
\$1,060 56	\$3,246 00 17,746 76	\$2,701 28	\$2,594 25	\$7,284 93	\$1,333 02 8,798 07 4,683 50 7,105 20
					1,300 88
			693 50		
			62 35	164 98	
			427 90		
44 00			278 00		
\$1,104 56	\$20,992 76	\$2,701 28	\$4,056 00	\$7,449 91	\$23,220 67

TABLE No. 3

ABSTRACT OF OPERATING REVENUES OF WATER COMPANIES OPER

	Black Diamond Water Company	J. W. Bloom
Commercial earnings—flat rate.....	\$49 32	\$1,093 69
Commercial earnings—metered rate.....	564 13	1,416 57
Earnings from industrial sales—flat rate.....	9,815 38	-----
Earnings from industrial sales—metered rate.....	624 11	-----
Earnings from municipal hydrants rental.....	558 00	-----
Earnings from sales for street sprinkling.....	156 77	-----
Earnings from sales to municipal departments.....	-----	-----
Earnings from sale for irrigation.....	-----	-----
Miscellaneous earnings from operation.....	-----	-----
Profit on merchandise sales.....	-----	-----
Profit on piping and connections.....	179 66	-----
Total revenues .....	\$11,947 37	\$2,510 26

TABLE No. 3

ABSTRACT OF OPERATING REVENUES OF WATER COMPANIES OPER

	Calistoga Water Company	Callahan Water System
Commercial earnings—flat rate.....		
Commercial earnings—metered rate.....	\$3,497 94	\$216 55
Earnings from industrial sales—flat rate.....	-----	-----
Earnings from industrial sales—metered rate.....	-----	-----
Earnings from municipal hydrants rental.....	600 00	-----
Earnings from sales for street sprinkling.....	147 99	-----
Earnings from sales to municipal departments.....	-----	-----
Earnings from sale for irrigation.....	-----	-----
Miscellaneous earnings from operation.....	-----	-----
Profit on merchandise sales.....	-----	-----
Profit on piping and connections.....	-----	-----
Total revenues .....	\$4,245 93	\$216 55

—Continued.

ATING IN CALIFORNIA DURING THE YEAR ENDING DECEMBER 31, 1913.

Boulder Creek Electric Light and Water Company	Bradbury Estate Company	Buena Vista Canal Company	Butte County Power, Light and Water Company	The Central Canal Company	California- Michigan Land and Water Company
\$1,970 25	\$1,996 11		\$2,483 70		
					\$2,331 08
					532 60
50 00					
286 00					
31 50					
30 00		\$3,498 12		\$7,599 10	
				1,376 65	
6 17					
\$2,373 92	\$1,996 11	\$3,498 12	\$2,483 70	\$8,975 75	\$2,863 68

—Continued.

ATING IN CALIFORNIA DURING THE YEAR ENDING DECEMBER 31, 1913.

Campbell Water Company	Cherry Canyon Water Company	Chico Water Supply Company	City Water Company of Banning	Citizens' Land and Water Company of Upland	Claremont Domestic Water Company
\$725 63		\$29,591 81	\$33 30		
2,063 80	\$2,267 46	442 66	3,220 80	\$9,545 16	\$7,598 34
			37 80		
			153 18	175 25	
		1,758 00			102 00
314 25		1,768 62			25 25
		314 00			
2,729 12					1,001 94
		242 28	390 00		
				153 26	
		223 30			385 92
\$5,832 80	\$2,267 46	\$34,340 67	\$3,835 08	\$9,873 67	\$9,113 45

TABLE No. 3

ABSTRACT OF OPERATING REVENUES OF WATER COMPANIES OPER

	Citizens' Water Company of Niles	Citizens' Water Company of San Jacinto
Commercial earnings—flat rate.....		
Commercial earnings—metered rate.....	\$2,655 05	
Earnings from industrial sales—flat rate.....		
Earnings from industrial sales—metered rate.....	1,310 55	
Earnings from municipal hydrants rental.....	264 00	
Earnings from sales for street sprinkling.....	1,469 55	
Earnings from sales to municipal departments.....		
Earnings from sale for irrigation.....		\$13,600 80
Miscellaneous earnings from operation.....		15 70
Profit on merchandise sales.....	5 00	2 60
Profit on piping and connections.....	92	11 93
Total revenues .....	\$5,705 07	\$13,631 03

<sup>1</sup>Not segregated.

TABLE No. 3

ABSTRACT OF OPERATING REVENUES OF WATER COMPANIES OPER

	Colegrove Water Company	Compton Water and Lighting Company <sup>1</sup>
Commercial earnings—flat rate.....		
Commercial earnings—metered rate.....	\$2,468 12	
Earnings from industrial sales—flat rate.....		
Earnings from industrial sales—metered rate.....		
Earnings from municipal hydrants rental.....		
Earnings from sales for street sprinkling.....		
Earnings from sales to municipal departments.....		
Earnings from sale for irrigation.....	11 00	
Miscellaneous earnings from operation.....		
Profit on merchandise sales.....		
Profit on piping and connections.....	87 73	
Total revenues .....	\$2,566 85	\$2,783 66

<sup>1</sup>Not segregated.



—Continued.

ATING IN CALIFORNIA DURING THE YEAR ENDING DECEMBER 31, 1913.

City Water Company of Ocean Park	Clara Vista Water Company	Coachella Water Company <sup>1</sup>	Coalinga Consolidated Water Company	Coalinga Domestic Water Company <sup>1</sup>	Crystal Springs Water Company
\$29,872 80			\$15,350 24		\$3,610 05
12,961 85					782 60
			21,297 43		
	\$1,218 90				
138 25					66 60
15 50					
158 80					120 00
	1,669 25				
1,492 15					82 50
486 40					
1,239 69					
\$46,365 44	\$2,888 15	\$765 26	\$36,647 67	\$9,328 55	\$4,661 75

—Continued.

ATING IN CALIFORNIA DURING THE YEAR ENDING DECEMBER 31, 1913.

Coneland Water Company	Conservative Realty Company	Consolidated Canal Company	Consolidated Water Company of Pomona	Consumers' Water Company	California- Oregon Power Company
	\$12,915 30	\$65,848 42	\$22,544 42		\$21,891 07
			30,874 94	\$13,555 27	9,123 76
			5,769 07		
	60 00		687 50		
			91 50		
			2,160 11		2,424 37
\$12,076 66			453 35		
	1,222 70		521 49		
			300 00		
\$12,076 66	\$14,198 00	\$65,848 42	\$63,402 38	\$13,555 27	\$33,439 20

TABLE No. 3

## ABSTRACT OF OPERATING REVENUES OF WATER COMPANIES OPERATING

	J. B. H. Cooper Water Company	Coast Valleys Gas and Electric Company
Commercial earnings—flat rate.....	\$257 00	\$18,907 45
Commercial earnings—metered rate.....		
Earnings from industrial sales—flat rate.....		34 75
Earnings from industrial sales—metered rate.....		
Earnings from municipal hydrants rental.....		471 00
Earnings from sales for street sprinkling.....		1,062 21
Earnings from sales to municipal departments.....		550 70
Earnings from sale for irrigation.....		289 00
Miscellaneous earnings from operation.....		
Profit on merchandise sales.....		
Profit on piping and connections.....		
Total revenues .....	\$257 00	\$21,315 11

TABLE No. 3

## ABSTRACT OF OPERATING REVENUES OF WATER COMPANIES OPERATING

	Crocker-Huffman Land and Water Company	Crown Water Company
Commercial earnings—flat rate.....		\$114 00
Commercial earnings—metered rate.....		
Earnings from industrial sales—flat rate.....		
Earnings from industrial sales—metered rate.....		
Earnings from municipal hydrants rental.....		
Earnings from sales for street sprinkling.....		
Earnings from sales to municipal departments.....		
Earnings from sale for irrigation.....	\$62,724 93	913 28
Miscellaneous earnings from operation.....		
Profit on merchandise sales.....		
Profit on piping and connections.....		
Total revenues .....	\$62,724 93	\$1,027 28

<sup>1</sup>Not segregated.

—Continued.

ATING IN CALIFORNIA DURING THE YEAR ENDING DECEMBER 31, 1913.

Corcoran Water and Gas Company	Corona City Water Company	Coronado Water Company	Crocker Tract Water System	Cottonwood Irrigation and Mining Company	Covina City Water Company
	\$987 80	\$129 50			\$1,076 05
\$2,961 68	17,753 53	28,522 87	\$6,173 45		9,029 20
		2 50			94 25
		1,522 39			290 70
	109 50	4,200 00			60 00
		339 61			39 20
	615 35	97 88			63 30
		2,206 19		\$761 25	17 00
	696 00	1,840 69			
	24 89				
	70 20	1,101 87			69 35
\$2,961 68	\$20,257 27	\$39,963 50	\$6,173 45	\$761 25	\$10,739 05

—Continued.

ATING IN CALIFORNIA DURING THE YEAR ENDING DECEMBER 31, 1913.

Consolidated Securities Company	Cucamonga Water Company	Cuyamaca Water Company	Danville Water Company <sup>1</sup>	Davis Water Company	Del Norte Water Company
\$387 55				\$372 80	\$2,497 40
3,399 35		\$13,522 54			
160 45					
34 49					
12,596 95	\$2,201 30	10,910 14			2,279 44
		208 75			
207 41					
\$16,786 20	\$2,201 30	\$24,641 43	\$419 50	\$372 80	\$4,776 84

TABLE No. 3

## ABSTRACT OF OPERATING REVENUES OF WATER COMPANIES OPER

	Domestic Water Company of Santa Maria	Domestic Water Company
Commercial earnings—flat rate.....		\$3,132 90
Commercial earnings—metered rate.....	\$11,243 32	3,293 94
Earnings from industrial sales—flat rate.....		
Earnings from industrial sales—metered rate.....		
Earnings from municipal hydrants rental.....	186 00	
Earnings from sales for street sprinkling.....	106 14	
Earnings from sales to municipal departments.....	691 92	
Earnings from sale for irrigation.....	590 40	
Miscellaneous earnings from operation.....		
Profit on merchandise sales.....	157 60	
Profit on piping and connections.....	204 12	
Total revenues .....	\$13,179 50	\$6,426 84

TABLE No. 3

## ABSTRACT OF OPERATING REVENUES OF WATER COMPANIES OPER

	Escalon Water and Light Company	Etna Development Company
Commercial earnings—flat rate.....	\$927 90	\$2,369 60
Commercial earnings—metered rate.....		
Earnings from industrial sales—flat rate.....		369 10
Earnings from industrial sales—metered rate.....		
Earnings from municipal hydrants rental.....		
Earnings from sales for street sprinkling.....		
Earnings from sales to municipal departments.....		
Earnings from sale for irrigation.....		757 25
Miscellaneous earnings from operation.....		15 00
Profit on merchandise sales.....		2 25
Profit on piping and connections.....		
Total revenues .....	\$927 90	\$3,513 20

<sup>1</sup>Not segregated.



—Continued.

ATING IN CALIFORNIA DURING THE YEAR ENDING DECEMBER 31, 1913.

Eagle Rock Water Company	East Sacramento Water Company	Eastside Canal and Irrigation Company	Electric Water Company	East Side Canal Company	Encanto Mutual Water Company
	\$3,929 75				
\$21,026 50					\$3,852 27
552 74					
		\$17,007 28	\$64,487 44	\$4,878 80	
2,775 00					66
11 21					
22 94	377 20				114 65
\$24,388 39	\$4,306 95	\$17,007 28	\$64,487 44	\$4,878 80	\$3,967 58

—Continued.

ATING IN CALIFORNIA DURING THE YEAR ENDING DECEMBER 31, 1913.

Euclid Avenue Water Company	The Eureka Water Company	Excelsior Water and Mining Company	Fairmont Water Company	Fairview Land and Water Company	Felton Water Company <sup>1</sup>
	\$2,626 80	\$546 75			
	36,744 35		\$16,202 80	\$174 21	
	246 00				
	3,446 65				
	5,400 00				
	594 85	95 00			
	498 85				
\$3,997 60	1,040 35	6,682 16		469 58	
276 00	2,328 95	4,749 50			
	9 18		1,418 01		
	15 76				
\$4,273 60	\$52,951 74	\$12,073 41	\$17,620 81	\$643 79	\$719 50

TABLE No. 3

ABSTRACT OF OPERATING REVENUES OF WATER COMPANIES OPER

	Fort Bragg Water Company	Fortuna Water Company
Commercial earnings—flat rate-----		\$1,579 15
Commercial earnings—metered rate-----	\$5,247 85	592 70
Earnings from industrial sales—flat rate-----		
Earnings from industrial sales—metered rate-----		
Earnings from municipal hydrants rental-----		
Earnings from sales for street sprinkling-----		32 50
Earnings from sales to municipal departments-----		
Earnings from sale for irrigation-----		
Miscellaneous earnings from operation-----		
Profit on merchandise sales-----		
Profit on piping and connections-----		
Total revenues -----	\$5,247 85	\$2,204 35

TABLE No. 3

ABSTRACT OF OPERATING REVENUES OF WATER COMPANIES OPER

	Glendora Water Company <sup>1</sup>	Goose Lake Canal Company <sup>2</sup>
Commercial earnings—flat rate-----		
Commercial earnings—metered rate-----		
Earnings from industrial sales—flat rate-----		
Earnings from industrial sales—metered rate-----		
Earnings from municipal hydrants rental-----		
Earnings from sales for street sprinkling-----		
Earnings from sales to municipal departments-----		
Earnings from sale for irrigation-----		
Miscellaneous earnings from operation-----		
Profit on merchandise sales-----		
Profit on piping and connections-----		
Total revenues -----	\$15,210 89	

<sup>1</sup>Not segregated.<sup>2</sup>No revenue.

—Continued.

ATING IN CALIFORNIA DURING THE YEAR ENDING DECEMBER 31, 1913.

Frederick Water Company	Farmers Canal Company	Fresno Canal and Irrigation Company	Fresno City Water Company	Garden Grove Water Company	Glendale Consolidated Water Company
\$696 85			\$145,485 35	\$960 50	\$62,764 29
72 69			8,115 30		
			1,476 00		
			36 00		
			1,968 00		
	\$3,597 51	\$121,408 37			
	74 25		1,903 16		
			456 04		
\$769 54	\$3,671 76	\$121,408 37	\$159,439 85	\$960 50	\$62,764 29

—Continued.

ATING IN CALIFORNIA DURING THE YEAR ENDING DECEMBER 31, 1913.

Gates Canal Company?	J. A. Graves	E. E. Hall	The Hanford Water Company	Happy Valley Land and Water Company	Hawthorne Electric and Water Company
		\$500 00	\$28,434 72	\$109 90	\$2,702 50
	\$4,372 81	2,206 62	1,580 00		2,530 65
				1,157 27	
			135 00		
	2,368 14			2,483 50	39 00
	150 00		497 35		367 17
	\$6,890 95	\$2,706 62	\$30,647 07	\$3,750 67	\$5,639 32

TABLE No. 3

ABSTRACT OF OPERATING REVENUES OF WATER COMPANIES OPER

	Hercules Water Company	Heck Brothers Water System <sup>2</sup>
Commercial earnings—flat rate.....	\$2,357 21	-----
Commercial earnings—metered rate.....	1,122 91	-----
Earnings from industrial sales—flat rate.....	-----	-----
Earnings from industrial sales—metered rate.....	10,955 78	-----
Earnings from municipal hydrants rental.....	379 92	-----
Earnings from sales for street sprinkling.....	-----	-----
Earnings from sales to municipal departments.....	-----	-----
Earnings from sale for irrigation.....	-----	-----
Miscellaneous earnings from operation.....	-----	-----
Profit on merchandise sales.....	-----	-----
Profit on piping and connections.....	-----	-----
Total revenues .....	\$14,815 82	\$3,548 39

<sup>1</sup>Credit item.<sup>2</sup>Not segregated.

TABLE No. 3

ABSTRACT OF OPERATING REVENUES OF WATER COMPANIES OPER

	Hollister Water Company	Hollywood Water Company
Commercial earnings—flat rate.....	\$10,939 15	\$13,421 31
Commercial earnings—metered rate.....	6,343 70	-----
Earnings from industrial sales—flat rate.....	4 00	-----
Earnings from industrial sales—metered rate.....	1,483 10	-----
Earnings from municipal hydrants rental.....	-----	-----
Earnings from sales for street sprinkling.....	-----	-----
Earnings from sales to municipal departments.....	1,660 30	-----
Earnings from sale for irrigation.....	-----	-----
Miscellaneous earnings from operation.....	52 10	-----
Profit on merchandise sales.....	-----	-----
Profit on piping and connections.....	-----	2,088 07
Total revenues .....	\$20,482 35	\$15,509 38

<sup>1</sup>Not segregated.



—Continued.

ATING IN CALIFORNIA DURING THE YEAR ENDING DECEMBER 31, 1913.

Hemet Town Water Company	Huntington Beach Company	Hihn Water Company	Hawthorne Water Company	Hermosa Beach Water Company	Highland Domestic Water Company
\$429 00	\$3,885 32	\$12,912 81	\$11,879 14	\$15,473 96	\$1,987 35
4,096 09	2,868 04	674 97	1,099 05		2,735 63
112 50		911 13			
175 99		436 50			
117 92		142 50			48 00
		1,705 93			
66 80	81 90				
		307 60		4,118 71	125 42
		172 05			564 95
		36 25	1,558 25	3,201 30	113 04
\$4,998 30	\$6,835 26	\$16,955 64	\$14,536 44	\$22,793 97	\$5,574 39

—Continued.

ATING IN CALIFORNIA DURING THE YEAR ENDING DECEMBER 31, 1913.

Home Tract Water Company	Hornbrook Water Company	Hyde Park Water Company	Ione Water Works	Independence Water Company	Indio Light, Water and Ice Company
\$580 85	\$1,903 00	\$3,395 78	\$2,386 35	\$1,142 25	\$1,102 52
118 30		5,237 06			
			854 53		
			170 10		
609 40				65 00	
11 11					205 20
1 04					
\$1,320 70	\$1,903 00	\$8,632 84	\$3,410 98	\$1,207 25	\$1,307 72

TABLE NO. 3

ABSTRACT OF OPERATING REVENUES OF WATER COMPANIES OPER

	Inglewood Water Company	Interurban Water Company
Commercial earnings—flat rate.....	\$4,325 34	-----
Commercial earnings—metered rate.....	18,302 03	\$5,690 16
Earnings from industrial sales—flat rate.....	-----	-----
Earnings from industrial sales—metered rate.....	-----	-----
Earnings from municipal hydrants rental.....	-----	-----
Earnings from sales for street sprinkling.....	-----	-----
Earnings from sales to municipal departments.....	60 00	-----
Earnings from sales for irrigation.....	527 47	-----
Miscellaneous earnings from operation.....	-----	-----
Profit on merchandise sales.....	-----	-----
Profit on piping and connections.....	-----	81 53
Total revenues .....	\$23,214 84	\$5,771 69

<sup>1</sup>Not segregated.

TABLE NO. 3

ABSTRACT OF OPERATING REVENUES OF WATER COMPANIES OPER

	Joyce Canal Company	Kennett Water Company
Commercial earnings—flat rate.....	-----	\$7,110 17
Commercial earnings—metered rate.....	-----	-----
Earnings from industrial sales—flat rate.....	-----	5,904 00
Earnings from industrial sales—metered rate.....	-----	-----
Earnings from municipal hydrants rental.....	-----	600 00
Earnings from sales for street sprinkling.....	-----	-----
Earnings from sales to municipal departments.....	-----	18 00
Earnings from sales for irrigation.....	\$70 89	687 25
Miscellaneous earnings from operation.....	-----	-----
Profit on merchandise sales.....	-----	5 20
Profit on piping and connections.....	-----	35 58
Total revenues .....	\$70 89	\$14,360 20

<sup>1</sup>Not segregated.

—Continued.

ATING IN CALIFORNIA DURING THE YEAR ENDING DECEMBER 31, 1913.

Interurban Land Company <sup>1</sup>	Irwin Heights Water Company	Jackson Water System	James Canal Company	James and Dixon Canal Company	Janss Water Company
	\$5,137 55	\$588 05			
	3,125 35				\$37,615 01
	326 20				
	26 00				
	72 45				
	349 70				
		32 75	\$11,910 18	\$33 78	
	1,249 00				2,346 73
\$2,593 85	\$10,286 25	\$620 80	\$11,910 18	\$33 78	\$39,961 74

—Continued.

ATING IN CALIFORNIA DURING THE YEAR ENDING DECEMBER 31, 1913.

Kern Island Irrigating Company	Kern River Canal and Irrigating Company	Kings River and Fresno Canal Company	Knapp Water Company	La Habra Valley Land and Water Company <sup>1</sup>	Laguna Blanca Water Company
			\$1,171 50		\$121 60
\$1,200 00					604 85
			117 60		2 95
31,797 35	\$6,194 11	\$2,475 10			100 85
3,531 53					
\$36,528 88	\$6,194 11	\$2,475 10	\$1,289 10	\$1,033 62	\$829 65

TABLE NO. 3

ABSTRACT OF OPERATING REVENUES OF WATER COMPANIES OPER

	Laguna Cliffs Water Company	Lake Hemet Water Company
Commercial earnings—flat rate.....	\$432 00	-----
Commercial earnings—metered rate.....	-----	\$2,522 12
Earnings from industrial sales—flat rate.....	-----	25 00
Earnings from industrial sales—metered rate.....	-----	449 64
Earnings from municipal hydrants rental.....	-----	280 75
Earnings from sales for street sprinkling.....	-----	51 79
Earnings from sales to municipal departments.....	-----	114 70
Earnings from sales for irrigation.....	-----	16,177 75
Miscellaneous earnings from operation.....	-----	3,410 00
Profit on merchandise sales.....	-----	174 22
Profit on piping and connections.....	-----	-----
Total revenues .....	\$432 00	\$23,205 97

<sup>1</sup>No revenue.

TABLE NO. 3

ABSTRACT OF OPERATING REVENUES OF WATER COMPANIES OPER

	Marin Water and Power Company	Marian Water Company
Commercial earnings—flat rate.....	\$35,536 08	-----
Commercial earnings—metered rate.....	73,455 64	\$214 82
Earnings from industrial sales—flat rate.....	120 00	-----
Earnings from industrial sales—metered rate.....	17,354 69	-----
Earnings from municipal hydrants rental.....	1,512 00	-----
Earnings from sales for street sprinkling.....	2,037 50	5,650 00
Earnings from sales to municipal departments.....	1,847 05	-----
Earnings from sales for irrigation.....	-----	-----
Miscellaneous earnings from operation.....	-----	-----
Profit on merchandise sales.....	5 80	-----
Profit on piping and connections.....	515 67	-----
Total revenues .....	\$132,384 43	\$5,864 82



—Continued.

ATING IN CALIFORNIA DURING THE YEAR ENDING DECEMBER 31, 1913.

Lerdo Canal Company	Lawndale Land and Water Company	Los Altos Water Company	Lytle Creek Water Company <sup>1</sup>	Madera Canal and Irrigation Company	Madera Electric Water Company
	\$963 46				\$2,119 20
	2,197 01	\$1,856 51			
		224 25			
\$1,416 40	6 25				100 00
				\$10,132 86	
	49 59				
	93 37	227 43			
\$1,416 40	\$3,309 68	\$2,308 19		\$10,132 86	\$2,219 20

—Continued.

ATING IN CALIFORNIA DURING THE YEAR ENDING DECEMBER 31, 1913.

The Marysville Water Company	Manteca Water Works	Midland Counties Pub- lic Service Corporation	Miradero Water Company	Minnehaha Oil Company	Mokelumne River Power and Water Company
\$32,227 00	\$530 90	\$5,711 98	\$17,000 00		\$2,366 00
		4,036 27		\$12,264 34	1,405 25
		78 00			
		59 70			
783 05		180 00			
745 35		275 02			
		495 99			318 25
					26 00
\$33,755 40	\$530 90	\$10,836 96	\$17,000 00	\$12,264 34	\$4,115 50

TABLE No. 3

ABSTRACT OF OPERATING REVENUES OF WATER COMPANIES OPERATING

	Montecito Valley Water Company	Monterey County Water Company
Commercial earnings—flat rate.....	\$3,073 25	-----
Commercial earnings—metered rate.....	-----	-----
Earnings from industrial sales—flat rate.....	-----	-----
Earnings from industrial sales—metered rate.....	-----	-----
Earnings from municipal hydrants rental.....	-----	-----
Earnings from sales for street sprinkling.....	-----	-----
Earnings from sales to municipal departments.....	-----	-----
Earnings from sales for irrigation.....	-----	\$1,916 10
Miscellaneous earnings from operation.....	-----	-----
Profit on merchandise sales.....	-----	-----
Profit on piping and connections.....	-----	-----
Total revenues .....	\$3,073 25	\$1,916 10

<sup>1</sup>Not segregated.

TABLE No. 3

ABSTRACT OF OPERATING REVENUES OF WATER COMPANIES OPERATING

	Newman Water Works Company	North Coast Water Company
Commercial earnings—flat rate.....	\$5,534 68	-----
Commercial earnings—metered rate.....	694 50	\$18,396 85
Earnings from industrial sales—flat rate.....	-----	-----
Earnings from industrial sales—metered rate.....	-----	-----
Earnings from municipal hydrants rental.....	624 00	-----
Earnings from sales for street sprinkling.....	355 60	959 55
Earnings from sales to municipal departments.....	72 00	-----
Earnings from sales for irrigation.....	-----	-----
Miscellaneous earnings from operation.....	-----	3,962 70
Profit on merchandise sales.....	59 07	-----
Profit on piping and connections.....	35 00	698 20
Total revenues .....	\$7,374 85	\$24,017 30

—Continued.

ATING IN CALIFORNIA DURING THE YEAR ENDING DECEMBER 31, 1913.

Monterey County Water Works	Mt. Jackson Water and Power Company	Mountain Power Company	Mountain Springs Water Company	Moorpark Water, Light and Power Company <sup>1</sup>	Natomas Water Company
	\$1,402 45	\$2,764 30	\$16,040 59	-----	\$4,094 50
\$70,928 52	-----	528 10	-----	-----	19,514 95
6,475 75	-----	-----	-----	-----	-----
1,508 66	-----	2,613 00	-----	-----	-----
2,051 61	-----	-----	-----	-----	-----
-----	-----	-----	-----	-----	-----
-----	-----	-----	-----	-----	6,849 94
21 30	-----	-----	-----	-----	-----
122 45	-----	77 52	-----	-----	-----
215 51	-----	51 00	-----	-----	-----
-----	-----	-----	-----	-----	-----
\$81,323 14	\$1,402 45	\$6,033 92	\$16,040 59	\$685 58	\$30,459 39

—Continued.

ATING IN CALIFORNIA DURING THE YEAR ENDING DECEMBER 31, 1913.

North Moneta Garden Lands Water Company	Northern Cali- fornia Power Company Consolidated	Northern Oil Company	Northern Water and Power Company	Oak Park Water Company	Ocean Park Water Company
\$654 11	\$31,967 46	\$25,048 39	\$271 25	\$28,203 75	\$14,835 17
-----	803 97	-----	-----	-----	2,057 12
-----	537 00	-----	7,845 54	14 00	-----
-----	318 86	-----	-----	-----	-----
-----	3,990 00	-----	-----	-----	60 00
-----	928 43	-----	-----	1,588 19	28 00
-----	1,181 30	-----	112 50	331 92	55 50
278 44	-----	-----	48 60	229 25	-----
183 50	-----	-----	-----	2,485 71	29 00
-----	-----	-----	-----	-----	-----
-----	-----	-----	-----	-----	646 00
-----	-----	-----	-----	-----	-----
\$1,116 05	\$39,727 02	\$25,048 39	\$8,277 89	\$32,852 82	\$17,710 79

TABLE No. 3

## ABSTRACT OF OPERATING REVENUES OF WATER COMPANIES OPER

	Ocean View Land and Water Company	Orange Home Water Company
Commercial earnings—flat rate.....		
Commercial earnings—metered rate.....	\$1,989 64	\$776 40
Earnings from industrial sales—flat rate.....		
Earnings from industrial sales—metered rate.....		
Earnings from municipal hydrants rental.....		
Earnings from sales for street sprinkling.....		
Earnings from sales to municipal departments.....		
Earnings from sales for irrigation.....		
Miscellaneous earnings from operation.....		
Profit on merchandise sales.....		
Profit on piping and connections.....	217 96	
Total revenues .....	\$2,207 60	\$776 40

TABLE No. 3

## ABSTRACT OF OPERATING REVENUES OF WATER COMPANIES OPER

	Peninsula Water Company	Peoples Water Company
Commercial earnings—flat rate.....		\$96,661 23
Commercial earnings—metered rate.....	\$40,812 44	1,159,057 20
Earnings from industrial sales—flat rate.....		593 90
Earnings from industrial sales—metered rate.....		220,918 03
Earnings from municipal hydrants rental.....		46,814 91
Earnings from sales for street sprinkling.....		37,036 31
Earnings from sales to municipal departments.....		32,029 16
Earnings from sales for irrigation.....		
Miscellaneous earnings from operation.....	913 60	
Profit on merchandise sales.....	330 05	28 97
Profit on piping and connections.....		11,581 58
Total revenues .....	\$42,056 09	\$1,604,721 29



—Continued.

ATING IN CALIFORNIA DURING THE YEAR ENDING DECEMBER 31, 1913.

Oro Water, Light and Power Company	Owensmouth Water Company	Pacific Gas and Electric Company	Palm Valley Water Company	Puente City Water Company	Pasadena Consolidated Water Company
\$17,329 10		\$136,324 45		\$390 00	
32 95	\$541 33	37,594 80	\$401 20	513 84	
4,956 39		38,820 86			
268 00		25,103 35			\$1,672 89
1,278 00					
	6,200 00				
448 10		25,009 57			
10,616 95		107,967 97	190 52	961 95	11,062 40
524 35		10,924 88		320 00	
65 84		4,212 00	46 00		
27 15			20 00		454 30
\$35,546 83	\$6,741 33	\$385,957 88	\$657 72	\$2,185 79	\$13,189 59

—Continued.

ATING IN CALIFORNIA DURING THE YEAR ENDING DECEMBER 31, 1913.

Peoples Water Company of Palms	Petaluma Power and Water Company	Pinal Dome Oil Company	Placerville Water Works	Pleasant Valley Water Company	Plunkett Canal Company
\$2,918 63	\$17,456 10	\$443 75	\$6,356 31		
	11,047 05			\$29,863 52	
	336 80				
	2,601 10	8,268 74			
	2,250 00			1,000 00	
	345 60			140 90	
32 50	574 20			422 86	\$1,307 43
				126 00	
			9 30		
	126 15				
\$2,951 13	\$34,737 00	\$8,712 49	\$6,365 61	\$31,553 28	\$1,307 43

TABLE No. 3

ABSTRACT OF OPERATING REVENUES OF WATER COMPANIES OPER

	Port Costa Water Company	Pioneer Canal Company
Commercial earnings—flat rate.....	\$14,197 46	-----
Commercial earnings—metered rate.....	14,379 92	-----
Earnings from industrial sales—flat rate.....	7,348 77	-----
Earnings from industrial sales—metered rate.....	23,106 44	-----
Earnings from municipal hydrants rental.....	1,905 00	-----
Earnings from sales for street sprinkling.....	1,715 32	-----
Earnings from sales to municipal departments.....	360 00	-----
Earnings from sales for irrigation.....	-----	\$1,392 21
Miscellaneous earnings from operation.....	-----	-----
Profit on merchandise sales.....	-----	-----
Profit on piping and connections.....	69 01	-----
Total revenues .....	\$63,081 92	\$1,392 21

TABLE No. 3

ABSTRACT OF OPERATING REVENUES OF WATER COMPANIES OPER

	Roseville Water Company	Reedley Water Works
Commercial earnings—flat rate.....	\$15,796 45	\$6,513 32
Commercial earnings—metered rate.....	-----	-----
Earnings from industrial sales—flat rate.....	-----	-----
Earnings from industrial sales—metered rate.....	-----	-----
Earnings from municipal hydrants rental.....	1,083 00	267 91
Earnings from sales for street sprinkling.....	279 86	-----
Earnings from sales to municipal departments.....	120 00	-----
Earnings from sale for irrigation.....	-----	-----
Miscellaneous earnings from operation.....	-----	-----
Profit on merchandise sales.....	-----	-----
Profit on piping and connections.....	125 00	-----
Total revenues .....	\$17,404 31	\$6,781 23

<sup>1</sup>Credit item.

—Continued.

ATING IN CALIFORNIA DURING THE YEAR ENDING DECEMBER 31, 1913.

Randsburg Water Company	Redondo Water Company	Redwood City Water Company	Rialto Domestic Water Company	Riverbank Water Company	Mrs M. A. Rohner
	\$18,992 52		\$5,237 70	\$3,129 11	\$613 05
\$11,369 55	1,378 06			97 15	
	769 50				
	2,019 55			4,674 02	
	225 00				
	95 65				
	1,297 70	\$10,405 98			
	65 97			1,140 72	
	79				
	575 69		49 86	305 00	
\$11,369 55	\$25,420 43	\$10,405 98	\$5,287 56	\$9,346 00	\$613 05

—Continued.

ATING IN CALIFORNIA DURING THE YEAR ENDING DECEMBER 31, 1913.

San Joaquin Light and Power Corporation	San Dimas Water Company	San Benito County Land and Water Company	San Dimas Charter Oak Domestic Water Company	San Gabriel Valley Water Company	San Geronimo Water Company
\$13,850 40	\$1,012 20	\$2,113 05	\$7,293 24	\$849 81	\$4,461 25
692 55				40,942 59	1,095 66
7 35					
15 00				4,681 95	7,047 20
75 00				1,095 75	
11 50					
406 70				1,345 27	
	34,880 35			18,980 68	426 25
6 55	297 43			119 61	52 34
				27 63	
11 26				892 61	
\$15,063 79	\$36,189 98	\$2,113 05	\$7,293 24	\$68,935 90	\$13,082 70

TABLE No. 3

ABSTRACT OF OPERATING REVENUES OF WATER COMPANIES OPER

	San Joaquin and Kings River Canal and Irrigation Company	San Jose Water Company
Commercial earnings—flat rate.....	\$1,437 00	\$85,094 10
Commercial earnings—metered rate.....		94,520 01
Earnings from industrial sales—flat rate.....	2,088 00	
Earnings from industrial sales—metered rate.....		2,968 03
Earnings from sales for street sprinkling.....		7,543 51
Earnings from sales to municipal departments.....		3,347 19
Earnings from sale for irrigation.....	205,636 08	
Miscellaneous earnings from operation.....		810 43
Profit on merchandise sales.....		
Profit on piping and connections.....		264 82
Total revenues .....	\$209,161 08	\$204,548 09

TABLE No. 3

ABSTRACT OF OPERATING REVENUES OF WATER COMPANIES OPER

	Santa Paula Water Works	Santa Rosa Water Works
Commercial earnings—flat rate.....	\$1,313 65	\$10,440 35
Commercial earnings—metered rate.....	8,869 70	1,258 20
Earnings from industrial sales—flat rate.....	1,120 05	112 75
Earnings from industrial sales—metered rate.....	645 25	2,064 00
Earnings from municipal hydrants rental.....		366 71
Earnings from sales for street sprinkling.....	1,176 72	525 00
Earnings from sales to municipal departments.....	312 00	159 29
Earnings from sale for irrigation.....	4,303 84	
Miscellaneous earnings from operation.....		699 90
Profit on merchandise sales.....		
Profit on piping and connections.....		326 90
Total revenues .....	\$17,741 21	\$15,953 10



—Continued.

ATING IN CALIFORNIA DURING THE YEAR ENDING DECEMBER 31, 1913.

San Lorenzo Water Company	Santa Catalina Island Company	Santa Clara Valley Water Company	Santa Clara Water and Irrigation Company	San Francisco- Oakland Terminal Power Company	Santa Monica Water Company
\$13,613 42	\$2,601 35	\$275 60	-----	\$2,614 10	\$3,611 85
296 45					40,737 25
845 78				768 55	
				9,084 25	
2,266 50					211 75
967 44				437 75	192 70
				166 25	217 35
970 60			10,350 53	7,480 30	
			92 94	1,174 11	5,403 52
					1,709 73
\$18,960 19	\$2,601 35	\$275 60	\$10,443 47	\$21,725 31	\$52,083 65

—Continued.

ATING IN CALIFORNIA DURING THE YEAR ENDING DECEMBER 31, 1913.

Sawtelle Water Company	Saticoy Water Company	Sausalito Spring Water Company	Sherman Water Company	Sierra and San Francisco Power Company	Sierra Park Water Company
\$3,846 75	\$5,091 24	-----	\$2,323 46	\$18,273 94	-----
4,900 20			1,608 94		\$808 60
			192 50	19,074 79	
21 00				585 00	
				186 60	
				195 25	
				4,282 30	
191 55		1,139 16	285 75		
379 34					19 74
\$9,338 84	\$5,091 24	\$1,139 16	\$4,410 65	\$12,597 88	\$928 34

TABLE No. 3

## ABSTRACT OF OPERATING REVENUES OF WATER COMPANIES OPER

	Soledad Land and Water Company	Sonoma Valley Water, Light and Power Company <sup>1</sup>
Commercial earnings—flat rate.....	-----	-----
Commercial earnings—metered rate.....	-----	-----
Earnings from industrial sales—flat rate.....	-----	-----
Earnings from industrial sales—metered rate.....	-----	-----
Earnings from municipal hydrants rental.....	-----	-----
Earnings from sales for street sprinkling.....	-----	-----
Earnings from sales to municipal departments.....	-----	-----
Earnings from sale for irrigation.....	\$4,943 00	-----
Miscellaneous earnings from operation.....	-----	-----
Profit on merchandise sales.....	-----	-----
Profit on piping and connections.....	-----	-----
Total revenues .....	\$4,943 00	\$1,394 69

<sup>1</sup>Not segregated.

TABLE No. 3

## ABSTRACT OF OPERATING REVENUES OF WATER COMPANIES OPER

	Stockton and Mokelumne Canal Company	Stoll Water Company
Commercial earnings—flat rate.....	-----	\$2,236 60
Commercial earnings—metered rate.....	-----	-----
Earnings from industrial sales—flat rate.....	-----	-----
Earnings from industrial sales—metered rate.....	-----	-----
Earnings from municipal hydrants rental.....	-----	-----
Earnings from sales for street sprinkling.....	-----	-----
Earnings from sales to municipal departments.....	-----	-----
Earnings from sale for irrigation.....	\$22,130 75	-----
Miscellaneous earnings from operation.....	35 35	-----
Profit on merchandise sales.....	-----	-----
Profit on piping and connections.....	-----	117 00
Total revenues .....	\$22,166 10	\$2,353 60

—Continued.

ATING IN CALIFORNIA DURING THE YEAR ENDING DECEMBER 31, 1913.

South Feather Land and Water Company	South Los Angeles Water Company	South San Francisco Water Company	Southern California Mountain Water Company	St. Helena Water Company	Spring Valley Water Company
-----	\$686 50	\$18 00	\$2 75	\$215 00	\$1,283,768 95
-----	30,777 05	14,814 17	622 50	6,171 68	1,231,243 12
-----	140 00	-----	-----	-----	75,816 72
-----	304 75	20,009 20	449 08	-----	416,402 48
-----	-----	-----	-----	1,099 68	131,910 31
-----	-----	163 92	123 13	319 82	28,753 62
-----	-----	-----	-----	-----	49,382 45
\$14,295 36	75 75	-----	-----	-----	-----
-----	-----	122 14	20,565 78	-----	33,714 55
-----	1,058 79	8 89	-----	-----	1,467 46
\$14,295 36	\$33,042 84	\$35,136 32	\$21,763 24	\$7,806 18	\$3,252,459 66

—Continued.

ATING IN CALIFORNIA DURING THE YEAR ENDING DECEMBER 31, 1913.

Stratton Water Company	Stine Canal Company	Summit Lake Irrigation Company	Sunnyvale Water Company	Susanville Water Works	Sutter and Amador Water Works
-----	-----	-----	\$2,801 20	\$6,119 80	\$8,104 75
-----	-----	-----	472 13	38 59	-----
-----	-----	-----	-----	21 00	957 00
\$13,070 81	-----	-----	200 00	-----	-----
-----	-----	-----	254 79	-----	-----
-----	\$6,057 05	\$3,903 80	-----	702 50	-----
-----	-----	-----	-----	62 50	-----
-----	-----	-----	75 00	-----	-----
\$13,070 81	\$6,057 05	\$3,903 80	\$3,803 12	\$6,944 39	\$9,061 75

TABLE NO. 3

ABSTRACT OF OPERATING REVENUES OF WATER COMPANIES OPER

	Sutter-Butte Canal Company	The Sweetwater Water Company	Terra Bella City Water Company
Commercial earnings—flat rate-----		\$18,878 50	\$42 00
Commercial earnings—metered rate----		6,543 30	859 45
Earnings from industrial sales—flat rate-----		699 60	-----
Earnings from industrial sales—me- tered rate-----		2,916 40	-----
Earnings from municipal hydrants rental-----		1,571 00	-----
Earnings from sales for street sprink- ling-----		257 30	-----
Earnings from sales to municipal de- partments-----		78 60	-----
Earnings from sale for irrigation-----	\$50,617 20	33,442 80	-----
Miscellaneous earnings from operation		2,343 00	-----
Profit on merchandise sales-----			-----
Profit on piping and connections-----			-----
Total revenues-----	\$50,617 20	\$66,730 50	\$901 45

<sup>1</sup>Not segregated.

TABLE NO. 3

ABSTRACT OF OPERATING REVENUES OF WATER COMPANIES OPER

	The Union Water Company of California	Valley View Land and Water Company <sup>1</sup>	Vacaville Water and Light Company
Commercial earnings—flat rate-----	\$1,299 30	-----	\$5,157 30
Commercial earnings—metered rate----	23,263 30	-----	228 40
Earnings from industrial sales—flat rate-----		-----	-----
Earnings from industrial sales—me- tered rate-----	2,761 24	-----	-----
Earnings from municipal hydrants rental-----	3,477 67	-----	900 00
Earnings from sales for street sprink- ling-----	1,313 83	-----	121 55
Earnings from sales to municipal de- partments-----	213 74	-----	18 00
Earnings from sales for irrigation-----	2,366 25	-----	-----
Miscellaneous earnings from operation	560 28	-----	-----
Profit on merchandise sales-----	169 25	-----	-----
Profit on piping and connections-----		-----	-----
Total revenues-----	\$35,424 86	\$1,479 85	\$6,425 25

<sup>1</sup>Not segregated.



—Continued.

ATING IN CALIFORNIA DURING THE YEAR ENDING DECEMBER 31, 1913.

Tehama Water Works	Torrance Water, Light and Power Company <sup>1</sup>	The Truckee River General Electric Company	Ukiah Water and Improvement Company	Union Hollywood Water Company	Union Water Company
\$451 35		\$5,066 11			\$4,324 02
				\$229,540 39	1,509 00
			\$7,203 35		
			2,488 15		399 60
			60 00	6,433 75	
			285 15	722 63	121 60
			109 00	3,563 58	
				544 01	
			164 60		
		76 30		57,600 68	725 90
\$451 35	\$6,554 70	\$5,142 41	\$10,310 25	\$298,405 04	\$7,080 12

—Continued.

ATING IN CALIFORNIA DURING THE YEAR ENDING DECEMBER 31, 1913.

Edmund Varney Water System	Van Nuys Water Company	Venice Water Company	Ventura County Power Company	Verdugo Pipe and Reservoir Company <sup>1</sup>	Verdugo Springs Water Company
\$907 50		\$6,076 18	\$25,467 72		
1,249 17	\$3,125 38		1,416 60		\$11,556 59
			263 50		
			83 45		
	3,750 00		887 45		15 64
		21 80	1,706 00		
		4,476 15	7,155 60		58 00
		122 50	235 33		112 00
\$2,156 67	\$6,875 38	\$10,696 63	\$37,215 65	\$3,013 15	\$11,742 23

TABLE NO. 3

## ABSTRACT OF OPERATING REVENUES OF WATER COMPANIES OPER

	Vineyard Ditch Company	Visalia City Water Company	Vista Grande Water Company
Commercial earnings—flat rate-----		\$26,694 90	\$2,390 50
Commercial earnings—metered rate----			3,370 45
Earnings from industrial sales—flat rate-----			288 25
Earnings from industrial sales—me- tered rate-----			
Earnings from municipal hydrants rental-----			
Earnings from sales for street sprink- ling-----			
Earnings from sales to municipal de- partments-----		2,160 00	
Earnings from sale for irrigation-----	\$879 63		
Miscellaneous earnings from operation	43 95	79 79	
Profit on merchandise sales-----			
Profit on piping and connections-----			
Total revenues-----	\$923 58	\$28,934 69	\$6,049 30

<sup>1</sup>Not segregated.

TABLE NO. 3

## ABSTRACT OF OPERATING REVENUES OF WATER COMPANIES OPER

	West Side Water Company	Western Water Company	Whittier Water Company
Commercial earnings—flat rate-----			
Commercial earnings—metered rate----	\$13,010 07	\$295,972 04	\$1,866 11
Earnings from industrial sales—flat rate-----			
Earnings from industrial sales—me- tered rate-----			390 00
Earnings from municipal hydrants rental-----	1,337 50		1,545 62
Earnings from sales for street sprink- ling-----			
Earnings from sales to municipal de- partments-----			
Earnings from sale for irrigation-----			5,584 15
Miscellaneous earnings from operation	4,292 31		71,239 74
Profit on merchandise sales-----		213 60	5 64
Profit on piping and connections-----			
Total revenues-----	\$18,639 88	\$296,185 64	\$80,631 26

<sup>1</sup>Several utilities not segregated amounting to \$68,563.70.

NOTE.—Reports of Cosumnes Irrigation Company and Napa City Water Company omitted, as same were incomplete.

—Continued.

ATING IN CALIFORNIA DURING THE YEAR ENDING DECEMBER 31, 1913.

W. G. Wadley <sup>1</sup>	Walgrove Water Company	Walnut Creek Water Company	Washington Water and Light Company	West San Joaquin Valley Water Company <sup>1</sup>	West Side Irrigation Company
	\$850 40	\$983 50	\$4,003 20		
					\$141 50
			225 40		
					2,734 25
			443 99		
	150 00				
\$2,349 11	\$1,000 40	\$983 50	\$4,672 59	\$11,738 60	\$2,875 75

—Concluded.

ATING IN CALIFORNIA DURING THE YEAR ENDING DECEMBER 31, 1913.

Williams Water Company	Willits Water and Power Company	Windsor Water Company	Weaverville Town Water Works	Yolo County Consolidated Water Company	Total
\$1,339 49 284 30	\$7,368 80	\$7,410 62 142 37	\$2,146 50		\$2,838,503 73 4,007,949 70
	1,260 55				239,714 97
					832,106 96
	767 00				240,064 73
121 91	185 00				118,887 77
	296 00				154,032 89
				\$51,466 55	1,113,890 34
			33 85	157 00	201,289 74
	105 12				9,664 25
		540 00			98,827 72
\$1,745 70	\$9,982 47	\$8,092 99	\$2,180 35	\$51,623 55	<sup>1</sup> \$9,923,496 50

TABLE No. 4

ABSTRACT OF OPERATING EXPENSES CLASS "A" WATER COMPANIES

	Fresno Canal and Irrigation Company
<i>Pumping Expenses.</i>	
Superintendence .....	
Pumping labor .....	
Purification labor .....	
Miscellaneous labor .....	
Fuel for steam .....	
Power purchased .....	
Lubricants .....	
Purification supplies and expenses .....	
Miscellaneous pumping station supplies and expenses .....	
Repairs to power pumping equipment .....	
Repairs to boiler room auxiliary equipment .....	
Repairs to pumping station auxiliary equipment .....	
Repairs to pumping station miscellaneous equipment .....	
Repairs to surface source of supply .....	
Repairs to ground source of supply .....	
Repairs to collecting aqueducts, intakes and supply mains .....	
Repairs to purification plant .....	
Repairs to pumping station buildings, fixtures and grounds .....	
Total pumping expenses .....	
<i>Distribution Expenses.</i>	
Patrolling storage facilities .....	
Meter and fitting department expenses and supplies .....	
Street department expenses and supplies .....	
Customers' premises expenses .....	
Repairs to transmission mains .....	
Repairs to reservoirs, tanks and standpipes .....	
Repairs to distribution mains .....	
Repairs to fire cisterns, basins, fountains and troughs .....	
Repairs to services .....	
Repairs to hydrants .....	
Repairs to distribution buildings, fixtures and grounds .....	
Repairs to distribution miscellaneous equipment .....	
Total distribution expenses .....	

—Continued.

OPERATING IN CALIFORNIA FOR YEAR ENDING DECEMBER 31, 1913.

Fresno City Water Company	Marin Water and Power Company	Pacific Gas and Electric Company	Peoples Water Company	San Joaquin and Kings River Canal and Irrigation Company, Inc.	San Jose Water Company
\$156 45		\$3,163 43	\$4,367 05		
5,244 28	\$2,428 00	13,621 03	54,634 20		\$13,401 47
			8,699 55		
435 83		1,923 50	1,315 20		1,814 91
		4,359 75	44,703 70		5,259 84
53,125 25	2,633 81	4,062 58	33,685 39		9,954 27
44 47	175 88	752 57	1,087 25		406 04
	3 10		570 08		215 85
2,023 82	51 83	2,088 13	3,769 94		843 37
1,090 15	801 99	3,297 27	4,449 52		4,825 17
12 60	12 00	60 60	1,375 80		106 95
		360 84	293 56		29 85
26 77	170 33	359 56	853 36		
	806 35	707 99	2,713 52		4,672 29
15 35		590 09	1,412 97		325 55
			1,063 03		
	25		205 86		
125 21	272 85	3,843 07	784 61		584 54
\$62,300 18	\$7,356 39	\$39,190 41	\$165,984 59		\$42,540 10
	\$2,994 51	\$40,584 97	\$10,949 88		
\$7 96	1,546 54	2,310 77	13,499 33		\$725 50
	169 38		20,318 39		
711 70	21 17	2,044 95	45 25		855 25
	32 47		2,044 12		
11 61	40 40	17,546 64	2,245 76		
940 64	1,942 66	7,398 28	15,868 68		2,447 76
3,192 02	1,596 61	5,472 44	14,814 34		3,643 50
2 59		131 83	572 42		333 00
51 22	3,138 21	483 57	693 98		
232 07	4 25	3,711 91	1,808 86		49 85
\$5,149 81	\$11,486 20	\$79,685 36	\$82,861 00		\$8,054 86



TABLE No. 4

ABSTRACT OF OPERATING EXPENSES CLASS "A" WATER COMPANIES

	Spring Valley Water Company
<i>Pumping Expenses.</i>	
Superintendence .....	\$14,707 25
Pumping labor .....	78,055 57
Purification labor .....	2,619 33
Miscellaneous labor .....	11,522 90
Fuel for steam .....	60,950 15
Power purchased .....	38,909 52
Lubricants .....	1,554 43
Purification supplies and expenses .....	3,901 47
Miscellaneous pumping station supplies and expenses .....	4,014 87
Repairs to power pumping equipment .....	5,199 56
Repairs to boiler room auxiliary equipment .....	2,023 87
Repairs to pumping station auxiliary equipment .....	1,737 53
Repairs to pumping station miscellaneous equipment .....	1,074 27
Repairs to surface source of supply .....	21,545 14
Repairs to ground source of supply .....	6,011 60
Repairs to collecting aqueducts, intakes and supply mains .....	6,871 03
Repairs to purification plant .....	994 14
Repairs to pumping station buildings, fixtures and grounds .....	12,436 65
Total pumping expenses .....	\$274,129 28
<i>Distribution Expenses.</i>	
Patrolling storage facilities .....	\$2,873 77
Meter and fitting department expenses and supplies .....	13,331 28
Street department expenses and supplies .....	17,069 83
Customers, premises expenses .....	38,460 53
Repairs to transmission mains .....	15,072 01
Repairs to reservoirs, tanks and standpipes .....	3,111 96
Repairs to distribution mains .....	24,229 20
Repairs to fire cisterns, basins, fountains and troughs .....	-----
Repairs to services .....	19,649 40
Repairs to hydrants .....	-----
Repairs to distribution buildings, fixtures and grounds .....	37 71
Repairs to distribution miscellaneous equipment .....	17,536 53
Total distribution expenses .....	\$151,372 22

—(Continued.)

OPERATING IN CALIFORNIA FOR YEAR ENDING DECEMBER 31, 1913.

Union Hollywood Water Company	Western Water Company	Total			
	\$2,550 00	\$24,944 18			
\$10,971 56	13,743 72	192,099 83			
		11,318 88			
55 11	822 14	17,889 59			
23,400 47	9,600 00	148,373 91			
2,860 10	14,720 10	159,951 02			
1,970 29	2,418 60	8,409 53			
2 28		4,692 78			
28,255 78	2,861 17	43,908 91			
861 74	4,783 06	25,308 46			
1,493 92	1,391 01	6,476 75			
237 44	68 27	2,727 49			
16 15		2,500 44			
15 60		30,460 89			
277 10	184 84	8,817 50			
47 39	38 50	8,019 95			
5 40		1,205 65			
448 54	3,458 77	21,954 24			
\$70,918 87	\$56,640 18	\$719,060 00			
\$495 80	\$127 84	\$58,026 77			
2,302 00	1,111 52	34,834 90			
171 62		37,729 22			
41 04		42,179 88			
2,439 42		19,588 02			
147 26	18 10	23,121 73			
5,415 98	1,335 38	59,578 58			
2,990 61		51,358 92			
136 75		1,176 59			
37 00		4,441 69			
5,382 05		28,725 52			
\$19,559 53	\$2,592 84	\$360,761 82			

TABLE NO. 4

ABSTRACT OF OPERATING EXPENSES CLASS "A" WATER COMPANIES

	Fresno Canal and Irrigation Company
<i>Commercial Expenses.</i>	
Collections—reading meters, etc.-----	
Promotion of business—salaries and expenses-----	
Total commercial expenses-----	
<i>General Expenses.</i>	
Salaries of general officers-----	\$5,000 00
Salaries of general office clerks-----	2,330 90
Miscellaneous general office supplies and expenses-----	1,833 48
Law expenses—general-----	4,937 67
Railroad Commission expense-----	112 65
Injuries and damages-----	
Relief department and expense-----	
Water franchise requirements-----	
Other general expenses-----	8,621 45
Insurance-----	
Repairs of general structures-----	
Repairs of general equipment-----	41,670 24
Undistributed adjustments—balance-----	
Water expenses transferred—Cr.-----	
Joint operating expenses—Cr.-----	
Extraordinary repairs-----	
Repairs charged to reserve—Cr.-----	
Total general expenses-----	\$64,506 39
<i>Taxes.</i>	
Taxes-----	\$6,436 51
<i>General Amortization of Capital.</i>	
Amortization of franchises and patents-----	
Depreciation of plant and equipment-----	
Depreciation of pumping capital-----	
Depreciation of distribution capital-----	
Depreciation of general capital-----	\$7,240 36
Total general amortization of capital-----	\$7,240 36
<i>Recapitulation of Expenses.</i>	
Pumping expenses-----	
Distribution expenses-----	
Commercial expenses-----	
General expenses-----	\$64,506 39
Taxes-----	6,436 51
General amortization of capital-----	7,240 36
Total operating expenses-----	\$78,183 26

—Continued.

OPERATING IN CALIFORNIA FOR YEAR ENDING DECEMBER 31, 1913.

Fresno City Water Company	Marin Water and Power Company	Pacific Gas and Electric Company	Peoples Water Company	San Joaquin and Kings River Canal and Irrigation Company, Inc.	San Jose Water Company
\$6,072 61 15 85	\$1,851 01 5 00	\$4,162 24 237 63	\$67,844 43 124 00	----- -----	\$11,672 97 1,449 77
\$6,088 46	\$1,856 01	\$4,399 87	\$67,968 43	-----	\$13,122 74
\$15,282 50 6,892 50 3,400 42 1,220 67	\$7,800 00 8,646 14 3,031 89 3,011 70	\$14,699 52 14,257 42 20,670 41 672 03	\$48,648 35 13,619 50 32,254 69 20,609 90	----- \$8,861 80 1,354 95 22,988 90	\$10,003 14 992 95 5,478 32 285 25
5 00	-----	19 01 1,404 41 112 74	16 50 920 10	----- 4 00	284 80 ----- 180 00
12 28 155 29 4 39 144 72	6,412 18 853 85 91 45 47 90	4,143 46 364 65	11,795 55 2,942 94 373 35 241 43	41,203 47 ----- ----- -----	2,259 68 702 40 1,208 63 10 25
-----	-----	-----	-----	-----	-----
-----	-----	-----	-----	-----	-----
-----	-----	-----	-----	-----	-----
\$27,117 77	\$29,895 11	\$56,343 65	\$131,422 31	\$74,413 12	\$21,355 42
\$6,226 56	\$13,491 21	\$25,127 27	\$170,608 80	\$10,730 43	\$17,334 90
\$4,248 81 4,513 14 1,320 72	----- ----- -----	----- ----- -----	\$99,458 00 208,689 00 25,429 00	\$1,901 95 13,183 16	\$8,989 16 18,672 05 253 33
\$10,082 67	-----	-----	\$333,576 00	\$15,085 11	\$27,914 54
\$62,300 18 5,149 81 6,088 46 27,117 77 6,226 56 10,082 67	\$7,356 39 11,486 20 1,856 01 29,895 11 13,491 21	\$39,190 41 79,685 36 4,399 87 56,343 65 25,127 27	\$165,984 59 82,861 00 67,968 43 131,422 31 170,608 80 333,576 00	----- ----- ----- \$74,413 12 10,730 43 15,085 11	\$42,540 10 8,054 86 13,122 74 21,355 42 17,334 90 27,914 54
\$116,965 45	\$64,084 92	\$204,746 56	\$952,421 13	\$100,228 66	\$130,322 56

TABLE No. 4

ABSTRACT OF OPERATING EXPENSES CLASS "A" WATER COMPANIES

	Spring Valley Water Company
<i>Commercial Expenses.</i>	
Collections—reading meters, etc.-----	\$122,233 17
Promotion of business—salaries and expenses-----	
Total commercial expenses-----	\$122,233 17
<i>General Expenses.</i>	
Salaries of general officers-----	\$57,880 65
Salaries of general office clerks-----	11,281 05
Miscellaneous general office supplies and expenses-----	45,690 54
Law expenses—general-----	58,724 14
Railroad Commission expense-----	1,005 50
Injuries and damages-----	3,862 07
Relief department and expense-----	1,800 00
Water franchise requirements-----	
Other general expenses-----	39,933 85
Insurance-----	
Repairs of general structures-----	1,954 27
Repairs of general equipment-----	5,935 31
Undistributed adjustments—balance-----	
Water expenses transferred—Cr.-----	
Joint operating expenses—Cr.-----	
Extraordinary repairs-----	
Repairs charged to reserve—Cr.-----	
Total general expenses-----	\$228,067 38
<i>Taxes.</i>	
Taxes-----	\$427,146 03
<i>General Amortization of Capital.</i>	
Amortization of franchises and patents-----	
Depreciation of plant and equipment-----	
Depreciation of pumping capital-----	
Depreciation of distribution capital-----	
Depreciation of general capital-----	\$260,000 00
Total general amortization of capital-----	\$260,000 00
<i>Recapitulation of Expenses.</i>	
Pumping expenses-----	\$274,129 28
Distribution expenses-----	151,372 22
Commercial expenses-----	122,233 17
General expenses-----	228,067 38
Taxes-----	427,146 03
General amortization of capital-----	260,000 00
Total operating expenses-----	\$1,462,948 08



—Continued.

OPERATING IN CALIFORNIA FOR YEAR ENDING DECEMBER 31, 1913.

Union Hollywood Water Company	Western Water Company	Total		
\$6,282 02	\$4,622 40	\$224,740 85		
581 50	688 59	3,102 34		
\$6,863 52	\$5,310 99	\$227,843 19		
\$9,725 00	\$6,000 00	\$175,039 16		
7,784 95	1,512 50	76,179 71		
2,961 08	4,084 55	120,760 33		
1,298 95	614 50	114,363 71		
6,865 29	394 35	8,698 10		
146 20		6,341 78		
		2,042 74		
1 00		1 00		
113 49	390 00	114,885 41		
32 60	954 09	6,005 82		
	2,919 44	6,551 53		
16 80		48,018 75		
		47 90		
\$28,945 36	\$16,869 43	\$678,935 94		
\$12,249 00	\$3,353 47	\$692,704 18		
	\$2,040 00	\$2,040 00		
{ \$14,543 38	19,713 94	148,855 24		
{ 32,116 42	28,151 46	305,325 23		
{ 992 20	1,586 10	296,821 71		
\$47,652 00	\$51,491 50	\$753,042 18		
\$70,918 87	\$56,640 18	\$719,060 00		
19,559 53	2,592 84	360,761 82		
6,863 52	5,310 99	227,843 19		
28,945 36	16,869 43	678,935 94		
12,249 00	3,353 47	692,704 18		
47,652 00	51,491 50	753,042 18		
\$186,188 28	\$136,258 41	\$3,432,347 31		

TABLE No. 4

ABSTRACT OF OPERATING EXPENSES CLASS "B" WATER COMPANIES

	California- Oregon Power Company	Chico Water Supply Company
<i>Pumping Expenses.</i>		
Operating labor .....	\$1,806 26	\$3,609 50
Fuel and power purchased.....	1,800 00	6,581 12
Pumping station supplies and expenses.....	144 52	361 12
Repairs to pumping station equipment.....	44 96	80 75
Repairs to source of supply.....		19 00
Repairs to collecting aqueducts, intakes and supply mains .....		
Repairs to buildings, grounds and purification plant .....	63 25	133 63
Total pumping expenses.....	\$3,858 99	\$10,785 12
<i>Distribution Expenses.</i>		
Distribution system labor and expenses.....	\$143 80	\$1,771 25
Repairs to transmission and distribution systems.....	992 71	
Repairs to services.....	100 42	
Repairs to buildings, grounds and equipment.....	140 16	
Total distribution expenses.....	\$1,377 09	\$1,771 25
<i>Commercial Expenses.</i>		
Collection and promotion of business expenses.....	\$376 00	
<i>General Expenses.</i>		
General officers' and clerks' salaries.....	\$428 80	\$2,840 00
Law expenses—general .....		
Railroad Commission expense.....		
Injuries and damages.....		
Miscellaneous general expenses.....	237 93	1,418 30
Insurance .....		340 11
Repairs of general structures and equipment.....		
Other general expenses.....		
Total general expenses.....	\$666 73	\$4,598 41
<i>Taxes.</i>		
Taxes .....		\$1,719 84
<i>General Amortization of Capital.</i>		
Depreciation, etc. ....		
<i>Recapitulation of Expenses.</i>		
Pumping expenses .....	\$3,858 99	\$10,785 12
Distribution expenses .....	1,377 09	1,771 25
Commercial expenses .....	376 00	
General expenses .....	666 73	4,598 41
Taxes .....		1,719 84
General amortization of capital.....		
Total operating expenses.....	\$6,278 81	\$18,874 62

<sup>1</sup>Not segregated.

—Continued.

OPERATING IN CALIFORNIA DURING YEAR ENDING DECEMBER 31, 1913.

City Water Company of Ocean Park	Coalinga Consolidated Water Company	Consolidated Canal Company	Consolidated Water Company of Pomona	Coronado Water Company	Crocker- Huffman Land and Water Company <sup>1</sup>
\$5,717 34	\$4,386 45	-----	\$1,625 00	-----	-----
2,212 79	6,907 49	-----	4,235 11	-----	-----
923 60	1,507 20	-----	87 97	\$12,735 89	-----
527 42	696 46	-----	906 92	-----	-----
-----	1,095 41	-----	289 63	-----	-----
-----	5 00	-----	243 76	-----	-----
-----	-----	-----	-----	-----	-----
\$9,381 15	\$14,598 01	-----	\$7,388 39	\$12,735 89	-----
-----	-----	-----	-----	-----	-----
\$3,835 91	\$268 95	\$17,231 56	\$1,834 65	\$958 85	-----
-----	1,570 49	-----	397 24	763 23	-----
331 90	14 52	-----	-----	77 04	-----
-----	31 26	-----	-----	33 87	-----
-----	-----	-----	-----	-----	-----
\$4,167 81	\$1,885 22	\$17,231 56	\$2,231 89	\$1,832 99	-----
-----	-----	-----	-----	-----	-----
-----	-----	-----	\$2,177 10	\$1,085 57	-----
-----	-----	-----	-----	-----	-----
\$4,202 40	\$3,012 95	\$9,339 80	\$7,800 00	\$5,047 17	-----
100 00	150 00	300 00	5,467 00	375 15	-----
42 10	-----	133 65	25 00	-----	-----
601 95	-----	-----	-----	-----	-----
3,443 01	137 40	4,050 14	2,627 40	201 06	-----
-----	-----	-----	-----	132 16	-----
-----	-----	-----	1,114 98	45 07	-----
-----	-----	1,274 46	778 64	-----	-----
-----	-----	-----	-----	-----	-----
\$8,389 46	\$3,300 35	\$15,098 05	\$17,813 02	\$5,800 61	-----
-----	-----	-----	-----	-----	-----
\$1,479 64	\$766 60	\$3,220 27	\$3,284 45	\$2,578 88	-----
-----	-----	-----	-----	-----	-----
\$9,000 00	\$4,079 23	-----	\$7,718 12	\$8,257 90	-----
-----	-----	-----	-----	-----	-----
\$9,381 15	\$14,598 01	-----	\$7,388 39	\$12,735 89	-----
4,167 81	1,885 22	\$17,231 56	2,231 89	1,832 99	-----
-----	-----	-----	2,177 10	1,085 57	-----
8,389 46	3,300 35	15,098 05	17,813 02	5,800 61	-----
1,479 64	766 60	3,220 27	3,284 45	2,578 88	-----
9,000 00	4,079 23	-----	7,718 12	8,257 90	-----
-----	-----	-----	-----	-----	-----
\$32,418 06	\$24,629 41	\$35,549 88	\$40,612 97	\$32,291 84	\$44,906 57

TABLE No. 4

ABSTRACT OF OPERATING EXPENSES CLASS "B" WATER COMPANIES

	Cuyamaca Water Company	Eagle Rock Water Company
<i>Pumping Expenses.</i>		
Operating labor -----	\$909 75	\$1,459 96
Fuel and power purchased -----	2,546 42	7,761 80
Pumping station supplies and expenses -----	188 80	158 75
Repairs to pumping station equipment -----	20 25	498 45
Repairs to source of supply -----		
Repairs to collecting aqueducts, intakes and supply mains -----		
Repairs to buildings, grounds and purification plant -----		5 69
Total pumping expenses -----	\$3,665 22	\$9,884 65
<i>Distribution Expenses.</i>		
Distribution system labor and expenses -----	\$4,752 26	\$2,650 42
Repairs to transmission and distribution systems -----	6,801 22	1,056 58
Repairs to services -----	34 30	
Repairs to buildings, grounds and equipment -----	285 26	
Total distribution expenses -----	\$11,873 04	\$3,707 00
<i>Commercial Expenses.</i>		
Collection and promotion of business expense -----	\$415 70	\$1,461 00
<i>General Expenses.</i>		
General officers' and clerks' salaries -----	\$17,945 22	
Law expenses—general -----	987 12	
Railroad Commission expense -----	36 80	905 62
Injuries and damages -----	94 50	
Miscellaneous general expenses -----		
Insurance -----	72 45	
Repairs of general structures and equipment -----	1,775 14	
Other general expenses -----		3,482 94
Total general expenses -----	\$20,911 23	\$4,388 56
<i>Taxes.</i>		
Taxes -----	\$3,910 75	\$1,618 05
<i>General Amortization of Capital.</i>		
Depreciation, etc. -----		\$2,147 99
<i>Recapitulation of Expenses.</i>		
Pumping expenses -----	\$3,665 22	\$9,884 65
Distribution expenses -----	11,873 04	3,707 00
Commercial expenses -----	415 70	1,461 00
General expenses -----	20,911 23	4,388 56
Taxes -----	3,910 75	1,618 05
General amortization of capital -----		2,147 99
Total operating expenses -----	\$40,775 94	\$23,207 25

—Continued.

OPERATING IN CALIFORNIA DURING YEAR ENDING DECEMBER 31, 1913.

Electric Water Company	The Eureka Water Company	Glendale Consolidated Water Company	The Hanford Water Company	Janss Water Company	Kern Island Irrigating Canal Company
\$4,603 50	\$2,004 41	\$2,067 70	\$1,546 20	\$2,711 20	\$5,411 92
12,867 56	2,066 97	4,251 31	2,770 45	6,160 64	-----
424 59	715 29	5,498 19	25 60	379 46	2,495 64
2,520 21	191 90	382 61	173 90	1,188 26	-----
-----	124 81	389 00	-----	69 45	508 11
-----	3 70	-----	-----	-----	-----
42 23	86 12	-----	45 85	49 62	916 03
\$20,458 09	\$5,193 20	\$12,588 81	\$4,562 00	\$10,558 63	\$9,331 70
-----	-----	-----	-----	-----	-----
\$499 70	\$1,416 95	-----	\$57 00	\$622 13	\$5,730 58
2,746 87	2,178 23	\$8,434 78	791 32	1,940 04	7,955 24
-----	432 76	1,550 96	473 62	502 31	-----
-----	55 31	543 23	101 10	-----	-----
\$3,246 57	\$4,083 25	\$10,528 97	\$1,423 04	\$3,064 48	\$13,685 82
-----	-----	-----	-----	-----	-----
\$3,868 43	\$1,222 02	\$4,395 91	\$1,411 88	\$4,016 58	-----
-----	-----	-----	-----	-----	-----
\$4,103 01	\$10,434 22	\$4,648 12	\$4,657 95	\$3,812 73	\$3,549 83
-----	500 00	2,466 65	250 00	-----	-----
-----	46 67	-----	42 10	114 40	-----
-----	-----	-----	-----	300 00	182 90
12 39	76 76	-----	859 00	49 05	80
-----	-----	-----	278 30	63 43	-----
424 97	106 35	-----	250 23	-----	4,146 45
-----	-----	-----	-----	-----	-----
\$4,540 37	\$11,164 00	\$7,114 77	\$6,337 58	\$4,339 61	\$7,879 98
-----	-----	-----	-----	-----	-----
\$4,630 08	\$2,950 00	\$1,640 06	\$1,656 71	854 63	\$2,658 22
-----	-----	-----	-----	-----	-----
\$6,150 60	\$6,336 89	\$15,050 00	\$4,666 47	\$6,801 35	-----
-----	-----	-----	-----	-----	-----
\$20,458 09	\$5,193 20	\$12,588 81	\$4,562 00	\$10,558 63	\$9,331 70
3,246 57	4,083 25	10,528 97	1,423 04	3,064 48	13,685 82
3,868 43	1,222 02	4,395 91	1,411 88	4,016 58	-----
4,540 37	11,164 00	7,114 77	6,337 58	4,339 61	7,879 98
4,630 08	2,950 00	1,640 06	1,656 71	854 63	2,658 22
6,150 60	6,336 89	15,050 00	4,666 47	6,801 35	-----
-----	-----	-----	-----	-----	-----
\$42,894 14	\$30,949 36	\$51,318 52	\$20,057 68	\$29,635 28	\$33,555 72



TABLE No. 4

ABSTRACT OF OPERATING EXPENSES CLASS "B" WATER COMPANIES

	The Marysville Water Company	Monterey County Water Works
<i>Pumping Expenses.</i>		
Operating labor .....	\$3,635 99	\$1,066 58
Fuel and power purchased.....	2,173 85	2,776 76
Pumping station supplies and expenses.....	353 89	78 42
Repairs to pumping station equipment.....		423 26
Repairs to source of supply.....		1,932 23
Repairs to collecting aqueducts, intakes and supply mains .....		
Repairs to buildings, grounds and purification plant .....		14 38
Total pumping expenses.....	\$6,163 73	\$6,291 63
<i>Distribution Expenses.</i>		
Distribution system labor and expenses.....	\$1,266 71	\$829 04
Repairs to transmission and distribution systems.....		2,196 78
Repairs to services.....	652 40	1,269 57
Repairs to buildings, grounds and equipment.....		864 52
Total distribution expenses.....	\$1,919 11	\$5,159 91
<i>Commercial Expenses.</i>		
Collection and promotion of business expense.....	\$2,011 75	\$5,954 77
<i>General Expenses.</i>		
General officers' and clerks' salaries.....	\$1,500 00	\$7,823 98
Law expenses—general .....		
Railroad Commission expense .....		
Injuries and damages.....		18 01
Miscellaneous general expenses.....	851 45	819 70
Insurance .....	489 23	372 87
Repairs of general structures and equipment.....		884 33
Other general expenses.....		96 00
Total general expenses.....	\$2,840 68	\$9,988 87
<i>Taxes.</i>		
Taxes .....	\$3,430 73	\$5,025 36
<i>General Amortization of Capital.</i>		
Depreciation, etc. ....		\$20,472 72
<i>Recapitulation of Expenses.</i>		
Pumping expenses .....	\$6,163 73	\$6,291 63
Distribution expenses .....	1,919 11	5,159 91
Commercial expenses .....	2,011 75	5,954 77
General expenses .....	2,840 68	9,988 87
Taxes .....	3,430 73	5,025 36
General amortization of capital.....		20,472 72
Total operating expenses.....	\$16,366 00	\$52,893 26

<sup>1</sup>Credit item.

—Continued.

OPERATING IN CALIFORNIA DURING YEAR ENDING DECEMBER 31, 1913.

Northern California Power Company, Consolidated	Natomas Water Company	Oak Park Water Company	Oro Water, Light and Power Company	Peninsula Water Company	Petaluma Power and Water Company
\$4,367 17		\$2,784 25		\$2,659 15	
18,094 25		4,925 53			
171 09		120 30			
706 06		884 77			
33 56					\$738 91
29 20		1,353 57	\$20,527 51		254 40
99 34		596 99			
\$23,500 67		\$10,665 41	\$20,527 51	\$2,659 15	\$993 31
\$360 48	\$2,732 57		\$2,468 23		\$154 05
1,691 85	950 19	\$1,265 24	149 95	\$250 00	1,453 80
523 62			65 03		86 86
269 41			88 65		
\$2,845 36	\$3,682 76	\$1,265 24	\$2,771 86	\$250 00	\$1,694 71
\$1,502 73	\$960 00	\$875 00	\$987 63	\$422 40	\$392 00
	\$1,200 00	\$3,663 05	\$4,727 00	\$14,629 40	\$3,810 80
			273 00		
			163 80		1,427 80
	26 72		91 55		
				1,370 47	4 00
	930 49		174 54		41 72
	\$2,157 21	\$3,663 05	\$5,369 89	\$15,999 87	\$5,200 88
	\$2,113 85	\$978 76	\$2,447 21	\$2,172 40	\$1,966 03
			\$714 25		\$4,469 76
\$23,500 67		\$10,665 41	\$20,527 51	\$2,659 15	\$993 31
2,845 36	\$3,682 76	1,265 24	2,771 86	250 00	1,694 71
1,502 73	960 00	875 00	987 63	422 40	392 00
	2,157 21	3,663 05	5,369 89	15,999 87	5,200 88
	2,113 85	978 76	2,447 21	2,172 40	1,966 03
			714 25		4,469 76
\$27,848 76	\$8,913 82	\$17,447 46	\$32,818 35	\$21,503 82	\$14,716 69

TABLE No. 4

ABSTRACT OF OPERATING EXPENSES CLASS "B" WATER COMPANIES

	Port Costa Water Company	Pleasant Valley Water Company
<i>Pumping Expenses.</i>		
Operating labor .....	\$3,223 84	-----
Fuel and power purchased.....	6,360 97	\$15,813 54
Pumping station supplies and expenses.....	\$3,223 84	-----
Repairs to pumping station equipment.....	1,069 21	-----
Repairs to source of supply.....	180 45	-----
Repairs to collecting aqueducts, intakes and supply mains .....	509 60	-----
Repairs to buildings, grounds and purification plant	303 83	-----
Total pumping expenses.....	\$11,994 97	\$15,813 54
<i>Distribution Expenses.</i>		
Distribution system labor and expenses.....	\$623 87	\$462 22
Repairs to transmission and distribution systems..	2,364 95	535 55
Repairs to services.....	69 05	689 89
Repairs to buildings, grounds and equipment.....	267 73	12 00
Total distribution expenses.....	\$3,325 60	\$1,699 66
<i>Commercial Expenses.</i>		
Collection and promotion of business expense.....	\$1,536 66	\$720 50
<i>General Expenses.</i>		
General officers' and clerks' salaries.....	\$3,316 10	\$4,058 80
Law expenses—general .....	28 50	42 20
Railroad Commission expense.....	-----	-----
Injuries and damages.....	-----	-----
Miscellaneous general expenses.....	141 00	380 24
Insurance .....	199 72	36 67
Repairs of general structures and equipment.....	120 70	-----
Other general expenses.....	-----	61 15
Total general expenses.....	\$3,806 02	\$4,579 06
<i>Taxes.</i>		
Taxes .....	\$2,396 44	\$643 81
<i>General Amortization of Capital.</i>		
Depreciation, etc. ....	-----	\$5,012 33
<i>Recapitulation of Expenses.</i>		
Pumping expenses .....	\$11,994 97	\$15,813 54
Distribution expenses .....	3,325 60	1,699 66
Commercial expenses .....	1,536 66	720 50
General expense .....	3,806 02	4,579 06
Taxes .....	2,396 44	643 81
General amortization of capital.....	-----	5,012 33
Total operating expenses.....	\$23,059 69	\$28,468 90

<sup>1</sup>Credit item.

—Continued.

OPERATING IN CALIFORNIA DURING YEAR ENDING DECEMBER 31, 1913.

San Dimas Water Company	San Gabriel Valley Water Company	Santa Monica Water Company	South Los Angeles Water Company	South San Francisco Water Company	Sierra and San Francisco Power Company
\$3,409 29	\$2,169 05	\$3,684 53	\$2,059 40	\$5,406 51	\$18 00
-----	8,078 86	11,921 79	2,351 77	11,217 54	-----
23,184 52	141 79	323 09	689 75	171 98	1 50
-----	1,762 30	954 18	767 20	1,029 69	8 35
2,917 52	1 07	26 50	12 75	79 64	3,148 08
-----	44	3 20	-----	76 27	315 95
-----	39 67	36 18	248 89	2 50	6 50
\$29,511 33	\$12,193 18	\$16,949 47	\$6,129 76	\$17,984 13	\$3,498 38
\$796 42	\$559 07	\$8,721 04	\$741 47	\$363 71	\$11,638 49
-----	2,652 04	2,132 18	850 30	5,089 08	-----
225 02	779 02	260 00	35	929 97	2 80
-----	1,079 82	8 47	-----	205 96	136 80
\$1,021 44	\$5,069 95	\$11,121 69	\$1,592 12	\$6,588 72	\$11,778 09
-----	\$774 19	\$3,951 70	\$1,282 90	\$29 52	-----
\$2,183 75	\$10,269 11	\$4,699 97	\$4,245 35	\$922 94	\$6,970 21
1,048 31	261 55	237 30	-----	11 00	586 30
156 45	-----	-----	-----	-----	1,342 00
-----	-----	281 50	-----	-----	50 00
2,162 65	1,257 07	170 10	1,545 70	-----	136 15
-----	-----	74 57	-----	801 75	-----
-----	21 24	484 28	310 43	-----	393 60
186 67	1864 20	-----	-----	-----	77 89
\$5,737 83	\$10,944 77	\$5,947 72	\$6,101 48	\$1,735 69	\$9,556 15
\$252 88	\$6,587 09	\$3,744 43	\$1,625 76	\$457 23	\$2,637 64
-----	\$11,832 97	-----	-----	\$9,414 47	-----
\$29,511 33	\$12,193 18	\$16,949 47	\$6,129 76	\$17,984 13	\$3,498 38
1,021 44	5,069 95	11,121 69	1,592 12	6,588 72	11,778 09
-----	774 19	3,951 70	1,282 90	29 52	-----
5,737 83	10,944 77	5,947 72	6,101 48	1,735 69	9,556 15
252 88	6,587 09	3,744 43	1,625 76	457 23	2,637 64
-----	11,832 97	-----	-----	9,414 47	-----
\$36,523 48	\$47,402 15	\$41,715 01	\$16,732 02	\$36,209 76	\$27,470 26

TABLE No. 4

## ABSTRACT OF OPERATING EXPENSES CLASS "B" WATER COMPANIES

	Sutter-Butte Canal Company
<i>Pumping Expenses.</i>	
Operating labor .....	
Fuel and power purchased.....	
Pumping station supplies and expenses.....	
Repairs to pumping station equipment.....	
Repairs to source of supply.....	
Repairs to collecting aqueducts, intakes and supply mains.....	
Repairs to buildings, grounds and purification plant.....	
Total pumping expenses.....	
<i>Distribution Expenses.</i>	
Distribution system labor and expense.....	\$720 00
Repairs to transmission and distribution systems.....	11,723 21
Repairs to services.....	
Repairs to buildings, grounds and equipment.....	
Total distribution expenses.....	\$12,443 21
<i>Commercial Expenses.</i>	
Collection and promotion of business expenses.....	\$381 03
<i>General Expenses.</i>	
General officers' and clerks' salaries.....	\$8,555 00
Law expenses—general .....	1,392 20
Railroad Commission expense.....	1,301 00
Injuries and damages.....	170 00
Miscellaneous general expenses.....	
Insurance .....	48 50
Repairs of general structures and equipment.....	
Other general expenses.....	
Total general expenses.....	\$11,466 70
<i>Taxes.</i>	
Taxes .....	\$1,652 55
<i>General Amortization of Capital.</i>	
Depreciation, etc. ....	
<i>Recapitulation of Expenses.</i>	
Pumping expenses .....	
Distribution expenses .....	\$12,443 21
Commercial expenses .....	381 03
General expense .....	11,466 70
Taxes .....	1,652 55
General amortization of capital.....	
Total operating expenses.....	\$25,943 49

<sup>1</sup>Credit item.<sup>2</sup>Includes expenses of Crocker-Huffman Land and Water Company of \$44,906.57 not segregated.

NOTE.—Report of Napa City Water Company omitted, as same was very incomplete.



—Continued.

OPERATING IN CALIFORNIA DURING YEAR ENDING DECEMBER 31, 1913.

The Sweetwater Water Company	The Union Water Company of California	Ventura County Power Company	Whittier Water Company	Yolo County Consolidated Water Company	Total
\$932 50	\$5,476 92	\$1,185 33	\$8,692 46		\$88,630 16
	3,244 72	8,442 86	15,878 65		171,442 75
64 14	410 56	364 44	2,575 02		54,644 18
13 96	778 68	745 91	5,592 06		21,967 72
280 69	129 31		5 20		11,981 32
	3 78		1,078 59		24,404 97
2,176 47	95 97	37 10	666 96		5,667 20
\$3,467 76	\$10,139 94	\$10,775 64	\$34,488 94		\$378,738 30
\$2,328 24	\$850 76		\$2,138 61	\$611 80	\$80,140 79
9,416 00	1,527 53	\$3,559 10	5,768 80	5,659 61	94,864 11
3,598 82	856 53	192 99			13,719 75
241 08	1 65	147 45			4,513 73
\$15,584 14	\$3,236 47	\$3,899 54	\$7,907 41	\$6,271 41	\$193,238 38
	\$5,615 02	\$1,869 31	\$885 05	\$5,240 45	\$55,822 80
\$7,367 63	\$10,292 87	\$1,466 62	\$14,457 70	\$13,394 12	\$211,376 60
1,500 00	2,103 62	143 25	5,933 68	10,205 41	34,362 24
6,843 15		77 55			11,066 49
		50 17	15 25		1,738 26
1,933 25	1 00	92 52	33 29	8,788 39	32,957 35
63 75	392 91	61 80	474 09	20 85	4,041 43
	13 17	280 53	54 70		7,654 19
833 99		2,903 75			8,233 55
\$18,541 77	\$12,803 57	\$1,731 31	\$20,968 71	\$32,408 77	\$311,430 11
\$6,499 06	\$2,849 27	\$1,630 53	\$1,407 80	\$1,500 37	\$84,987 38
\$24,041 86	\$3,000 00	\$3,800 61	\$23,149 28		\$176,116 80
\$3,467 76	\$10,139 94	\$10,775 64	\$34,488 94		\$378,738 30
15,584 14	3,236 47	3,899 54	7,907 41	\$6,271 41	193,238 38
	5,615 02	1,869 31	885 05	5,240 45	55,822 80
18,541 77	12,803 57	1,731 31	20,968 71	32,408 77	311,430 11
6,499 06	2,849 27	1,630 53	1,407 80	1,500 37	84,987 38
24,041 86	3,000 00	3,800 61	23,149 28		176,116 80
\$68,134 59	\$37,644 27	\$21,244 32	\$88,807 19	\$45,421 00	\$1,245,240 34

TABLE NO. 4

## ABSTRACT OF OPERATING EXPENSES CLASS "C" WATER COMPANIES

	American Canyon Water Company	American Irrigation Company
Operating labor and expenses.....	\$5,535 11	\$1,545 06
Repairs to operating capital.....		
Distribution system labor and expense.....	446 75	552 88
Repairs to distribution and transmission capital.....		
Collection and promotion of business expenses.....		
General expense .....	3,143 83	3,049 99
Taxes .....	2,829 85	1,725 26
Depreciation, etc. ....	8,500 00	6,000 00
Total operating expenses.....	\$20,455 54	\$12,873 19

<sup>1</sup>Not segregated.

TABLE NO. 4

## ABSTRACT OF OPERATING EXPENSES CLASS "C" WATER COMPANIES

	Baldwin Park Water Company	Bay Point Light and Water Company
Operating labor and expenses.....	\$2,320 63	\$2,998 79
Repairs to operating capital.....		
Distribution system labor and expense.....		
Repairs to distribution and transmission capital.....		
Collection and promotion of business expenses.....		
General expense .....		
Taxes .....		
Depreciation, etc. ....		
Total operating expenses.....	\$2,320 63	\$2,998 79

TABLE NO. 4

## ABSTRACT OF OPERATING EXPENSES CLASS "C" WATER COMPANIES

	Black Diamond Water Company	J. W. Bloom
Operating labor and expenses.....	\$4,590 11	\$2,407 26
Repairs to operating capital.....		281 86
Distribution system labor and expense.....	881 20	
Repairs to distribution and transmission capital.....		105 76
Collection and promotion of business expenses.....		
General expense .....	1,376 06	724 96
Taxes .....	496 82	88 60
Depreciation, etc. ....	2,114 57	
Total operating expenses.....	\$9,458 76	\$3,608 44

—Continued.

OPERATING IN CALIFORNIA DURING YEAR ENDING DECEMBER 31, 1913.

Antelope Creek and Red Bluff Water Company	The Anderson Canal Company	Artesian Water Company <sup>1</sup>	Auburn Springs Water Works	Bakersfield Water Company	Baldwin Park Domestic Water Company
\$2,904 70	\$616 48	-----	-----	\$6,553 46	\$1,645 82
-----	-----	-----	-----	130 63	89 79
1,521 58	195 12	-----	\$84 00	-----	-----
304 41	303 46	-----	-----	1,404 73	32 00
2,105 06	-----	-----	12 00	1,103 65	74 05
1,572 17	441 90	-----	-----	4,429 31	1,791 57
2,229 75	121 41	-----	39 60	2,051 66	-----
2,450 04	-----	-----	-----	6,140 11	859 15
-----	-----	-----	-----	-----	-----
\$13,087 71	\$1,678 37	\$12,941 03	\$135 60	\$21,813 55	\$4,492 38

—Continued.

OPERATING IN CALIFORNIA DURING YEAR ENDING DECEMBER 31, 1913.

Beach Land Water System	Bear Gulch Water Company	Beaverwyck Land Company	Bell Water Company	Belvedere Land Company	Benicia Water Company
\$1,513 88	\$803 75	\$3,799 37	\$2,140 71	\$4,600 00	\$16,639 13
-----	-----	201 57	797 96	-----	264 94
247 34	-----	-----	-----	542 23	219 85
-----	99 05	-----	-----	-----	587 47
-----	39 20	-----	-----	542 22	2,364 25
32 20	4,117 34	856 05	167 06	1,386 58	3,181 98
28 90	2,633 90	-----	65 02	-----	1,721 04
-----	5,752 34	-----	-----	-----	7,271 32
-----	-----	-----	-----	-----	-----
\$1,822 32	\$13,445 58	\$4,856 99	\$3,170 75	\$7,071 03	\$32,249 98

—Continued.

OPERATING IN CALIFORNIA DURING YEAR ENDING DECEMBER 31, 1913.

Boulder Creek Electric Light and Water Company	Bradbury Estate Company	Buena Vista Canal Company	Butte County Power, Light and Water Company	The Central Canal Company	California- Michigan Land and Water Company
\$33 86	-----	\$644 21	\$1,080 00	\$5,478 15	\$885 61
61 73	-----	-----	-----	2,385 18	116 45
5 77	\$2,524 20	1,111 88	-----	7,684 09	269 81
44 24	-----	96 50	1,685 11	9,224 79	-----
40 07	-----	-----	-----	-----	318 20
959 00	-----	240 64	63 37	653 15	1,072 95
142 14	-----	285 55	152 02	2,317 39	34 00
-----	980 00	-----	-----	-----	-----
-----	-----	-----	-----	-----	-----
\$1,286 81	\$3,504 20	\$2,378 78	\$2,980 50	\$27,742 75	\$2,697 02

TABLE No. 4

## ABSTRACT OF OPERATING EXPENSES CLASS "C" WATER COMPANIES

	Calistoga Water Company	Callahan Water System
Operating labor and expenses.....	\$2,089 75	-----
Repairs to operating capital.....	37 75	-----
Distribution system labor and expense.....	31 65	-----
Repairs to distribution and transmission capital...	23 75	-----
Collection and promotion of business expenses.....	-----	-----
General expense .....	57 00	\$58 50
Taxes .....	272 09	-----
Depreciation, etc. ....	887 88	-----
Total operating expenses.....	\$3,399 87	\$58 50

TABLE No. 4

## ABSTRACT OF OPERATING EXPENSES CLASS "C" WATER COMPANIES

	Citizens Water Company of Niles	Citizens Water Company of San Jacinto
Operating labor and expenses.....	\$2,869 12	\$4,973 47
Repairs to operating capital.....	-----	1,181 14
Distribution system labor and expense.....	-----	1,350 43
Repairs to distribution and transmission capital...	32 95	785 36
Collection and promotion of business expenses.....	-----	27 85
General expense .....	304 29	5,186 95
Taxes .....	61 40	486 09
Depreciation, etc. ....	-----	120 38
Total operating expenses.....	\$3,267 76	\$14,111 67

Not segregated.

TABLE No. 4

## ABSTRACT OF OPERATING EXPENSES CLASS "C" WATER COMPANIES

	Conservative Realty Company	Consumers Water Company
Operating labor and expenses.....	\$3,135 08	-----
Repairs to operating capital.....	236 52	-----
Distribution system labor and expense.....	105 40	\$1,172 44
Repairs to distribution and transmission capital...	338 85	153 65
Collection and promotion of business expenses.....	593 07	1,866 37
General expense .....	5,301 00	4,563 03
Taxes .....	290 01	142 42
Depreciation, etc. ....	3,098 29	1,883 50
Total operating expenses.....	\$13,098 22	\$9,781 47

—Continued.

OPERATING IN CALIFORNIA DURING YEAR ENDING DECEMBER 31, 1913.

Campbell Water Company	Cherry Canon Water Company	City Water Company of Banning	Coast Valleys Gas and Electric Company	Citizens Land and Water Company of Upland	Claremont Domestic Water Company
\$1,430 95	\$292 95	-----	\$7,086 98	\$981 50	\$2,553 49
35 91	107 95	-----	422 32	-----	308 66
14 70	-----	\$320 40	240 71	370 48	-----
69 20	-----	-----	806 34	623 88	276 81
214 50	475 85	60 25	1,601 80	71 05	409 44
1,354 06	57 33	1,233 15	4,851 75	2,377 14	693 86
76 62	65 10	705 00	1,769 73	1,052 98	406 23
700 00	-----	210 00	-----	-----	2,051 80
\$3,895 94	\$999 18	\$2,528 80	\$16,779 63	\$5,477 03	\$6,700 32

—Continued.

OPERATING IN CALIFORNIA DURING YEAR ENDING DECEMBER 31, 1913.

Clara Vista Water Company	Coachella Water Company	Coalinga Domestic Water Company	Colegrove Water Company	Compton Water and Lighting Company	Coneland Water Company <sup>1</sup>
\$1,250 00	\$31 45	\$3,416 93	\$634 57	\$1,287 86	-----
-----	-----	-----	49 08	33 68	-----
-----	-----	1,131 78	87 65	52 78	-----
-----	-----	-----	191 50	54 60	-----
-----	-----	-----	318 00	-----	-----
-----	-----	3,679 15	382 50	-----	-----
62 40	57 06	33 20	154 98	81 83	-----
-----	-----	444 75	1,026 00	330 00	-----
\$1,312 40	\$88 51	\$8,705 81	\$2,844 28	\$1,840 75	\$9,027 34

—Continued.

OPERATING IN CALIFORNIA DURING YEAR ENDING DECEMBER 31, 1913.

Consolidated Securities Company	J. B. H. Cooper Water Company	Corcoran Water and Gas Company	Corona City Water Company	Crocker Tract Water System	Cottonwood Irrigation and Mining Company
\$8,486 80	-----	\$2,528 60	\$9,000 00	\$6,695 83	\$331 25
886 50	-----	-----	-----	-----	-----
645 79	-----	-----	413 95	-----	-----
2,481 16	-----	-----	1,332 71	-----	-----
66 00	-----	-----	593 03	-----	-----
1,595 97	\$10 00	-----	2,306 69	-----	-----
867 26	32 27	-----	807 92	-----	51 65
-----	200 00	-----	2,350 00	-----	-----
\$15,029 48	\$242 27	\$2,528 60	\$16,804 30	\$6,695 83	\$382 90



TABLE No. 4

## ABSTRACT OF OPERATING EXPENSES CLASS "C" WATER COMPANIES

	Covina City Water Company	Crown Water Company
Operating labor and expenses.....	\$1,027 73	\$210 10
Repairs to operating capital.....		655 34
Distribution system labor and expense.....	42 95	
Repairs to distribution and transmission capital.....	673 26	50 60
Collection and promotion of business expenses.....	139 30	15 55
General expense .....	4,044 28	16 60
Taxes .....	689 47	32 26
Depreciation, etc. ....	3,759 23	
Total operating expenses.....	\$10,376 22	\$980 19

TABLE No. 4

## ABSTRACT OF OPERATING EXPENSES CLASS "C" WATER COMPANIES

	Domestic Water Company of Santa Maria	East Sacramento Water Company
Operating labor and expenses.....	\$2,480 00	
Repairs to operating capital.....		
Distribution system labor and expense.....	2,377 13	
Repairs to distribution and transmission capital.....		
Collection and promotion of business expenses.....		
General expense .....	7,443 22	\$3,299 87
Taxes .....	457 53	
Depreciation, etc. ....	6,681 55	
Total operating expenses.....	\$19,439 43	\$3,299 87

TABLE No. 4

## ABSTRACT OF OPERATING EXPENSES CLASS "C" WATER COMPANIES

	Excelsior Water and Mining Company	Fairmont Water Company
Operating labor and expenses.....		\$5,350 27
Repairs to operating capital.....	\$7,361 49	
Distribution system labor and expense.....	8,533 90	47 90
Repairs to distribution and transmission capital.....	153 83	1,527 93
Collection and promotion of business expenses.....		
General expense .....		4,307 19
Taxes .....		288 82
Depreciation, etc. ....		1,865 70
Total operating expenses.....	\$16,049 22	\$13,387 81

—Continued.

OPERATING IN CALIFORNIA DURING YEAR ENDING DECEMBER 31, 1913.

Crystal Springs Water Company of Sawtelle	Cucamonga Water Company	Danville Water Company	Davis Water Company	Del Norte Water Company	Domestic Water Company
\$1,602 00	\$5,923 90	-----	\$149 34	\$3,042 96	-----
1,401 85	1,116 54	-----	75	751 73	-----
-----	1,442 35	-----	-----	-----	\$28 10
-----	1,251 96	\$137 85	-----	397 90	60 10
-----	181 08	-----	350 00	-----	1,616 50
2,198 87	2,480 75	67 15	332 65	356 70	2,754 71
156 62	677 73	39 32	-----	177 90	23 25
-----	415 00	-----	-----	-----	683 96
\$5,359 34	\$13,489 31	\$244 32	\$832 74	\$4,727 19	\$5,166 92

—Continued.

OPERATING IN CALIFORNIA DURING YEAR ENDING DECEMBER 31, 1913.

East Side Canal and Irrigation Company	East Side Canal Company	Encanto Mutual Water Company	Frescalon Water and Light Company	Etna Development Company	Euclid Avenue Water Company
\$1,994 79	\$5,836 96	\$2,648 63	\$377 30	\$1,342 00	\$1,942 61
1,335 18	-----	268 79	18 50	140 48	451 58
544 18	-----	166 53	-----	58 70	-----
2,056 78	1,404 83	311 63	-----	-----	-----
-----	-----	-----	30 00	114 22	-----
18,435 90	1,012 92	992 54	26 45	386 60	162 85
285 18	441 61	-----	-----	231 68	691 95
-----	-----	-----	-----	-----	-----
\$24,652 01	\$8,696 32	\$4,388 12	\$452 25	\$2,273 68	\$3,248 39

—Continued.

OPERATING IN CALIFORNIA DURING YEAR ENDING DECEMBER 31, 1913.

Fairview Land and Water Company	Farmers Canal Company	Felton Water Company	Fort Bragg Water Company	Fortuna Water Company	Frederick Water Company
-----	\$1,277 27	\$120 00	-----	\$890 96	\$287 21
\$39 02	-----	193 00	-----	290 85	44 20
910 00	1,340 51	-----	-----	-----	-----
715 29	961 77	-----	\$500 00	19 85	74 09
41 00	-----	-----	-----	-----	-----
2,728 83	368 56	26 11	1,500 00	334 91	43 16
1,110 27	207 26	41 43	539 00	70 24	133 50
1,159 08	-----	50 00	3,000 00	-----	-----
-----	-----	-----	-----	-----	-----
\$6,703 49	\$4,155 37	\$430 54	\$5,539 00	\$1,606 81	\$582 16

TABLE No. 4

## ABSTRACT OF OPERATING EXPENSES CLASS "C" WATER COMPANIES

	Garden Grove Water Company	Glendora Water Company
Operating labor and expenses.....	\$800 00	\$6,363 87
Repairs to operating capital.....	52 20	
Distribution system labor and expense.....		
Repairs to distribution and transmission capital.....		472 19
Collection and promotion of business expenses.....		909 68
General expense .....		5,848 50
Taxes .....		
Depreciation, etc. ....		
Total operating expenses.....	\$852 20	\$13,594 24

TABLE No. 4

## ABSTRACT OF OPERATING EXPENSES CLASS "C" WATER COMPANIES

	Hercules Water Company	Heck Brothers Water System <sup>1</sup>
Operating labor and expenses.....	\$5,996 51	
Repairs to operating capital.....	1,402 12	
Distribution system labor and expense.....		
Repairs to distribution and transmission capital.....	873 71	
Collection and promotion of business expenses.....		
General expense .....	967 19	
Taxes .....	478 01	
Depreciation, etc. ....	4,037 64	
Total operating expenses.....	\$13,755 18	\$2,190 93

<sup>1</sup>Not segregated.

TABLE No. 4

## ABSTRACT OF OPERATING EXPENSES CLASS "C" WATER COMPANIES

	Hollister Water Company	Hollywood Water Company
Operating labor and expenses.....	\$2,969 70	\$11,149 99
Repairs to operating capital.....	471 09	
Distribution system labor and expense.....	859 38	
Repairs to distribution and transmission capital.....	501 06	
Collection and promotion of business expenses.....	1,388 99	
General expense .....	1,700 88	150 00
Taxes .....	811 32	85 00
Depreciation, etc. ....	5,082 00	1,740 72
Total operating expenses.....	\$13,784 42	\$13,125 71

—Continued.

OPERATING IN CALIFORNIA DURING YEAR ENDING DECEMBER 31, 1913.

Goose Lake Canal Company	Gates Canal Company	J. A. Graves	E. E. Hall	Happy Valley Land and Water Company	Hawthorne Electric and Water Company
		\$924 37	\$1,342 45		\$1,173 04
			559 55		43 80
		14 20	8 75	\$1,275 55	446 78
		1,322 42	69 80	5,492 10	1,895 11
			273 12		684 81
\$60 64	\$60 62	119 25	290 80	755 35	1,585 51
94 88	44 88	809 61	48 38	200 01	395 91
					6,098 08
\$155 52	\$105 50	\$3,189 85	\$2,592 85	\$7,723 01	\$12,323 04

—Continued.

OPERATING IN CALIFORNIA DURING YEAR ENDING DECEMBER 31, 1913.

Hemet Town Water Company	Huntington Beach Company	Hihn Water Company	Hawthorne Water Company	Hermosa Beach Water Company	Highland Domestic Water Company
	\$6,746 18	\$47 56	\$2,772 28	\$4,799 88	\$864 80
\$378 57	255 88	\$1,461 11	53 48	1,238 21	125 50
121 10	101 79	100 91	206 22	944 13	204 65
224 78	592 34	4,039 68	793 32	993 32	43 40
43 25	71 36	1,384 64	727 25	1,679 50	736 65
584 68	3,685 56	2,833 95	3,905 70	5,282 72	272 92
267 52	57 75	951 95	444 12	525 25	115 72
423 48	7,106 33		3,032 87		609 32
\$2,043 38	\$18,617 19	\$13,819 80	\$11,935 24	\$15,463 01	\$2,972 96

—Continued.

OPERATING IN CALIFORNIA DURING YEAR ENDING DECEMBER 31, 1913.

Home Tract Water Company	Hornbrook Water Company	Hyde Park Water Company	Ione Water Works	Independence Water Company	Indio Light, Water and Ice Company
\$641 29	\$410 50	\$2,118 76	\$859 92		\$130 56
	25 37	552 27	660 50		
41 57		137 97	600 00		54 90
	10 00	176 19	27 15	\$347 42	
41 15	80 00		196 17		
118 49	12 00	1,941 97	160 40	232 00	614 50
32 12	52 43	147 91	159 38	83 40	142 77
			787 32	400 00	
\$874 62	\$590 30	\$5,075 07	\$3,450 84	\$1,062 82	\$942 73

TABLE No. 4

## ABSTRACT OF OPERATING EXPENSES CLASS "C" WATER COMPANIES

	Inglewood Water Company	Interurban Land Company
Operating labor and expenses.....	\$4,762 42	\$2,936 20
Repairs to operating capital.....	339 32	471 62
Distribution system labor and expense.....	898 93	1,071 95
Repairs to distribution and transmission capital...	1,828 20	-----
Collection and promotion of business expenses.....	-----	-----
General expense .....	7,903 66	338 45
Taxes .....	3,114 70	499 22
Depreciation, etc. ....	-----	-----
Total operating expenses.....	\$18,847 23	\$5,317 44

TABLE No. 4

## ABSTRACT OF OPERATING EXPENSES CLASS "C" WATER COMPANIES

	Joyce Canal Company	Kern River Canal and Irrigating Company
Operating labor and expenses.....		\$1,845 16
Repairs to operating capital.....		-----
Distribution system labor and expense.....		2,460 37
Repairs to distribution and transmission capital...		3,124 63
Collection and promotion of business expenses.....		-----
General expense .....	\$60 62	1,061 09
Taxes .....	49 81	312 60
Depreciation, etc. ....	-----	-----
Total operating expenses.....	\$110 43	\$8,803 85

<sup>1</sup>Not segregated.

TABLE No. 4

## ABSTRACT OF OPERATING EXPENSES CLASS "C" WATER COMPANIES

	Lerdo Canal Company	Lawndale Land and Water Company
Operating labor and expenses.....	\$1,998 58	\$797 29
Repairs to operating capital.....		96 76
Distribution system labor and expense.....	221 36	319 38
Repairs to distribution and transmission capital...	561 33	324 61
Collection and promotion of business expenses.....		151 73
General expense .....	120 80	1,311 86
Taxes .....	158 25	82 67
Depreciation, etc. ....	-----	3,562 23
Total operating expenses.....	\$3,060 32	\$6,646 53



—Continued.

OPERATING IN CALIFORNIA DURING YEAR ENDING DECEMBER 31, 1913.

Interurban Water Company	Irwin Heights Water Company	Jackson Water System	Kennett Water Company	James Canal Company	James and Dixon Canal Company
\$2,325 14	\$3,070 61	\$69 70	\$1,022 18	\$171 56	-----
414 20	-----	-----	2,884 51	-----	-----
67 34	-----	308 29	108 28	-----	-----
231 59	603 55	-----	558 74	146 34	-----
1,409 53	-----	-----	-----	-----	-----
1,940 60	3,350 18	150 00	4,919 32	332 78	\$60 64
1,983 03	341 19	26 24	644 51	385 99	101 31
3,707 86	-----	60 00	1,372 75	-----	-----
\$12,079 29	\$7,365 53	\$614 23	\$11,510 29	\$1,036 67	\$161 95

—Continued.

OPERATING IN CALIFORNIA DURING YEAR ENDING DECEMBER 31, 1913.

Kings River and Fresno Canal Company	Knapp Water Company	La Habra Valley Land and Water Company <sup>1</sup>	Laguna Blanca Water Company	Laguna Cliffs Water Company	Lake Hemet Water Company
\$1,747 50	\$1,739 83	-----	-----	-----	-----
-----	-----	-----	\$568 50	\$400 00	\$315 00
-----	-----	-----	630 87	100 00	4,189 09
-----	-----	-----	-----	17 50	5,481 01
123 50	-----	-----	1,394 35	-----	607 31
5 00	-----	-----	881 00	30 00	9,824 81
-----	-----	-----	-----	500 00	3,127 88
-----	-----	-----	-----	-----	12,308 64
\$1,876 00	\$1,739 83	\$10,519 37	\$3,474 72	\$1,047 50	\$35,853 74

—Continued.

OPERATING IN CALIFORNIA DURING YEAR ENDING DECEMBER 31, 1913.

Los Altos Water Company	Lytle Creek Water Company	Madera Canal and Irrigation Company	Madera Electric Water Company	Marian Water Company	Manteca Water Works
\$1,889 64	\$180 00	\$3,654 00	\$604 29	\$128 40	-----
1,140 47	-----	-----	9 09	-----	-----
264 59	-----	-----	-----	68 64	-----
4 30	-----	-----	1 81	26 45	-----
75 66	-----	-----	-----	13 80	-----
975 98	75	2,635 58	829 91	50	\$471 18
122 95	68 82	-----	206 18	32 20	-----
2,478 27	-----	-----	393 14	-----	-----
\$6,951 86	\$249 57	\$6,289 58	\$2,044 42	\$269 99	\$471 18

TABLE No. 4

## ABSTRACT OF OPERATING EXPENSES CLASS "C" WATER COMPANIES

	Midland Counties Public Service Corporation	Miradero Water Company
Operating labor and expenses-----	\$3,207 93	-----
Repairs to operating capital-----	513 52	-----
Distribution system labor and expense-----	258 03	-----
Repairs to distribution and transmission capital-----	503 24	-----
Collection and promotion of business expenses-----	432 49	-----
General expense -----	1,132 93	\$12,444 33
Taxes -----	591 90	-----
Depreciation, etc. -----	632 36	-----
Total operating expenses-----	\$7,272 40	\$12,444 33

TABLE No. 4

## ABSTRACT OF OPERATING EXPENSES CLASS "C" WATER COMPANIES

	Mountain Springs Water Company	Moorpark Water, Light and Power Company
Operating labor and expenses-----	\$4,691 45	\$40 81
Repairs to operating capital-----	3,178 14	-----
Distribution system labor and expense-----	303 63	171 13
Repairs to distribution and transmission capital-----	75 91	402 95
Collection and promotion of business expenses-----	318 97	33 60
General expense -----	4,022 45	-----
Taxes -----	334 63	27 09
Depreciation, etc. -----	13,273 23	-----
Total operating expenses-----	\$26,198 41	\$675 58

TABLE No. 4

## ABSTRACT OF OPERATING EXPENSES CLASS "C" WATER COMPANIES

	Ocean View Land and Water Company	Orange Home Water Company
Operating labor and expenses-----	\$1,522 02	\$1,214 66
Repairs to operating capital-----	75 87	46 40
Distribution system labor and expense-----	350 71	-----
Repairs to distribution and transmission capital-----	39 27	-----
Collection and promotion of business expenses-----	300 00	-----
General expense -----	15 00	-----
Taxes -----	312 50	15 00
Depreciation, etc. -----	70 00	-----
Total operating expenses-----	\$2,685 37	\$1,276 06

—Continued.

OPERATING IN CALIFORNIA DURING YEAR ENDING DECEMBER 31, 1913.

Minnehaha Oil Company	Mokelumne River Power and Water Company	Montecito Valley Water Company	Monterey County Water Company	Mt. Jackson Water and Power Company	Mountain Power Company
\$11,075 19		\$720 00	\$3,529 65	\$380 10	\$1,203 41
			2,931 27		10 26
	\$3,684 50				
60 00	349 75			51 32	29 85
					688 20
180 00	5,665 04	136 10		679 00	1,356 80
173 53	2,271 18	40 00	149 86	55 00	184 00
4,400 00	2,120 00			221 55	
\$15,888 72	\$14,090 47	\$896 10	\$6,610 78	\$1,386 97	\$3,422 52

—Continued.

OPERATING IN CALIFORNIA DURING YEAR ENDING DECEMBER 31, 1913.

Newman Water Works Company	North Coast Water Company	North Moneta Garden Lands Water Company	Northern Water and Power Company	Northern Oil Company	Ocean Park Water Company
\$3,909 44		\$1,861 90	\$9,767 22	\$15,908 43	\$5,213 60
		80 95	8,620 05		2,220 98
	\$1,797 78	720 67			
	2,780 26	76 40			
	1,661 97	30 35			
250 00	3,246 30		2,677 60	3,714 47	6,416 12
224 00	1,470 33	210 28	3,235 65		623 69
					2,851 99
\$4,383 44	\$10,956 64	\$2,980 55	\$24,300 52	\$19,622 90	\$17,326 38

—Continued.

OPERATING IN CALIFORNIA DURING YEAR ENDING DECEMBER 31, 1913.

Owensmouth Water Company	Palm Valley Water Company	Puente City Water Company	Pasadena Consolidated Water Company	Peoples Water Company of Palms	Pinal Dome Oil Company
\$1,668 91		\$1,165 24	\$4,280 74	\$1,020 10	\$6,032 15
	\$11 40	108 42	411 76	133 56	
	102 70		270 30	43 35	
76 00	63 50		187 68	244 19	
				83 70	
150 78	1,375 00		3,518 68	330 30	
30 00	127 50	84 38	240 00	286 94	
	2,500 00	628 25	3,455 65		1,208 32
\$1,925 69	\$4,180 10	\$1,986 29	\$12,864 81	\$2,142 14	\$7,240 47

TABLE No. 4

## ABSTRACT OF OPERATING EXPENSES CLASS "C" WATER COMPANIES

	Placerville Water Works	Plunkett Canal Company
Operating labor and expenses.....	\$2,974 11	
Repairs to operating capital.....	140 50	
Distribution system labor and expense.....		
Repairs to distribution and transmission capital.....		
Collection and promotion of business expenses.....		
General expense .....	488 78	\$60 64
Taxes .....	404 14	49 81
Depreciation, etc. ....		
Total operating expenses.....	\$4,007 53	\$110 45

TABLE No. 4

## ABSTRACT OF OPERATING EXPENSES CLASS "C" WATER COMPANIES

	Mrs. M. A. Rohner	Roseville Water Company
Operating labor and expenses.....	\$261 00	\$4,797 30
Repairs to operating capital.....		
Distribution system labor and expense.....		
Repairs to distribution and transmission capital.....		
Collection and promotion of business expenses.....		600 00
General expense .....		4,281 00
Taxes .....		934 23
Depreciation, etc. ....		
Total operating expenses.....	\$261 00	\$10,612 53

TABLE No. 4

## ABSTRACT OF OPERATING EXPENSES CLASS "C" WATER COMPANIES

	Santa Catalina Island Company	Santa Clara Valley Water Company
Operating labor and expenses.....	\$2,084 53	
Repairs to operating capital.....	132 86	\$18 00
Distribution system labor and expense.....		
Repairs to distribution and transmission capital.....	421 02	
Collection and promotion of business expenses.....		
General expense .....		768 65
Taxes .....		111 89
Depreciation, etc. ....	1,269 00	
Total operating expenses.....	\$3,907 41	\$898 54

—Continued.

OPERATING IN CALIFORNIA DURING YEAR ENDING DECEMBER 31, 1912.

Pioneer Canal Company	Randsburg Water Company	Redondo Water Company	Redwood City Water Company	Rialto Domestic Water Company	Riverbank Water Company
\$714 65	\$3,560 38	\$4,340 19	\$5,293 50	\$120 00	\$2,236 48
-----	-----	1,117 20	206 03	-----	451 93
387 99	-----	213 90	-----	464 17	-----
861 56	2,244 82	2,267 58	217 60	-----	120 10
-----	480 00	1,022 60	-----	508 15	-----
305 64	8,478 03	3,721 25	37 65	24 75	5,574 77
253 35	181 21	1,252 55	197 80	113 57	311 64
-----	-----	6,315 82	-----	10 35	430 75
\$2,523 19	\$14,944 44	\$20,251 09	\$5,952 58	\$1,240 99	\$9,125 67

—Continued.

OPERATING IN CALIFORNIA DURING YEAR ENDING DECEMBER 31, 1913.

Reedley Water Works	San Joaquin Light and Power Corporation	San Benito County Land and Water Company	San Dimas Charter Oak Domestic Water Company	San Geronimo Water Company	San Lorenzo Water Company
\$2,423 37	\$2,595 78	\$2,111 84	\$2,305 25	-----	\$4,673 52
38 30	2,068 70	-----	-----	-----	2,017 83
1,473 26	-----	-----	162 45	\$432 88	62 80
36 00	385 24	-----	170 70	384 70	1,984 26
582 00	2,071 03	-----	135 46	390 50	-----
334 22	2,446 17	-----	1,130 82	6,816 24	5,699 25
142 77	1,424 04	75 00	57 32	462 98	614 86
533 22	1,730 07	-----	-----	1,856 85	-----
\$5,563 14	\$12,721 03	\$2,186 84	\$3,962 00	\$10,344 15	\$15,052 52

—Continued.

OPERATING IN CALIFORNIA DURING YEAR ENDING DECEMBER 31, 1913.

Santa Clara Water and Irrigation Company	San Francisco- Oakland Terminal Power Company	Santa Paula Water Works	Santa Rosa Water Works	Sawtelle Water Company	Saticoy Water Company
-----	-----	\$406 70	\$959 75	\$4,300 09	\$1,945 91
\$7,111 73	\$8,103 97	31 48	-----	303 68	395 74
-----	-----	127 03	379 35	309 70	-----
-----	6,237 05	1,076 48	-----	693 02	-----
-----	734 97	830 69	-----	888 61	-----
2,883 75	2,780 37	1,426 45	6,014 66	1,892 02	2,202 83
698 70	2,268 52	1,481 42	1,208 91	316 99	-----
1,710 80	-----	2,928 44	-----	-----	-----
\$12,404 98	\$20,124 88	\$8,308 69	\$8,562 67	\$8,704 11	\$4,544 48



TABLE No. 1

## ABSTRACT OF OPERATING EXPENSES CLASS "C" WATER COMPANIES

	Sausalito Spring Water Company	Sherman Water Company
Operating labor and expenses.....	\$894 38	\$900 00
Repairs to operating capital.....		350 00
Distribution system labor and expense.....		1,506 85
Repairs to distribution and transmission capital.....		
Collection and promotion of business expenses.....		325 00
General expense .....		
Taxes .....	766 90	345 10
Depreciation, etc. ....		
Total operating expenses.....	\$1,661 28	\$3,426 95

TABLE No. 4

## ABSTRACT OF OPERATING EXPENSES CLASS "C" WATER COMPANIES

	Stoll Water Company	Stratton Water Company	St. Helena Water Company
Operating labor and expenses.....	\$1,350 00		
Repairs to operating capital.....	114 00		
Distribution system labor and expense.....		\$13,752 23	
Repairs to distribution and trans- mission capital .....			\$164 28
Collection and promotion of business expenses .....	150 00		263 59
General expense .....	300 00		1,436 81
Taxes .....	57 27	399 12	669 73
Depreciation, etc. ....		9,948 81	507 14
Total operating expenses.....	\$1,971 27	\$24,100 16	\$3,041 55

TABLE No. 4

## ABSTRACT OF OPERATING EXPENSES CLASS "C" WATER COMPANIES

	Terra Bella City Water Company	Torrance Water, Light and Power Company	Tehama Water Works
Operating labor and expenses.....	\$382 39	\$2,581 32	\$120 00
Repairs to operating capital.....	832 55		
Distribution system labor and expense.....	77 89	481 31	
Repairs to distribution and transmis- sion capital .....	182 53	648 92	
Collection and promotion of business expenses .....	89 25		
General expense .....	315 70	697 59	50 65
Taxes .....	30 00	492 86	7 50
Depreciation, etc. ....	900 00	6,107 85	
Total operating expenses.....	\$2,810 31	\$11,009 85	\$178 15

¹Not segregated.

—Continued.

OPERATING IN CALIFORNIA DURING YEAR ENDING DECEMBER 31, 1913.

Sierra Park Water Company	Soledad Land and Water Company	Sonoma Valley Water, Light and Power Company	Southern California Mountain Water Company	South Feather Land and Water Company	Stockton and Mokelumne Canal Company
\$750 80	\$3,024 90	\$226 00	\$13,067 24	-----	\$5,541 87
18 25	158 15	60 87	137 40	-----	-----
8 40	20 50	287 35	2,452 66	-----	-----
219 88	-----	-----	635 61	-----	-----
432 13	111 70	-----	9 96	\$3,964 07	-----
245 05	518 15	710 00	31,618 63	4,204 39	77 35
221 25	99 88	-----	7,707 70	662 02	506 61
938 29	-----	-----	12,792 78	5,243 33	3,675 00
\$2,834 05	\$3,933 28	\$1,284 22	\$68,421 98	\$14,073 81	\$9,800 83

—Continued.

OPERATING IN CALIFORNIA DURING YEAR ENDING DECEMBER 31, 1913.

Summit Lake Irrigation Company	Sunnyvale Water Company	Susanville Water Works	Sutter and Amador Water Works	Stine Canal Company	The Truckee River General Electric Company
\$2,588 10	\$1,763 99	-----	\$2,099 45	\$1,357 84	-----
-----	13 30	-----	540 00	930 27	\$3,836 87
-----	44 95	\$148 95	101 89	1,495 09	-----
-----	119 30	600 00	229 69	-----	-----
599 95	685 00	1,676 93	2,315 82	300 64	1,008 78
5 00	136 20	281 74	342 39	449 75	-----
-----	-----	2,810 40	1,877 16	-----	-----
\$3,193 05	\$2,762 74	\$5,518 02	\$7,506 40	\$4,533 59	\$4,845 65

—Continued.

OPERATING IN CALIFORNIA DURING YEAR ENDING DECEMBER 31, 1913.

Ukiah Water and Improvement Company	Union Water Company	Valley View Land and Water Company <sup>1</sup>	Vacaville Water and Light Company	Edmund Varney Water System	Van Nuys Water Company
\$4,323 00	\$188 25	-----	\$300 00	\$1,169 93	\$1,820 43
50 00	-----	-----	-----	22 15	-----
150 00	249 55	-----	1,141 08	-----	-----
50 00	16 50	-----	-----	6 60	101 89
600 00	900 00	-----	-----	-----	274 90
370 74	1,100 00	-----	2,869 39	64 55	159 05
629 68	291 52	-----	295 81	54 10	232 73
-----	-----	-----	679 84	653 20	-----
\$6,173 42	\$2,745 82	\$1,448 35	\$5,286 12	\$1,970 53	\$2,589 00

TABLE No. 4

ABSTRACT OF OPERATING EXPENSES CLASS "C" WATER COMPANIES

	Venice Water Company	Visalia City Water Company	Verdugo Pipe and Reservoir Company <sup>1</sup>
Operating labor and expenses.....	\$8,207 20	\$15,343 22	-----
Repairs to operating capital.....	21 67	820 59	-----
Distribution system labor and expense	-----	-----	-----
Repairs to distribution and transmis- sion capital .....	4,357 52	-----	-----
Collection and promotion of business expenses .....	40 00	-----	-----
General expense .....	1,270 00	1,288 84	-----
Taxes .....	62 42	1,661 83	-----
Depreciation, etc. ....	7,250 00	-----	-----
Total operating expenses.....	\$21,208 81	\$19,114 48	\$3,080 15

<sup>1</sup>Not segregated.

TABLE No. 4

ABSTRACT OF OPERATING EXPENSES CLASS "C" WATER COMPANIES

	Washington Water and Light Company	Weaverville Town Water Works	West San Joaquin Valley Water Company
Operating labor and expenses.....	\$1,382 75	-----	\$5,869 94
Repairs to operating capital.....	545 45	-----	298 57
Distribution system labor and expense	-----	\$202 20	59 47
Repairs to distribution and transmis- sion capital .....	58 45	6 88	113 43
Collection and promotion of business expenses .....	309 05	-----	-----
General expense .....	268 50	1,321 20	1,081 89
Taxes .....	111 97	76 86	45 00
Depreciation, etc. ....	-----	-----	2,376 84
Total operating expenses.....	\$2,676 17	\$1,607 14	\$9,845 14

<sup>1</sup>Includes several utilities expenses of \$39,207.17 not segregated.

NOTE.—Report of Cosumnes Irrigation Company omitted, as same was very incomplete.

—Continued.

OPERATING IN CALIFORNIA DURING YEAR ENDING DECEMBER 31, 1913.

Verdugo Springs Water Company	Vineyard Ditch Company	Vista Grande Water Company	W. G. Wadley	Walgrove Water Company	Walnut Creek Water Company
\$2,226 01		\$3,199 75	\$1,054 32	\$750 00	\$2,218 97
	\$602 15	326 14		35 00	99 27
258 25		166 90			210 43
368 45		388 08	864 79		
201 60					
1,534 50	961 15	343 73	10 00		81 84
80 83	70 68		20 00	101 10	76 53
1,190 56			1 60		
\$5,860 20	\$1,633 98	\$4,424 60	\$1,950 71	\$886 10	\$2,687 04

—Concluded.

OPERATING IN CALIFORNIA DURING YEAR ENDING DECEMBER 31, 1913.

West Side Irrigation Company	West Side Water Company	Williams Water Company	Willits Water and Power Company	Windsor Water Company	Total
\$931 00	\$16,425 10	\$1,082 95		\$1,878 47	\$474,907 13
				100 65	83,122 93
			\$712 97		92,156 54
		31 85	871 84	606 15	96,378 08
	3,524 12		412 44	620 00	50,845 75
999 31		169 64	3,479 26	1,163 58	355,560 34
	239 10	71 24	383 20	57 11	89,797 93
		207 00		829 01	230,820 76
\$1,930 31	\$20,188 32	\$1,562 68	\$5,859 71	\$5,254 97	\$1,512,796 63





## GAS COMPANIES.

TABLES NOS. 1 TO 4, INCLUSIVE.

TABLE

ABSTRACT OF BALANCE SHEETS OF GAS COMPANIES OPERATING

	Banning Gas and Lighting Company	Beaumont Gas and Power Company
<i>Assets.</i>		
Fixed capital installed prior to January 1, 1913.....	\$15,461 61	\$31,845 94
Fixed capital installed subsequent to January 1, 1913 .....	753 22	141 85
Total fixed capital.....	\$16,214 83	\$31,987 79
Cash and deposits.....	1 87	
Notes receivable .....		
Accounts receivable .....	306 98	191 76
Other current assets .....		
Investments .....		
Working assets .....	215 00	138 30
Prepaid expenses .....		
Unamortized discount on securities and expenses.....		
Miscellaneous .....		
Corporate deficit .....	2,132 44	
Totals .....	\$18,871 12	\$32,317 85
<i>Liabilities.</i>		
Capital stock .....	\$14,050 00	\$25,000 00
Funded debt .....		6,000 00
Invested in plant .....		
Notes payable .....	2,000 00	
Accounts payable .....	718 62	37 28
Interest and taxes accrued .....		137 02
Miscellaneous .....	2,102 50	38 54
Reserves .....		
Income invested since December 31, 1912, in fixed capital .....		
Corporate surplus .....		1,105 01 <sup>1</sup>
Totals .....	\$18,871 12	\$32,317 85

<sup>1</sup>Assessment.<sup>2</sup>Creditor's claims.

## No. 1.

IN CALIFORNIA DURING YEAR ENDING DECEMBER 31, 1913.

California Natural Gas Company	Central California Gas Company	Central Natural Gas Company	Citrus Belt Gas Company	Coalinga Gas and Power Company	Economic Gas Company
\$309,127 47	\$280,341 05	\$68,497 64	\$552,434 12	\$44,756 56	\$2,328,964 39
48,637 67	165,969 65	-----	25,804 23	789 83	114,599 61
\$357,765 11	\$446,310 70	\$68,497 64	\$578,238 35	\$45,546 39	\$2,443,563 43
204,636 02	8,180 54	10,396 13	20,351 19	1,605 30	23,881 07
34,650 27	-----	-----	-----	-----	1,288 28
43,342 81	14,652 52	-----	17,698 05	2,507 07	16,871 14
100 00	-----	-----	35,888 00	-----	-----
8,891 27	17,140 96	-----	11,573 26	743 30	20,362 92
-----	527 57	-----	391 07	-----	8,955 89
-----	76,955 00	-----	500 00	21,532 08	-----
-----	-----	-----	16,000 00	-----	-----
-----	-----	-----	102,912 92	-----	-----
\$649,385 51	\$563,767 29	\$78,893 77	\$783,552 84	\$71,934 14	\$2,514,922 73
\$350,000 00	\$248,700 00	\$19,900 00	\$500 00	\$46,738 66	\$1,500,000 00
-----	250,000 00	-----	283,200 00	-----	565,000 00
-----	19,207 83	-----	-----	4,500 00	25,496 81
17,597 46	27,160 96	-----	11,506 01	350 00	118,331 53
27,924 54	9,357 19	-----	1,654 17	586 98	-----
-----	2,744 50	69 79	475,281 98	-----	-----
21,638 92	1,800 00	-----	11,410 68	1,955 85	110,000 00
232,224 59	4,796 81	58,923 98	-----	17,802 65	196,094 39
\$649,385 51	\$563,767 29	\$78,893 77	\$783,552 84	\$71,934 14	\$2,514,922 73

TABLE No. 1

ABSTRACT OF BALANCE SHEETS OF GAS COMPANIES OPERATING

	Hanford Gas and Power Company	Henet- San Jacinto Gas Company
<i>Assets.</i>		
Fixed capital installed prior to January 1, 1913. ....	\$195,056 55	\$30,007 50
Fixed capital installed subsequent to January 1, 1913 -----	2,900 51	2,668 51
Total fixed capital -----	\$197,957 06	\$32,676 01
Cash and deposits -----	7,629 47	24 86
Notes receivable -----		
Accounts receivable -----	3,662 23	1,213 03
Other current assets -----		
Investments -----		
Working assets -----	698 31	1,107 34
Prepaid expenses -----		
Unamortized discount on securities and expenses -----		
Miscellaneous -----		
Corporate deficit -----		41,375 03
Totals -----	\$209,947 07	\$76,396 27
<i>Liabilities.</i>		
Capital stock -----	\$100,000 00	\$42,878 00
Funded debt -----	40,000 00	25,000 00
Invested in plant -----		
Notes payable -----	9,000 00	2,407 80
Accounts payable -----	1,168 92	3,860 47
Interest and taxes accrued -----	3,267 54	2,250 00
Miscellaneous -----		
Reserves -----	3,325 34	
Income invested since December 31, 1912, in fixed capital -----		
Corporate surplus -----	53,185 27	
Totals -----	\$209,947 07	\$76,396 27

<sup>1</sup>Includes gas and electric.

—Continued.

IN CALIFORNIA DURING YEAR ENDING DECEMBER 31, 1913.

Imperial Valley Gas Company	Jackson Gas Light Company	Long Beach Consolidated Gas Company	Los Angeles Gas and Electric Corporation <sup>1</sup>	Madera Gas Company	Midway Gas Company
\$621,417 74	\$15,000 00	\$1,270,291 47	\$18,985,300 00	-----	\$1,510,256 53
28,247 50	160 85	91,484 40	1,306,425 67	\$40,109 05	31,635 07
\$649,665 24	\$15,160 85	\$1,361,775 87	\$20,291,725 67	\$40,109 05	\$1,541,891 60
2,418 96	-----	7,639 10	24,679 21	59 13	976 77
-----	-----	-----	401 00	-----	27,619 81
7,188 54	1,295 65	10,598 08	459,823 72	1,489 46	42,242 34
-----	-----	-----	1,666 67	-----	142 70
-----	-----	-----	-----	-----	45 00
1,379 46	950 00	32,552 24	393,760 33	793 97	3,227 51
-----	-----	1,872 66	1,144 63	-----	3,860 51
12,285 80	-----	5,984 19	-----	-----	3,143,618 00
-----	-----	673 33	404,430 12	-----	53,693 41
11,387 78	-----	-----	-----	696 38	100,727 77
\$684,325 78	\$17,406 50	\$1,421,095 47	\$21,577,631 35	\$43,147 99	\$4,918,045 42
\$500,000 00	-----	\$760,700 00	\$10,000,000 00	\$14,000 00	\$3,000,000 00
159,500 00	-----	421,000 00	8,303,000 00	25,000 00	1,450,000 00
-----	17,245 65	-----	-----	-----	-----
8,000 00	-----	108,000 00	125,000 00	300 00	48,004 81
11,995 78	-----	67,007 05	431,137 54	3,597 99	44,661 84
4,830 00	-----	6,697 18	190,942 11	250 00	7,310 60
-----	-----	7,000 00	-----	-----	300,000 00
-----	-----	38,828 07	2,275,747 65	-----	68,068 17
-----	-----	-----	-----	-----	-----
-----	160 85	-----	240,000 00	-----	-----
-----	-----	11,863 17	11,804 05	-----	-----
\$684,325 78	\$17,406 50	\$1,421,095 47	\$21,577,631 35	\$43,147 99	\$4,918,045 42



TABLE No. 1

ABSTRACT OF BALANCE SHEETS OF GAS COMPANIES OPERATING

	Modesto Gas, Light, Coal and Coke Company	Joseph McDonald
<i>Assets.</i>		
Fixed capital installed prior to January 1, 1913.....	\$143,559 14	\$17,741 25
Fixed capital installed subsequent to January 1, 1913 .....	7,747 28	822 72
Total fixed capital.....	\$151,306 42	\$18,563 97
Cash and deposits.....		<sup>1</sup> 1,177 26
Notes receivable .....		
Accounts receivable .....	2,332 95	5,262 84
Other current assets.....		
Investments .....		
Working assets .....		
Prepaid expenses .....		
Unamortized discount on securities and expenses.....		
Miscellaneous .....		
Corporate deficit .....		
Totals .....	\$153,639 37	\$22,649 55
<i>Liabilities.</i>		
Capital stock .....	\$100,000 00	
Funded debt .....		
Invested in plant.....		\$21,297 67
Notes payable .....	42,989 50	
Accounts payable .....	4,146 00	938 37
Interest and taxes accrued.....		413 51
Miscellaneous .....		
Reserves .....		
Income invested since December 31, 1912, in fixed capital .....		
Corporate surplus .....	6,503 87	
Totals .....	\$153,639 37	\$22,649 55

<sup>1</sup>Includes electric and telephone plant.<sup>2</sup>Credit item

—Continued.

IN CALIFORNIA DURING YEAR ENDING DECEMBER 31, 1913.

Needles Gas and Electric Company <sup>1</sup>	Ontario- Fland Gas Company	Oakdale Gas Company	Palo Alto Gas Company	Rochester Oil Company	Sacramento Natural Gas Company
\$100,000 00	\$121,323 16	-----	\$298,118 55	\$53,266 83	\$699,400 93
94,430 96	1,973 75	\$33,234 48	3,428 50	801 46	101,194 99
\$194,430 96	\$123,296 91	\$33,234 48	\$301,547 05	54,068 29	\$800,595 92
1,085 63	5,368 67	56 88	8,996 72	141 19	4,780 67
	1,500 00	-----		605 71	-----
5,312 58	4,080 22	1,082 51	4,260 15	3,456 72	16,009 17
-----	-----	-----	-----	-----	1,935 96
-----	-----	-----	-----	-----	1,000 00
4,040 32	931 01	2,510 00	-----	-----	640 04
214 62	-----	63 51	1,032 64	-----	-----
30,000 00	-----	-----	-----	-----	1,783 93
	11,005 00	-----	54,000 00	-----	-----
2,228 17	-----	-----	-----	1,454 23	-----
\$237,312 28	\$146,181 81	\$36,947 38	\$369,836 56	\$59,726 14	\$826,745 69
\$100,000 00	\$100,000 00	\$80 00	\$200,000 00	\$39,279 00	\$429,100 00
100,000 00	25,000 00	-----	96,000 00	-----	200,000 00
	-----	34,923 76	-----	-----	-----
24,945 56	-----	-----	-----	13,281 41	94,500 00
8,480 66	2,155 71	157 71	10,942 89	322 70	9,647 48
540 55	728 02	88 62	-----	626 49	2,000 00
-----	-----	-----	-----	3,557 92	23,686 50
3,345 51	15,021 93	-----	26,111 35	2,658 62	27,667 80
-----	-----	-----	-----	-----	-----
-----	3,276 15	1,697 29	36,782 32	-----	40,143 91
\$237,312 28	\$146,181 81	\$36,947 38	\$369,836 56	\$59,726 14	\$826,745 69

TABLE No. 1

ABSTRACT OF BALANCE SHEETS OF GAS COMPANIES OPERATING

	Santa Maria Gas and Power Company	Southern California Gas Company
<i>Assets.</i>		
Fixed capital installed prior to January 1, 1913.....	\$200,166 31 <sup>1</sup>	\$9,269,041 57
Fixed capital installed subsequent to January 1, 1913 -----	15,450 70	581,852 72
Total fixed capital.....	\$215,617 01	\$9,850,894 29
Cash and deposits .....	664 98	300,509 42
Notes receivable .....		
Accounts receivable .....	42,964 74	346,678 04
Other current assets.....		
Investments .....		
Working assets .....	7,781 70	182,012 69
Prepaid expenses .....	100 33	1,979 39
Unamortized discount on securities and expenses.....		330,226 61
Miscellaneous .....	310 65	432,098 90
Corporate deficit .....		
Totals .....	\$267,439 41	\$11,444,399 34
<i>Liabilities.</i>		
Capital stock .....	\$100,000 00	\$6,875,000 00
Funded debt .....	75,000 00	3,250,000 00
Invested in plant.....		
Notes payable .....	7,000 00	366,971 77
Accounts payable .....	7,294 11	570,747 71
Interest and taxes accrued.....	1,609 48	104,263 87
Miscellaneous .....	5,953 23	40,873 09
Reserves .....	29,102 89	216,464 85
Income invested since December 31, 1912, in fixed capital .....		
Corporate surplus .....	41,479 70	20,078 05
Totals .....	\$267,439 41	\$11,444,399 34

<sup>1</sup>Credit item.

—Concluded.

IN CALIFORNIA DURING YEAR ENDING DECEMBER 31, 1913.

Southern Counties Gas Company of California	Turlock Gas Company	Utiah Gas Company	Western Fuel Gas and Power Company	West Side Gas Company	Total
\$1,421,499 88	\$39,350 10	\$47,608 78	\$143,918 69	\$223,652 84	\$39,037,406 60
89,242 69	5,314 22	527 05	7,564 45	3,239 41	2,807,152 43
\$1,510,742 57	\$44,664 32	\$48,135 83	\$151,483 14	\$226,892 25	\$41,844,559 03
1,323 28	-----	4 43	674 10	1,839 13	633,069 20
-----	-----	-----	-----	-----	66,065 07
28,539 13	2,310 71	1,478 73	4,670 15	10,441 63	1,101,963 65
-----	-----	-----	-----	-----	3,745 33
-----	-----	-----	-----	-----	37,033 00
18,159 25	2,346 28	1,103 96	2,833 09	1,576 54	717,469 05
5,216 03	80 38	-----	31 87	-----	25,471 10
69,605 15	5 47	12,264 28	-----	-----	3,704,760 51
30,799 39	3 50	-----	7,566 30	-----	1,010,580 60
-----	4,469 13	12,266 73	-----	5,750 01	285,400 59
\$1,664,384 80	\$53,879 79	\$75,253 96	\$167,258 65	\$242,821 30	\$49,430,117 13
-----	-----	-----	-----	-----	-----
\$840,000 00	\$50,900 00	\$70,000 00	\$30,000 00	\$150,000 00	\$25,706,825 66
607,500 00	-----	-----	-----	50,000 00	15,931,200 00
-----	-----	-----	-----	-----	73,467 08
66,636 08	-----	-----	20,500 00	17,591 95	1,006,333 52
74,647 19	1,121 50	250 30	79,143 74	12,495 26	1,521,622 78
9,687 20	67 04	3,003 66	1,028 38	11,875 82	391,139 97
290 00	-----	-----	-----	-----	861,598 05
60,359 31	1,791 25	2,000 00	6,398 76	858 27	2,924,555 22
-----	-----	-----	-----	-----	-----
5,265 02	-----	-----	30,187 77	-----	240,160 85
-----	-----	-----	-----	-----	773,214 00
\$1,664,384 80	\$53,879 79	\$75,253 96	\$167,258 65	\$242,821 30	\$49,430,117 13

TABLE

ABSTRACT OF INCOME AND PROFIT AND LOSS ACCOUNTS OF  
ENDING DECEMBER

	Banning Gas and Lighting Company	Beaumont Gas and Power Company
Operating revenues .....	\$7,026 10	\$5,520 23
Operating expenses .....	6,037 42	4,727 54
Net operating revenue .....	\$988 68	\$792 69
Net operating loss .....		
Non-operating revenue .....		
Gross corporate income .....	\$988 68	\$792 69
Gross corporate loss .....		
<i>Deductions.</i>		
Non-operating revenue deductions .....		
Interest accrued on funded debt .....		\$517 33
Other interest deductions .....	\$167 86	
Rent deductions .....		
Miscellaneous deductions .....		
Total deductions .....	\$167 86	\$517 33
Net corporate income for year .....	\$820 82	\$275 36
Net corporate loss for year .....		
Dividends .....		
Miscellaneous additions to income .....		
Miscellaneous deductions from income .....		
Surplus on December 31, 1912 .....		829 65
Deficit on December 31, 1912 .....	2,953 26	
Surplus on December 31, 1913 .....		1,105 01
Deficit on December 31, 1913 .....	2,132 44	

<sup>3</sup>See electric report.



## No. 2.

GAS COMPANIES OPERATING IN CALIFORNIA DURING YEAR  
ENDING 31, 1913.

California Natural Gas Company	Central California Gas Company	Central Natural Gas Company	Citrus Belt Gas Company	Coalinga Gas and Power Company	Coast Counties Gas and Electric Company <sup>1</sup>
\$411,885 46	\$64,260 65	\$6,735 75	\$105,927 53	\$21,632 71	\$90,797 43
308,723 22	33,925 48	4,246 42	86,078 21	17,676 34	54,298 79
\$103,162 24	\$30,335 17	\$2,489 33	\$19,849 32	\$3,956 37	\$36,498 64
5,396 51			2,527 83	46 62	
\$108,558 75	\$30,335 17	\$2,489 33	\$22,377 15	\$4,002 99	\$36,498 64
	\$13,130 67		\$15,147 00	\$462 00	
			527 16	268 30	
	\$13,130 67		\$15,674 16	\$730 30	
\$108,558 75	\$17,204 50	\$2,489 33	\$6,702 99	\$3,272 69	
	11,406 50	1,194 00		2,336 91	
	953 61		79,449 35		
	4,876 93		6,115 66	15 00	
123,665 84	2,922 13	57,628 65	182,949 60	16,881 87	
232,224 59	4,796 81	58,923 98	102,912 92	17,802 65	

TABLE No. 2

ABSTRACT OF INCOME AND PROFIT AND LOSS ACCOUNTS OF  
ENDING DECEMBER

	Coast Valleys Gas and Electric Company <sup>1</sup>	Escondido Utilities Company <sup>1</sup>
Operating revenues -----	\$42,104 19	\$4,055 01
Operating expenses -----	35,135 08	3,715 26
Net operating revenue -----	\$6,969 11	\$339 75
Net operating loss -----		
Non-operating revenue -----		
Gross corporate income -----	\$6,969 11	\$339 75
Gross corporate loss -----		
<i>Deductions.</i>		
Non-operating revenue deductions -----		
Interest accrued on funded debt -----		
Other interest deductions -----		
Rent deductions -----		
Miscellaneous deductions -----		
Total deductions -----		
Net corporate income for year -----		
Net corporate loss for year -----		
Dividends -----		
Miscellaneous additions to income -----		
Miscellaneous deductions from income -----		
Surplus on December 31, 1912 -----		
Deficit on December 31, 1912 -----		
Surplus on December 31, 1913 -----		
Deficit on December 31, 1913 -----		

<sup>1</sup>See electric report.

—Continued.

GAS COMPANIES OPERATING IN CALIFORNIA DURING YEAR  
ENDING 31, 1913.

Economic Gas Company	Hanford Gas and Power Company	Hemet- San Jacinto Gas Company	Imperial Valley Gas Company	Jackson Gas Light Company	Long Beach Consolidated Gas Company
\$226,887 68	\$25,110 09	\$9,716 04	\$30,401 59	\$6,899 81	\$209,311 92
196,010 93	17,627 42	8,101 53	22,708 82	6,899 60	166,914 21
\$30,876 75	\$7,482 67	\$1,614 51	\$7,692 77	\$0 21	\$42,397 71
19 75			354 00		120 78
\$30,896 50	\$7,482 67	\$1,614 51	\$8,046 77	\$0 21	\$42,518 49
\$3,269 33		\$545 74	\$106 86		\$123 00
30,500 01	\$2,667 82	1,335 00	7,295 49		25,480 00
2,852 02	392 18		879 92		6,245 75
					1,730 96
\$36,621 36	\$3,060 00	\$1,880 74	\$8,282 27		\$33,579 71
	\$4,422 67			\$0 21	\$8,938 78
\$5,724 86		\$266 23	\$235 50		
237,401 09			165 81		401 70
490 11	450 16		16 67	21	20 50
	49,212 76				2,543 19
35,091 73		41,108 80	11,301 42		
196,094 39	53,185 27				11,863 17
		41,375 03	11,387 78		

TABLE NO. 2

ABSTRACT OF INCOME AND PROFIT AND LOSS ACCOUNTS OF  
ENDING DECEMBER

	Los Angeles Gas and Electric Corporation	Madera Gas Company
Operating revenues .....	\$3,073,017 76	\$982 57
Operating expenses .....	2,333,999 14	1,414 05
Net operating revenue .....	\$739,018 62	
Net operating loss .....		\$431 48
Non-operating revenue .....	15,288 46	
Gross corporate income .....	\$754,307 08	
Gross corporate loss .....		\$431 48
<i>Deductions.</i>		
Non-operating revenue deductions .....		
Interest accrued on funded debt .....	\$400,942 88	\$250 00
Other interest deductions .....	5,148 21	14 90
Rent deductions .....		
Miscellaneous deductions .....	15,935 34	
Total deductions .....	\$422,026 43	\$264 90
Net corporate income for year .....	\$332,280 65	
Net corporate loss for year .....		\$696 38
Dividends .....	660,000 00	
Miscellaneous additions to income .....	255,304 94	
Miscellaneous deductions from income .....	327,426 19	
Surplus on December 31, 1912 .....	9,350 86	
Deficit on December 31, 1912 .....		
Surplus on December 31, 1913 .....	<sup>2</sup> 11,804 05	
Deficit on December 31, 1913 .....		696 38

<sup>1</sup>See electric report.<sup>2</sup>Electric revenue of \$402,293.79 included.<sup>3</sup>Includes electric revenue \$3,639.57 and telephone revenue \$450.78.

—Continued.

GAS COMPANIES OPERATING IN CALIFORNIA DURING YEAR  
ENDING 31, 1913.

Joseph McDonald	Midland Counties Public Service Corporation¹	Midway Gas Company	Modesto Gas, Light, Coal and Coke Company	Napa Valley Electric Company¹	Needles Gas and Electric Company
\$15,151 00	\$23,849 30	\$101,777 58	\$41,122 93	\$3,209 65	\$7,115 10
12,945 33	13,777 81	125,250 67	30,672 76	3,816 30	4,009 76
\$2,205 67	\$10,071 49		\$10,450 17		\$3,105 34
		\$23,473 09		\$606 65	
		142 70			3,168 72
\$2,205 67	\$10,071 49		\$10,450 17		\$6,274 06
		\$23,330 39		\$606 65	
		\$4,241 88			
		59,700 00	\$5,278 30		\$6,000 00
		6,339 80			860 35
\$590 69		7,115 70			4,448 17
\$590 69		\$77,397 38	\$5,278 30		\$11,308 52
\$1,614 98		\$100,727 77	\$5,171 87		\$5,034 46
1,956 29			1,332 00		
					1,284 06
3,571 27			6,503 87		
		100,727 77			2,228 17



TABLE No. 2

ABSTRACT OF INCOME AND PROFIT AND LOSS ACCOUNTS OF  
ENDING DECEMBER

	Northern California Power Company Consolidated <sup>1</sup>	Oakdale Gas Company
Operating revenues -----	\$28,952 80	\$1,459 44
Operating expenses -----	23,710 12	1,252 76
Net operating revenue -----	\$5,242 68	\$206 68
Net operating loss -----		
Non-operating revenue -----		
Gross corporate income -----	\$5,242 68	\$206 68
Gross corporate loss -----		
<i>Deductions.</i>		
Non-operating revenue deductions -----		
Interest accrued on funded debt -----		
Other interest deductions -----		
Rent deductions -----		
Miscellaneous deductions -----		
Total deductions -----		
Net corporate income for year -----		\$206 68
Net corporate loss for year -----		
Dividends -----		
Miscellaneous additions to income -----		
Miscellaneous deductions from income -----		
Surplus on December 31, 1912 -----		1,490 61
Deficit on December 31, 1912 -----		
Surplus on December 31, 1913 -----		1,697 29
Deficit on December 31, 1913 -----		

<sup>1</sup>See electric report.<sup>2</sup>See water report.

-Continued.

GAS COMPANIES OPERATING IN CALIFORNIA DURING YEAR  
ENDING 31, 1913.

Ontario- Upland Gas Company	Oro Water, Light and Power Company <sup>1</sup>	Pacific Gas and Electric Company <sup>1</sup>	Palo Alto Gas Company	Pinal Dome Oil Company <sup>2</sup>	Rochester Oil Company
\$26,338 73	\$19,077 91	\$6,547,594 96	\$43,339 81	\$5,818 63	\$7,498 58
21,338 51	15,517 36	3,960,307 70	36,868 85	4,173 02	6,383 95
\$5,000 22	\$3,560 55	\$2,587,287 26	\$6,470 96	\$1,645 61	\$1,114 63
207 29					
\$5,207 51	\$3,560 55	\$2,587,287 26	\$6,470 96	\$1,645 61	\$1,114 63
\$815 36			\$241 65		\$43 10
1,750 00			5,760 00		779 42
			378 93		84 00
\$2,565 36			\$6,380 58		\$906 52
\$2,642 15			\$90 38		\$208 11
4,449 65					
14 52			660 59		4 60
15 31			554 38		203 39
5,084 44			36,585 73		1,463 55
3,276 15			36,782 32		1,454 23

TABLE No. 2

ABSTRACT OF INCOME AND PROFIT AND LOSS ACCOUNTS OF  
ENDING DECEMBER

	Sacramento Natural Gas Company	San Diego Consolidated Gas and Electric Company <sup>1</sup>
Operating revenues -----	\$117,695 76	\$614,091 17
Operating expenses -----	79,932 70	385,871 51
Net operating revenue -----	\$37,763 06	\$228,219 66
Net operating loss -----		
Non-operating revenue -----	251 25	
Gross corporate income -----	\$38,014 31	\$228,219 66
Gross corporate loss -----		
<i>Deductions.</i>		
Non-operating revenue deductions -----	\$1,554 91	
Interest accrued on funded debt -----	11,746 70	
Other interest deductions -----	3,882 81	
Rent deductions -----		
Miscellaneous deductions -----	66 07	
Total deductions -----	\$17,250 49	
Net corporate income for year -----	\$20,763 82	
Net corporate loss for year -----		
Dividends -----	32,182 50	
Miscellaneous additions to income -----		
Miscellaneous deductions from income -----	662 54	
Surplus on December 31, 1912 -----	52,225 13	
Deficit on December 31, 1912 -----		
Surplus on December 31, 1913 -----	40,143 91	
Deficit on December 31, 1913 -----		

<sup>1</sup>See electric report.

—Continued.

GAS COMPANIES OPERATING IN CALIFORNIA DURING YEAR  
BER 31, 1913.

San Joaquin Light and Power Corporation <sup>1</sup>	Santa Barbara Gas and Electric Company <sup>1</sup>	Santa Maria Gas and Power Company	Southern California Edison Company <sup>1</sup>	Southern California Gas Company	Southern Counties Gas Company of California
\$176,145 39	\$89,116 23	\$49,529 78	\$256,229 99	\$1,041,798 64	\$226,774 54
133,272 26	64,742 49	31,327 10	232,825 72	715,853 77	168,242 94
\$42,873 13	\$24,373 74	\$18,202 68	\$23,404 27	\$325,944 87	\$58,531 60
		175 00			645 04
\$42,873 13	\$24,373 74	\$18,377 68	\$23,404 27	\$325,944 87	\$59,176 64
		\$437 39			
		5,273 06		\$187,358 01	\$35,341 92
				13,810 89	3,370 16
				10,269 25	12,990 66
		\$5,710 45		\$211,438 15	\$51,702 74
		\$12,667 23		\$114,506 72	\$7,473 90
		7,500 00		30,062 50	10,200 00
		36,312 47		94,122 56	
				29,756 39	7,991 12
		41,479 70		20,078 05	5,265 02

TABLE No. 2

ABSTRACT OF INCOME AND PROFIT AND LOSS ACCOUNTS OF  
ENDING DECEMBER

	Turlock Gas Company
Operating revenues -----	\$11,487 33
Operating expenses -----	11,474 99
Net operating revenue -----	\$12 34
Net operating loss -----	
Non-operating revenue -----	
Gross corporate income -----	\$12 34
Gross corporate loss -----	
<i>Deductions.</i>	
Non-operating revenue deductions -----	
Interest accrued on funded debt -----	
Other interest deductions -----	
Rent deductions -----	
Miscellaneous deductions -----	\$176 09
Total deductions -----	\$176 09
Net corporate income for year -----	
Net corporate loss for year -----	\$163 75
Dividends -----	
Miscellaneous additions to income -----	
Miscellaneous deductions from income -----	4,084 11
Surplus on December 31, 1912 -----	
Deficit on December 31, 1912 -----	221 27
Surplus on December 31, 1913 -----	
Deficit on December 31, 1913 -----	4,469 13

<sup>1</sup>See electric report.



—Concluded.

GAS COMPANIES OPERATING IN CALIFORNIA DURING YEAR  
BER 31, 1913.

Ukiah Gas Company	Ventura County Power Company <sup>1</sup>	West Side Gas Company	Western Fuel, Gas and Power Company	Western States Gas and Electric Company <sup>1</sup>	Total
\$9,150 45	\$52,116 89	\$36,185 07	\$31,059 09	\$204,994 45	\$14,130,953 72
11,644 22	38,536 00	30,302 75	31,720 22	103,740 64	9,607,751 67
-----	\$13 580 89	\$5,882 32	-----	\$101,253 81	\$4,523,202 05
\$2,493 77	-----	-----	\$661 13	-----	-----
-----	-----	-----	47 50	-----	28,391 45
-----	\$13,580 89	\$5,882 32	-----	\$101,253 81	\$4,551,593 50
\$2,493 77	-----	-----	\$613 63	-----	-----
-----	-----	-----	-----	-----	-----
\$1,390 58	-----	-----	-----	-----	\$12,769 80
-----	-----	\$3,000 00	-----	-----	813,980 55
-----	-----	1,626 90	\$1,136 72	-----	52,463 53
-----	-----	-----	-----	-----	462 93
185 25	-----	1,426 68	774 41	-----	56,504 73
-----	-----	-----	-----	-----	-----
\$1,575 83	-----	\$6,053 58	\$1,911 13	-----	\$936,181 54
-----	-----	-----	-----	-----	-----
-----	-----	-----	-----	-----	\$530,698 02
\$4,069 60	-----	\$171 26	\$2,524 76	-----	-----
-----	-----	-----	-----	-----	759,332 06
-----	-----	-----	-----	-----	574,356 21
-----	-----	-----	3,116 94	-----	442,170 66
-----	-----	-----	35,829 47	-----	181,449 03
8,197 13	-----	5,578 75	-----	-----	-----
-----	-----	-----	30,187 77	-----	491,384 68
12,266 73	-----	5,750 01	-----	-----	-----
-----	-----	-----	-----	-----	-----

TABLE

ABSTRACT OF OPERATING REVENUES OF GAS COMPANIES OPER

	Banning Gas and Lighting Company	Beaumont Gas and Power Company
Municipal street lighting—arc.....	\$36 00	
Municipal heat, power and lighting.....		
Commercial heat, power and lighting—flat rate.....		
Commercial heat, power and lighting—metered.....	6,968 23	\$5,520 23
Prepaid gas .....		
Other gas corporations.....		
Commissions on others' gas.....		
Rent of meters.....		
Breakdown service .....		
Joint gas rent revenue.....		
Other miscellaneous gas revenues.....		
Rent of gas appliances.....	21 87	
Gas merchandise and jobbing revenue.....		
Sale of residuals and by-products.....		
Steam sales revenue.....		
Total revenues .....	\$7,026 10	\$5,520 23

<sup>1</sup>Not segregated.

TABLE No. 3

ABSTRACT OF OPERATING REVENUES OF GAS COMPANIES OPER

	Coast Valleys Gas and Electric Company	Economic Gas Company
Municipal street lighting—arc.....		
Municipal heat, power and lighting.....	\$288 80	
Commercial heat, power and lighting—flat rate.....	406 85	
Commercial heat, power and lighting—metered.....	41,205 54	\$226,886 30
Prepaid gas .....	203 00	
Other gas corporations.....		
Commissions on others' gas.....		
Rent of meters.....		
Breakdown service .....		
Joint gas rent revenue.....		
Other miscellaneous gas revenues.....		1 38
Rent of gas appliances.....		
Gas merchandise and jobbing revenue.....		
Sale of residuals and by-products.....		
Steam sales revenue.....		
Total revenues .....	\$42,104 19	\$226,887 68

## No. 3.

ATING IN CALIFORNIA DURING YEAR ENDING DECEMBER 31, 1913.

California Natural Gas Company	Central California Gas Company	Central Natural Gas Company <sup>1</sup>	Citrus Belt Gas Company	Coalinga Gas and Power Company	Coast Counties Gas and Electric Company
					\$268 05
\$295,018 44					
29,152 96	\$64,260 65		\$93,688 21	\$17,641 51	89,408 43
			10,690 89	2,450 75	1,120 95
87,714 06					
			1,548 43	1,540 45	
\$411,885 46	\$64,260 65	\$6,735 75	\$105,927 53	\$21,632 71	\$90,797 43

—Continued.

ATING IN CALIFORNIA DURING YEAR ENDING DECEMBER 31, 1913.

Escondido Utilities Company	Hanford Gas and Power Company	Hemet- San Jacinto Gas Company	Imperial Valley Gas Company	Jackson Gas Light Company	Long Beach Consolidated Gas Company
					\$579 90
\$3,924 51					
130 50	\$24,747 37	\$8,495 26	\$28,717 24	\$5,257 33	189,662 23
		586 70	1,213 53		6,421 70
					7,794 71
	12 72			1,024 00	3,000 60
		2 35			
	350 00	425 74	470 82	283 69	1,849 38
		2 00		334 79	4 00
\$4,055 01	\$25,110 09	\$9,512 05	\$30,401 59	\$6,899 81	\$209,311 92

TABLE No. 3

ABSTRACT OF OPERATING REVENUES OF GAS COMPANIES OPER

	Los Angeles Gas and Electric Corporation	Madera Gas Company
Municipal street lighting—arc.....		
Municipal heat, power and lighting.....	\$3,399 93	
Commercial heat, power and lighting—flat rate.....		
Commercial heat, power and lighting—metered.....	2,902,067 41	\$982 57
Prepaid gas .....	71 47	
Other gas corporations.....		
Commissions on others' gas.....		
Rent of meters.....		
Breakdown service .....		
Joint gas rent revenue.....		
Other miscellaneous gas revenues.....		
Rent of gas appliances.....		
Gas merchandise and jobbing revenue.....		
Sale of residuals and by-products.....	167,478 95	
Steam sales revenue.....		
Total revenues .....	\$3,073,017 76	\$982 57

<sup>1</sup>Not segregated.

TABLE No. 3

ABSTRACT OF OPERATING REVENUES OF GAS COMPANIES OPER

	Northern Cali- fornia Power Company, Consolidated	Oakdale Gas Company
Municipal street lighting—arc.....		
Municipal heat, power and lighting.....	\$94 75	
Commercial heat, power and lighting—flat rate.....		
Commercial heat, power and lighting—metered.....	24,404 30	\$1,245 10
Prepaid gas .....	4,453 75	
Other gas corporations.....		
Commissions on others' gas.....		
Rent of meters.....		
Breakdown service .....		
Joint gas rent revenue.....		
Other miscellaneous gas revenues.....		
Rent of gas appliances.....		
Gas merchandise and jobbing revenue.....		214 34
Sale of residuals and by-products.....		
Steam sales revenue.....		
Total revenues .....	\$28,952 80	\$1,459 44

—Continued.

ATING IN CALIFORNIA DURING YEAR ENDING DECEMBER 31, 1913.

Joseph McDonald	Midland Counties Public Service Corporation	Midway Gas Company <sup>1</sup>	Modesto Gas, Light, Coal and Coke Company	Napa Valley Electric Company <sup>1</sup>	Needles Gas and Electric Company
			\$2,761 55		
	\$20 35				
	15 50				
\$15,151 00	22,310 40		37,983 63		\$6,936 10
	1,503 05		377 75		179 00
\$15,151 00	\$23,849 30	\$101,777 58	\$41,122 93	\$3,209 65	\$7,115 10

—Continued.

ATING IN CALIFORNIA DURING YEAR ENDING DECEMBER 31, 1913.

Ontario-Upland Gas Company	Oro Water, Light and Power Company	Pacific Gas and Electric Company	Palo Alto Gas Company	Pinal Dome Oil Company	Rochester Oil Company
		\$196,988 26			
	\$45 00	25,061 52			
				\$3,724 23	
\$23,680 98	14,447 90	6,124,815 97	\$43,066 41	894 40	\$7,488 83
2,040 13	4,368 15	50,220 80			9 75
		21,722 18		1,200 00	
		69,430 98	273 40		
38 70		59,355 25			
578 92	216 86				
\$26,338 73	\$19,077 91	\$6,547,594 96	\$43,339 81	\$5,818 63	\$7,498 58



TABLE No. 3

ABSTRACT OF OPERATING REVENUES OF GAS COMPANIES OPER

	Sacramento Natural Gas Company	San Diego Consolidated Gas and Electric Company
Municipal street lighting—arc.....		\$216 00
Municipal heat, power and lighting.....		3,642 00
Commercial heat, power and lighting—flat rate.....		
Commercial heat, power and lighting—metered.....	\$96,642 50	599,727 18
Prepaid gas .....	18,770 90	9,757 46
Other gas corporations.....		
Commissions on others' gas.....		
Rent of meters.....		
Breakdown service .....		
Joint gas rent revenue.....		
Other miscellaneous gas revenues.....		
Rent of gas appliances.....		
Gas merchandise and jobbing revenue.....	1,682 36	158 30
Sale of residuals and by-products.....	600 00	590 23
Steam sales revenue.....		
Total revenues .....	\$117,695 76	\$614,091 17

TABLE No. 3

ABSTRACT OF OPERATING REVENUES OF GAS COMPANIES OPER

	Turlock Gas Company
Municipal street lighting—arc.....	
Municipal heat, power and lighting.....	
Commercial heat, power and lighting—flat rate.....	
Commercial heat, power and lighting—metered.....	\$10,341 25
Prepaid gas .....	253 00
Other gas corporations.....	
Commissions on others' gas.....	
Rent of meters.....	
Breakdown service .....	
Joint gas rent revenue.....	
Other miscellaneous gas revenues.....	
Rent of gas appliances.....	
Gas merchandise and jobbing revenue.....	893 08
Sale of residuals and by-products.....	
Steam sales revenue.....	
Total revenues .....	\$11,487 33

<sup>1</sup>Revenue of Central Natural Gas Company, \$6,735.75; Midway Gas Company, \$101,777.58; Napa Valley Electric Company, \$3,209.65, not segregated.

(Continued.)

ATING IN CALIFORNIA DURING YEAR ENDING DECEMBER 31, 1913.

San Joaquin Light and Power Company	Santa Barbara Gas and Electric Company	Santa Maria Gas and Power Company	Southern California Edison Company	Southern California Gas Company	Southern Counties Gas Company of California
		\$1,167 00			
\$3,014 65			\$907 63		
142 55					
172,665 21	\$87,508 95	44,713 33	228,624 00	\$605,139 43	\$214,627 88
194 50	751 25		24,368 18	16,130 05	6,950 25
				396,742 45	
				17,715 44	
128 48		12 00		1,093 87	
	856 03	1,151 25	1,693 46	4,829 70	5,196 41
		2,486 20		147 70	
			636 72		
\$176,145 39	\$89,116 23	\$49,529 78	\$256,229 99	\$1,041,798 64	\$226,774 54

—Concluded.

ATING IN CALIFORNIA DURING YEAR ENDING DECEMBER 31, 1913.

Ukiah Gas Company	Ventura County Power Company	Western Fuel Gas and Power Company	Western States Gas and Electric Company	West Side Gas Company	Total
					\$201,168 81
	\$675 05				37,997 63
					303,232 08
\$7,714 20	50,462 18	\$29,612 16	\$199,582 69	\$34,392 85	12,438,970 80
			4,916 80		168,003 76
					515,173 40
			58 00		91,515 92
					60,652 52
1,436 25	979 66	1,388 43	436 96	1,792 22	29,972 74
					171,643 87
		58 50			695 22
\$9,150 45	\$52,116 89	\$31,059 09	\$204,994 45	\$36,185 07	\$14,130,749 73

TABLE

ABSTRACT OF OPERATING EXPENSES CLASS "A" GAS COMPANIES

	California Natural Gas Company	Citrus Belt Gas Company
<i>Production Expenses.</i>		
Superintendence .....		\$941 50
Natural gas plant labor .....		
Natural gas plant supplies and expenses .....		
Steam plant labor .....		
Steam plant supplies and expenses .....		667 70
Generating plant labor .....		7,636 84
Generating plant supplies and expenses .....		2,060 63
Fuel for steam .....		
Oil or coal for gas .....		24,928 74
Miscellaneous labor at works .....		
Miscellaneous supplies and expenses at works .....		485 88
Gas from other sources .....	\$229,419 90	
Repairs to gas wells and derricks .....		
Repairs to gas plant buildings and general structures .....		244 03
Repairs to gas holders .....		
Repairs to furnaces, boilers and accessories .....		333 04
Repairs to gas generators .....		
Repairs to purification apparatus .....		
Repairs to gas plant equipment .....		
Repairs to gas engines .....		
Repairs to miscellaneous gas plant equipment .....		
Repairs to water gas sets and accessories .....		
Repairs to accessory equipment at works .....		
Repairs to miscellaneous production equipment .....		1,545 60
Total production expenses .....	\$229,419 90	\$38,843 96
<i>Transmission Expenses.</i>		
Transmission pumping .....		\$204 34
Patrolling and inspecting .....	\$4,554 85	
General labor and supplies .....	2,475 72	
Repairs to transmission mains .....	530 75	18 19
Repairs to buildings and general structures .....		
Repairs to boosting apparatus and regulators .....		60 48
Repairs to miscellaneous transmission equipment .....	1,809 44	
Total transmission expenses .....	\$9,370 76	\$283 01

## No. 4.

OPERATING IN CALIFORNIA FOR YEAR ENDING DECEMBER 31, 1913.

Coast Counties Gas and Electric Company	Economic Gas Company	Long Beach Consolidated Gas Company	Los Angeles Gas and Electric Corporation	Midway Gas Company	Pacific Gas and Electric Company
\$1,203 24	\$2,461 36	-----	\$25,084 59	-----	\$31,008 16
-----	-----	-----	-----	-----	-----
13 46	3,119 72	\$898 50	35,833 15	-----	52,453 94
179 89	1,633 95	246 07	15,277 85	-----	5,564 32
7,139 08	3,327 93	2,955 03	36,355 98	-----	201,977 24
971 52	363 69	145 33	15,963 11	-----	27,892 31
805 33	3,632 23	2,228 62	88,449 60	-----	37,960 73
17,574 42	21,630 28	4,873 78	568,272 61	-----	1,256,006 44
3,275 85	963 60	513 64	20,361 54	-----	131,615 19
-----	474 03	412 36	22,282 23	-----	68,836 87
-----	67,698 03	80,005 93	102,222 34	-----	-----
-----	-----	-----	10,900 21	-----	-----
108 40	134 53	-----	5,068 76	-----	10,724 43
200 35	125 32	919 02	2,453 63	-----	3,194 59
869 99	709 85	148 02	4,819 22	-----	24,836 67
478 81	1,683 54	23 65	18,225 93	-----	39,221 45
703 91	248 02	20 15	2,553 80	-----	6,190 59
231 60	6 37	-----	332 16	-----	-----
133 77	-----	-----	-----	-----	1,347 22
895 12	5 31	1 92	146 19	-----	-----
258 45	-----	-----	920 24	-----	2,652 69
-----	526 85	249 05	22,524 90	-----	30,136 02
-----	142 12	5 50	72 12	-----	5,239 74
-----	-----	-----	-----	-----	-----
\$35,043 19	\$108,886 73	\$93,646 57	\$998,120 16	-----	\$1,936,858 60
-----	-----	\$161 00	-----	-----	\$25,655 56
-----	-----	-----	-----	-----	3,202 08
-----	-----	-----	\$734 52	-----	9,194 92
-----	-----	-----	104 50	-----	9,632 23
-----	-----	-----	-----	-----	85 95
-----	-----	18 61	-----	-----	3,232 47
-----	-----	-----	-----	-----	25 25
-----	-----	-----	-----	-----	-----
-----	-----	\$179 61	\$839 02	-----	\$51,028 46

TABLE NO. 4

ABSTRACT OF OPERATING EXPENSES CLASS "A" GAS COMPANIES

	San Diego Consolidated Gas and Electric Company
<i>Production Expenses</i>	
Superintendence .....	\$2,825 64
Natural gas plant labor .....	
Natural gas plant supplies and expenses .....	
Steam plant labor .....	
Steam plant supplies and expenses .....	
Generating plant labor .....	40,146 41
Generating plant supplies and expenses .....	4,752 94
Fuel for steam .....	19,508 24
Oil or coal for gas .....	119,630 91
Miscellaneous labor at works .....	4,369 56
Miscellaneous supplies and expenses at works .....	9,139 63
Gas from other sources .....	
Repairs to gas wells and derricks .....	
Repairs to gas plant buildings and general structures .....	192 74
Repairs to gas holders .....	1,004 97
Repairs to furnaces, boilers and accessories .....	
Repairs to gas generators .....	6,807 48
Repairs to purification apparatus .....	3,683 56
Repairs to gas plant equipment .....	324 67
Repairs to gas engines .....	
Repairs to miscellaneous gas plant equipment .....	744 80
Repairs to water gas sets and accessories .....	2,627 17
Repairs to accessory equipment at works .....	6,572 25
Repairs to miscellaneous production equipment .....	941 64
Total production expenses .....	\$223,272 61
<i>Transmission Expenses.</i>	
Transmission pumping .....	\$1,833 57
Patrolling and inspecting .....	1,489 46
General labor and supplies .....	528 64
Repairs to transmission mains .....	6,042 28
Repairs to buildings and general structures .....	7 50
Repairs to boosting apparatus and regulators .....	223 19
Repairs to miscellaneous transmission equipment .....	15 58
Total transmission expenses .....	\$10,140 22

<sup>1</sup>Credit item.



Continued.

OPERATING IN CALIFORNIA FOR YEAR ENDING DECEMBER 31, 1913.

San Joaquin Light and Power Company	Southern California Edison Company	Southern California Gas Company	Southern Counties Gas Company of California	Western States Gas and Electric Company	Total
\$66 66	\$5,263 41	\$3,828 69	\$1,841 81	\$2,829 38	\$77,354 44
				1,268 69	1,268 69
				1,930 47	1,930 47
	2,809 85	22,023 85	5,814 84	2,077 78	125,045 09
	1,657 89	6,503 98	2,075 09	129 48	33,936 22
2,724 90	4,571 53	19,555 71	5,588 70	3,305 78	335,285 13
533 81	2,128 83	8,529 52	1,557 10	579 01	65,477 80
37 90	2,297 02	3,732 50	6,532 95	2,362 20	167,547 32
6,047 82	31,074 65	205,325 38	42,344 01	19,154 84	2,316,863 88
457 47	2,583 87	2,370 56	2,141 01	781 88	169,434 17
709 42	1,366 28	2,525 65	2,369 08	269 68	108,871 11
58,856 25	53,984 09	169,452 07		904 80	762,543 41
				1,355 35	12,255 56
27 16	550 29	814 38	27 16	246 94	18,138 82
91 50	1,370 13	153 89	22 38	217 53	9,753 31
77 87	887 10	3,316 95	442 81	194 95	36,636 47
882 19	1,856 05	4,062 38	1,181 09	201 07	74,623 64
261 74	531 38	592 29	281 18	216 70	15,283 32
42 93	17 42	6,287 50	99 28	245 94	7,587 87
				1,231 33	1,249 66
44 19	362 52	23 07	134 23		2,357 35
					6,458 55
2 44	576 83	3,489 68	304 51	186 28	64,568 81
3 29	133 23		34 44	29 75	8,147 43
\$70,867 54	\$114,022 37	\$462,588 05	\$72,791 67	\$38,257 17	\$4,422,618 52
\$321 26			\$1,830 56		\$30,006 29
			47 22		9,293 61
			535 07		13,468 87
			45 63		16,373 58
			20 98		114 43
39 50			88 10		3,662 35
76 91			24 35		1,951 53
\$437 67			\$2,591 91		\$74,870 66

TABLE No. 4

ABSTRACT OF OPERATING EXPENSES CLASS "A" GAS COMPANIES

	California Natural Gas Company	Coast Counties Gas and Electric Company
<i>Distribution Expenses.</i>		
Superintendence .....	\$87 90	\$1,561 70
Setting and removing meters and regulators.....	141 16	1,118 22
Inspecting and patrolling.....	83 67	99 73
Gas meter operations.....	1,889 46	76 19
Commercial arc labor.....		91 01
Commercial arc supplies and repairs.....		109 81
Commercial lamp installations and renewals.....		8 64
Inspection and repairs to consumers' installations.....		1,203 22
Municipal street arc labor.....		
Municipal street arc supplies.....		
General labor and supplies.....	354 71	758 62
Repairs to distribution mains.....	9 61	406 36
Repairs to gas services.....		269 57
Repairs to gas meters and regulators.....	193 55	457 17
Repairs to municipal street lighting system.....		
Repairs to commercial arc lamps.....		8 09
Repairs to miscellaneous distributing equipment.....	626 06	416 10
Total distribution expenses.....	\$3,386 12	\$6,584 43
<i>Commercial Expenses.</i>		
New business expenses.....		\$2,249 21
Free installation expenses.....		1,409 74
Commercial department salaries and expenses.....	\$506 80	4,912 91
Commercial department indexing.....	628 16	638 30
Commercial department collections.....	28 97	1,530 44
Miscellaneous commercial expenses.....	205 44	953 12
Total commercial expenses .....	\$1,369 37	\$11,693 72

<sup>1</sup>Credit item.

—(Continued.)

OPERATING IN CALIFORNIA FOR YEAR ENDING DECEMBER 31, 1913.

Citrus Belt Gas Company	Economic Gas Company	Long Beach Consolidated Gas Company	Los Angeles Gas and Electric Corporation	Midway Gas Company	Pacific Gas and Electric Company
\$1,483 15	\$7,944 78	\$1,452 86	\$30,548 09	\$3,606 45	\$36,109 64
1,831 12	1,233 47	5,653 73	27,875 87	-----	85,494 78
-----	-----	17 20	13,261 48	14,176 58	12,459 36
-----	98 72	130 04	7,478 34	5,489 55	-----
144 33	-----	4 65	1,121 47	-----	35,822 08
55 92	909 28	135 49	4,371 66	-----	14,335 01
-----	-----	96	4,231 08	-----	62 77
1,744 42	5,759 36	3,544 83	12,104 89	-----	55,443 28
-----	-----	-----	-----	-----	28 45
-----	-----	-----	-----	-----	100,448 13
405 60	471 77	311 26	18,882 93	-----	171,843 38
806 96	1,724 04	1,206 34	8,656 61	18,163 32	88,591 10
683 30	420 25	788 36	17,247 81	-----	81,495 14
4,893 52	2,167 98	4,204 05	17,999 21	746 95	58,353 96
-----	-----	-----	-----	-----	4,679 60
-----	-----	6 95	697 60	-----	19,534 42
2,706 37	20 01	14 53	1,178 85	-----	50,061 08
-----	-----	-----	-----	-----	-----
\$14,754 69	\$20,749 66	\$17,298 35	\$168,655 89	\$42,182 85	\$814,762 18
-----	-----	-----	-----	-----	-----
\$1,315 95	\$711 37	\$1,101 15	\$41,230 22	-----	\$74,173 00
33 00	-----	10 40	14,834 43	-----	7,499 52
9,526 91	9,309 30	6,069 93	66,680 22	-----	300,878 21
1,026 89	1,907 74	1,534 77	24,009 28	-----	35,497 84
952 08	6,069 49	2,153 95	72,004 12	-----	101,395 05
515 31	10,967 74	-----	16,206 47	-----	1,770 15
-----	-----	-----	-----	-----	-----
\$13,370 14	\$28,965 64	\$10,870 20	\$234,964 74	-----	\$521,213 77

TABLE No. 4

ABSTRACT OF OPERATING EXPENSES CLASS "A" GAS COMPANIES

	San Diego Consolidated Gas and Electric Company
<i>Distribution Expenses.</i>	
Superintendence .....	
Setting and removing meters and regulators .....	\$10,291 77
Inspecting and patrolling .....	1,345 14
Gas meter operations .....	3,283 96
Commercial arc labor .....	
Commercial arc supplies and repairs .....	
Commercial lamp installations and renewals .....	
Inspection and repairs to consumers' installations .....	11,472 55
Municipal street arc labor .....	166 79
Municipal street arc supplies .....	46 76
General labor and supplies .....	1,953 07
Repairs to distribution mains .....	5,245 17
Repairs to gas service .....	11,524 52
Repairs to gas meters and regulators .....	7,362 42
Repairs to municipal street lighting system .....	
Repairs to commercial arc lamps .....	
Repairs to miscellaneous distribution equipment .....	2,507 64
Total distribution expenses .....	\$55,199 79
<i>Commercial Expenses.</i>	
New business expenses .....	\$3,257 99
Free installation expenses .....	
Commercial department salaries and expenses .....	15,028 75
Commercial department indexing .....	4,186 08
Commercial department collections .....	4,452 65
Miscellaneous commercial expenses .....	
Total commercial expenses .....	\$26,925 47

\*Credit item.

—Continued.

OPERATING IN CALIFORNIA FOR YEAR ENDING DECEMBER 31, 1913.

San Joaquin Light and Power Corporation	Southern California Edison Company	Southern California Gas Company	Southern Counties Gas Company of California	Western States Gas and Electric Company	Total
\$954 06	\$9,163 51	\$6,875 51	\$123 20	\$1,865 69	\$101,776 54
2,827 54	6,786 49	1,754 13	2,688 74	4,386 89	152,083 91
23 29	1,259 21	69 55	104 74	214 53	43,414 48
149 44	63 46	364 79	1,417 91	1,491 72	21,933 58
78 13	-----	458 29	212 01	-----	40,931 97
50 43	1 50	247 97	466 37	34 55	20,547 01
9 64	-----	26,513 17	117 48	196 78	31,003 64
4,382 83	5,768 19	-----	1,312 58	1,787 37	104,523 52
-----	-----	-----	46	-----	195 70
-----	-----	-----	15 35	-----	100,510 24
232 42	128 39	234 80	6,913 56	94 63	202,585 14
892 34	4,071 09	9,531 30	218 73	1,702 73	141,225 70
875 61	757 29	2,757 68	101 48	2,259 55	119,180 56
1,180 47	5,144 07	8,094 79	481 65	1,100 85	112,380 64
-----	-----	-----	3 35	-----	4,682 95
-----	1 68	442 23	77 14	-----	20,768 11
96 33	3 00	-----	2,352 81	5 85	59,988 63
\$11,752 53	\$33,147 88	\$57,344 21	\$16,772 60	\$15,141 14	\$1,277,732 32
\$2,588 15	\$6,153 44	\$17,485 52	\$3,925 82	\$2,416 39	\$156,608 21
212 73	-----	3,591 10	98 32	4,606 30	32,295 54
5,880 15	6,206 26	31,354 89	14,346 91	2,843 37	473,544 61
1,233 29	1,971 51	5,942 02	2,846 22	1,553 15	82,975 25
2,651 76	2,839 21	9,244 70	3,672 74	1,728 94	208,724 10
-----	-----	528 56	1,422 27	8 25	32,577 31
\$12,566 08	\$17,170 42	\$68,146 79	\$26,312 28	\$13,156 40	\$986,725 02



TABLE No. 4

ABSTRACT OF OPERATING EXPENSES CLASS "A" GAS COMPANIES

	California Natural Gas Company	Citrus Belt Gas Company
<i>General and Miscellaneous Expenses.</i>		
Salaries of general officers.....	\$3,037 14	\$918 30
Salaries of general office clerks.....	2,952 50	1,018 50
General office supplies and incidental expenses.....	4,403 22	1,235 66
Law expenses—general.....	1,430 00	556 45
Railroad Commission expenses.....	76 00	
Injuries and damages.....		
Relief department and expenses.....		
Gas franchise requirements.....		
Other general expenses.....	34 78	312 47
Insurance.....	236 50	125 09
Repairs to general structures.....		
Repairs to general equipment—office equipment.....		
Repairs to general equipment—shop equipment.....		
Repairs to general equipment—store equipment.....		
Repairs to general equipment—stable and garage equipment.....	1,064 19	
Repairs to general equipment—miscellaneous.....	13 35	
Repairs to telephone lines.....		
Repairs to roads, trestles and bridges.....		
Gas expenses transferred—Credit.....		
Joint operating expenses—Credit.....		
Undistributed adjustments—balance.....		
Extraordinary repairs.....		
Repairs charged to reserves—Credit.....		
Total general and miscellaneous expenses.....	\$13,247 68	\$4,166 47
<i>Other Operating Expenses.</i>		
Residual expense.....		
Steam sales expense.....		
Total other operating expenses.....		

<sup>1</sup>Credit item.

—Continued.

OPERATING IN CALIFORNIA DURING YEAR ENDING DECEMBER 31, 1913.

Coast Counties Gas and Electric Company	Economic Gas Company	Long Beach Consolidated Gas Company	Los Angeles Gas and Electric Corporation	Midway Gas Company	Pacific Gas and Electric Company
		\$2,100 00	\$43,247 25	\$4,373 29	\$70,231 38
		3,416 17	24,631 36	2,623 02	111,350 89
	\$1,359 77	6,641 78	24,566 33	3,252 12	36,685 60
	2,079 00	1 00	13,216 68	262 88	17,413 00
	1,544 33		151 89		492 65
	331 22	900 00	7,009 91	961 10	24,004 49
	476 23		962 32		2,921 25
\$548 27					
	60 00	25 38	46,316 30		107,361 07
	679 19	201 91	359 12	137 31	6,189 15
11 93	1 14		2,736 41	387 74	
47 70	41 71		219 12		
14 32					
	21 02				
345 33	4 63				
8 95	24 97			18 80	
95				2,983 39	
					12,321 68
			12,644 53		
\$977 45	\$6,623 21	\$13,286 24	\$160,772 16	\$14,999 65	\$374,327 80
			\$112,133 36		
			\$112,133 36		

TABLE NO. 4

## ABSTRACT OF OPERATING EXPENSES CLASS "A" GAS COMPANIES

	San Diego Consolidated Gas and Electric Company
<i>General and Miscellaneous Expenses.</i>	
Salaries of general officers.....	\$23,599 75
Salaries of general office clerks.....	7,812 35
General office supplies and incidental expenses.....	7,096 08
Law expenses—general.....	4,196 94
Railroad Commission expenses.....	1,391 97
Injuries and damages.....	54 45
Relief departments and expenses.....	64 62
Gas franchise requirements.....	
Other general expenses.....	2,678 31
Insurance.....	5,544 08
Repairs to general structures.....	328 07
Repairs to general equipment—office equipment.....	271 03
Repairs to general equipment—shop equipment.....	557 60
Repairs to general equipment—store equipment.....	99 60
Repairs to general equipment—stable and garage equipment.....	
Repairs to general equipment—miscellaneous.....	16 51
Repairs to telephone lines.....	
Repairs to roads, trestles and bridges.....	
Gas expenses transferred—Credit.....	18,104 50
Joint operating expenses—Credit.....	
Undistributed adjustments—balance.....	
Extraordinary repairs.....	
Repairs charged to reserves—Credit.....	
Total general and miscellaneous expenses.....	\$45,606 86
<i>Other Operating Expenses.</i>	
Residual expense.....	
Steam sales expense.....	
Total other operating expenses.....	

<sup>1</sup>Credit item.

—Continued.

OPERATING IN CALIFORNIA DURING YEAR ENDING DECEMBER 31, 1913.

San Joaquin Light and Power Corporation	Southern California Edison Company	Southern California Gas Company	Southern Counties Gas Company of California	Western States Gas and Electric Company	Total
\$5,987 99	\$4,696 71	\$37,869 18	\$10,925 00	\$2,678 01	\$209,664 00
3,118 03	6,084 05	18,799 64	3,626 70	4,338 72	189,771 93
3,900 05	5,692 61	22,478 73	8,300 54	11,391 50	137,003 99
-----	743 28	16,524 56	1,330 75	1,751 77	59,506 31
-----	20 45	232 95	1,062 78	9 10	4,982 12
-----	1,057 30	2,286 21	371 20	14 16	36,990 04
-----	343 01	75 00	-----	-----	4,842 43
-----	-----	-----	50 00	-----	598 27
5 55	263 80	1,824 57	382 75	310 42	159,575 40
180 61	398 90	855 39	3,444 49	3,112 55	21,461 29
-----	118 63	-----	-----	7 78	3,591 70
60	-----	97 75	-----	31 73	709 64
-----	-----	-----	-----	3 83	575 75
-----	-----	-----	-----	17 97	138 59
-----	-----	-----	87 00	293 79	1,794 94
6 67	-----	-----	3 30	4 86	97 41
-----	92 17	-----	-----	-----	3,076 51
-----	-----	-----	-----	-----	10,426 18
-----	193 82	-----	-----	837 96	1,612 75
-----	-----	-----	-----	-----	-----
\$13,199 50	\$19,704 73	\$101,043 98	\$29,584 51	\$24,804 15	\$822,344 39
-----	-----	\$119 28	-----	-----	\$112,252 64
-----	-----	\$119 28	-----	-----	\$112,252 64

TABLE No. 4

ABSTRACT OF OPERATING EXPENSES CLASS "A" GAS COMPANIES

	California Natural Gas Company	Citrus Belt Gas Company
<i>Taxes.</i>		
Taxes .....	\$22,473 63	\$4,943 76
<i>General Amortization of Capital.</i>		
Amortization of franchises and patents .....		\$27 30
Depreciation of plant equipment—		
Depreciation of production capital .....	\$21,638 92	
Depreciation of transmission capital .....	3,589 71	
Depreciation of distribution capital .....	17 38	
Depreciation of general capital .....	4,209 75	9,688 88
Total general amortization of capital .....	\$29,455 76	\$9,716 18
<i>Recapitulation of Expenses.</i>		
Production expenses .....	\$229,419 90	\$38,843 96
Transmission expenses .....	9,370 76	283 01
Distribution expenses .....	3,386 12	14,754 69
Commercial expenses .....	1,369 37	13,370 14
General and miscellaneous expenses .....	13,247 68	4,166 47
Other operating expenses .....		
Taxes .....	22,473 63	4,943 76
General amortization of capital .....	29,455 76	9,716 18
Total operating expenses .....	\$308,723 22	\$86,078 21

TABLE No. 4

ABSTRACT OF OPERATING EXPENSES CLASS "A" GAS COMPANIES

	San Diego Consolidated Gas and Electric Company
<i>Taxes.</i>	
Taxes .....	\$24,726 56
<i>General Amortization of Capital.</i>	
Amortization of franchises and patents .....	
Depreciation of plant equipment—	
Depreciation of production capital .....	
Depreciation of transmission capital .....	
Depreciation of distribution capital .....	
Depreciation of general capital .....	
Total general amortization of capital .....	
<i>Recapitulation of Expenses.</i>	
Production expenses .....	\$223,272 61
Transmission expenses .....	10,140 22
Distribution expenses .....	55,199 79
Commercial expenses .....	26,925 47
General and miscellaneous expenses .....	45,606 86
Other operating expenses .....	
Taxes .....	24,726 56
General amortization of capital .....	
Total operating expenses .....	\$385,871 51



—Continued.

OPERATING IN CALIFORNIA DURING YEAR ENDING DECEMBER 31, 1913.

Coast Counties Gas and Electric Company	Economic Gas Company	Long Beach Consolidated Gas Company	Los Angeles Gas and Electric Corporation	Midway Gas Company	Pacific Gas and Electric Company
	\$6,785 69	\$7,133 24	\$142,552 67		\$262,116 89
			\$199,324 51		
			2,145 18	\$68,068 17	
			309,068 74		
	\$24,000 00	\$24,500 00	5,422 71		
	\$24,000 00	\$24,500 00	\$515,961 14	\$68,068 17	
\$35,043 19	\$108,886 73	\$93,646 57	\$998,120 16		\$1,936,858 60
		179 61	839 02		51,028 46
6,584 43	20,749 66	17,298 35	168,655 89	\$42,182 85	814,762 18
11,693 72	28,965 64	10,870 20	234,964 74		521,213 77
977 45	6,623 21	13,286 24	160,772 16	14,999 65	374,327 80
			112,133 36		
	6,785 69	7,133 24	142,552 67		262,116 89
	24,000 00	24,500 00	515,961 14	68,068 17	
\$54,298 79	\$196,010 93	\$166,914 21	\$2,333,999 14	\$125,250 67	\$3,960,307 70

—Continued.

OPERATING IN CALIFORNIA DURING YEAR ENDING DECEMBER 31, 1913.

San Joaquin Light and Power Corporation	Southern California Edison Company	Southern California Gas Company	Southern Counties Gas Company of California	Western States Gas and Electric Company	Total
\$5,922 04	\$9,699 42	\$26,611 46	\$10,969 97	\$12,381 78	\$536,317 11
					\$27 30
\$8,926 55			\$2,910 00		232,799 98
			1,300 00		75,103 06
9,600 35			5,010 00		323,696 47
	\$39,080 90				106,902 24
\$18,526 90	\$39,080 90		\$9,220 00		\$738,529 05
\$70,867 54	\$114,022 37	\$462,588 05	\$72,791 67	\$38,257 17	\$4,422,618 52
437 67			2,591 91		74,870 66
11,752 53	33,147 88	57,344 21	16,772 60	15,141 14	1,277,732 32
12,566 08	17,170 42	68,146 79	26,312 28	13,156 40	986,725 02
13,199 50	19,704 73	101,043 98	29,584 51	24,804 15	822,344 39
		119 28			112,252 64
5,922 04	9,699 42	26,611 46	10,969 97	12,381 78	536,317 11
18,526 90	39,080 90		9,220 00		738,529 05
\$133,272 26	\$232,825 72	\$715,853 77	\$168,242 94	\$103,740 64	\$8,971,389 71

TABLE No. 4

ABSTRACT OF OPERATING EXPENSES CLASS "B" GAS COMPANIES

	Central California Gas Company
<i>Production Expenses.</i>	
Superintendence .....	\$640 10
Natural gas plant labor and supplies.....	
Steam plant labor and supplies.....	1,522 03
Gas generation labor and supplies.....	2,160 60
Fuel for steam.....	3,329 80
Oil or coal for gas.....	10,302 68
Miscellaneous labor and supplies.....	
Gas from other sources.....	
Repairs to gas wells and derricks.....	
Repairs to structures and holders.....	
Repairs to furnaces, boilers and accessories.....	269 04
Repairs to gas plant equipment.....	210 10
Repairs to miscellaneous production equipment.....	910 07
Total production expenses.....	\$19,344 42
<i>Transmission Expenses.</i>	
Transmission pumping .....	
General labor and supplies.....	\$2,018 77
Repairs to mains and structures.....	
Repairs to transmission equipment.....	
Total transmission expenses.....	\$2,018 77
<i>Distribution Expenses.</i>	
Superintendence .....	
Setting and removing meters and regulators.....	
Inspecting and patrolling.....	
Gas meter operations.....	
Commercial lamp labor and supplies.....	
Inspection and repairs to consumers' installations.....	
Municipal street lamp labor and supplies.....	
General labor and supplies.....	\$1,469 56
Repairs to mains and services.....	310 26
Repairs to gas meters and regulators.....	197 60
Repairs to municipal street lighting system.....	
Repairs to commercial arc lamps.....	37 56
Repairs to miscellaneous distribution equipment.....	
Total distribution expenses.....	\$2,014 98

—Continued.

OPERATING IN CALIFORNIA DURING YEAR ENDING DECEMBER 31, 1913.

Coast Valleys Gas and Electric Company	Hanford Gas and Power Company	Imperial Valley Gas Company	Modesto Gas, Light, Coal and Coke Company	Northern California Power Company, Consolidated	Ontario- Upland Gas Company
\$680 00		\$0 90	\$2,400 00	\$74 96	\$600 00
1,228 95	\$782 00	\$520 90	2,708 19		
6,181 67	2,222 85	2,451 81	4,708 20	3,329 80	2,146 32
488 77	1,447 24	256 03		2,090 66	108 68
8,671 14	2,825 70	8,962 49	5,056 87	6,145 05	4,509 36
503 60	336 95	118 76		717 10	424 86
334 17		203 95		190 14	52 55
403 66	394 89	85		320 19	361 95
1,317 93	916 03	507 36		872 46	841 49
110 66		12 53		60 79	106 83
\$19,920 55	\$8,925 66	\$13,035 58	\$14,873 26	\$13,801 15	\$9,152 04
		\$1,055 60		\$4,460 00	
		94 09			
\$2 80		270 25			
16 51		81 95		45 44	
\$19 31		\$1,501 89		\$4,505 44	
\$131 01		\$145 70		\$298 74	\$502 00
1,183 61	\$2,016 83	731 06	\$1,641 80	582 52	291 27
3 54		53 25		54 20	
6 72		28 35		68 56	
48 58		5 00		2 64	1 39
262 26		492 05		300 80	662 59
6 79			550 72	25	
38 07		158 03		69 74	580 41
665 59	3 75	209 20		294 82	74 21
731 78	59 95	353 83		335 20	380 91
2 22					
31 28					
267 08		51 81		79 73	
\$3,378 63	\$2,080 53	\$2,228 28	\$2,192 52	\$2,087 20	\$2,492 78

TABLE No. 4

ABSTRACT OF OPERATING EXPENSES CLASS "B" GAS COMPANIES

	Palo Alto Gas Company
<i>Production Expenses.</i>	
Superintendence .....	
Natural gas plant labor and supplies.....	
Steam plant labor and supplies.....	
Gas generation labor and supplies.....	
Fuel for steam.....	
Oil or coal for gas.....	
Miscellaneous labor and supplies.....	
Gas from other sources.....	\$20,107 97
Repairs to gas wells and derricks.....	
Repairs to structures and holders.....	
Repairs to furnaces, boilers and accessories.....	
Repairs to gas plant equipment.....	
Repairs to miscellaneous production equipment.....	
Total production expenses.....	\$20,107 97
<i>Transmission Expenses.</i>	
Transmission pumping .....	
General labor and supplies.....	
Repairs to mains and structures.....	
Repairs to transmission equipment.....	
Total transmission expenses.....	
<i>Distribution Expenses.</i>	
Superintendence .....	\$1,800 00
Setting and removing meters and regulators.....	406 47
Inspecting and patrolling.....	
Gas meter operations.....	
Commercial lamp labor and supplies.....	
Inspection and repairs to consumers' installations.....	495 03
Municipal street lamp labor and supplies.....	
General labor and supplies.....	
Repairs to mains and services.....	9 10
Repairs to gas meters and regulators.....	410 69
Repairs to municipal street lighting system.....	
Repairs to commercial arc lamps.....	
Repairs to miscellaneous distribution equipment.....	97 86
Total distribution expenses.....	\$3,219 15

—Continued.

OPERATING IN CALIFORNIA DURING YEAR ENDING DECEMBER 31, 1913.

Sacramento Natural Gas Company	Santa Barbara Gas and Electric Company	Santa Maria Gas and Power Company	Ventura County Power Company	Western Fuel Gas and Power Company	Total
\$944 75	\$679 60	-----	\$28 29	-----	\$6,048 60
1,965 60	3,550 35	-----		\$11,511 06	23,789 08
1,985 85	4,445 17	-----	5,603 04	-----	35,235 31
1,735 29	-----	-----	-----	-----	9,456 47
8,114 10	22,916 97	-----	13,374 93	-----	90,879 29
803 64	1,237 59	-----	-----	-----	4,142 50
-----	-----	\$4,336 86	-----	-----	24,444 83
484 58	-----	-----	-----	-----	484 58
1,029 98	14 67	-----	151 84	-----	1,977 30
277 00	509 94	-----	574 03	-----	3,111 55
823 13	945 74	-----	1,577 30	-----	8,011 54
39 27	977 72	-----	154 54	-----	2,372 41
\$18,203 19	\$35,277 75	\$4,336 86	\$21,463 97	\$11,511 06	\$209,953 46
-----	-----	\$2,070 00	\$73 24	-----	\$7,658 84
-----	-----	-----	-----	-----	2,112 86
-----	-----	-----	300 77	-----	573 82
-----	-----	1,097 92	214 74	-----	1,456 56
-----	-----	\$3,167 92	\$588 75	-----	\$11,802 08
\$1,532 75	\$1,441 35	\$983 42	\$373 33	\$1,154 67	\$8,362 97
1,251 80	1,545 86	-----	1,040 33	354 89	11,046 44
-----	232 40	-----	570 36	-----	913 75
186 80	-----	-----	-----	-----	290 43
-----	-----	-----	-----	1 50	59 11
2,445 22	1,404 96	-----	439 09	32 54	6,534 64
-----	-----	-----	-----	-----	557 76
1,719 64	353 59	-----	-----	2,149 19	6,538 23
736 72	1,340 82	1,686 94	2,430 40	82 86	7,844 67
650 08	989 82	-----	293 07	525 06	4,927 99
-----	-----	-----	-----	-----	2 22
-----	-----	-----	-----	-----	68 84
-----	3 17	-----	215 56	116 55	831 76
\$8,523 01	\$7,311 97	\$2,670 36	\$5,362 14	\$4,417 26	\$47,978 81



TABLE NO. 4

ABSTRACT OF OPERATING EXPENSES CLASS "B" GAS COMPANIES

	Central California Gas Company
<i>Commercial Expenses.</i>	
Promotion .....	\$1,466 57
Commercial department supplies and expenses.....	3,086 60
Total commercial expenses.....	\$4,553 17
<i>General and Miscellaneous Expenses.</i>	
Salaries and expenses of general officers.....	\$1,812 60
Law expenses—general .....	
Railroad commission expenses.....	
Injuries and damages.....	
Relief department and expenses.....	
Gas franchise requirements.....	
Other general expenses.....	801 03
Insurance .....	
Repairs to miscellaneous equipment.....	
Gas expenses transferred.....	Cr.
Joint operating expenses.....	Cr.
Undistributed adjustments—balance .....	
Extraordinary repairs .....	
Repairs charged to reserves.....	Cr.
Total general and miscellaneous expenses.....	\$2,613 63
<i>Other Operating Expenses.</i>	
Other expenses .....	\$410 00
<i>Taxes.</i>	
Taxes .....	\$2,970 51
<i>General Amortization of Capital.</i>	
Amortization of franchises and patents.....	
Depreciation of plant and equipment.....	
Total general amortization of capital.....	
<i>Recapitulation of Expenses.</i>	
Production expenses .....	\$19,344 42
Transmission expenses .....	2,018 77
Distribution expenses .....	2,014 98
Commercial expenses .....	4,553 17
General and miscellaneous expenses.....	2,613 63
Other operating expenses.....	410 00
Taxes .....	2,970 51
General amortization of capital.....	
Total operating expenses.....	\$33,925 48

<sup>1</sup>Credit item.

—Continued.

OPERATING IN CALIFORNIA DURING YEAR-ENDING DECEMBER 31, 1913.

Coast Valleys Gas and Electric Company	Hanford Gas and Power Company	Imperial Valley Gas Company	Modesto Light, Coal and Coke Company	Northern California Power Company Consolidated	Ontario- Upland Gas Company
\$527 00		\$753 92	\$511 00		\$368 48
2,335 00	\$17 69	752 42		\$2,940 34	1,063 58
\$2,862 00	\$17 69	\$1,506 34	\$511 00	\$2,940 34	\$1,432 06
\$4,064 00	\$1,490 54	\$3,422 47	\$6,255 65	\$375 99	\$2,218 06
263 00	250 00	91 48	420 00		
1,600 59					180 68
44 00					
53 00	143 45	47 67	3,543 79		45 00
646 00	62 55		573 41		10 40
532 00	97 74	41 83			23 50
136 00					198 38
\$7,166 59	\$2,044 28	\$3,603 45	\$10,792 85	\$375 99	\$2,676 02
					\$2 15
\$1,788 00	\$1,233 92	\$833 28	\$2,303 13		\$1,221 82
	\$3,325 34				\$4,361 64
	\$3,325 34				\$4,361 64
\$19,920 55	\$8,925 66	\$13,035 58	\$14,873 26	\$13,801 15	\$9,152 04
19 31		1,501 89		4,505 44	
3,378 63	2,080 53	2,228 28	2,192 52	2,087 20	2,492 78
2,862 00	17 69	1,506 34	511 00	2,940 34	1,432 06
7,166 59	2,044 28	3,603 45	10,792 85	375 99	2,676 02
					2 15
1,788 00	1,233 92	833 28	2,303 13		1,221 82
	3,325 34				4,361 64
\$35,135 08	\$17,627 42	\$22,708 82	\$30,672 76	\$23,710 12	\$21,338 51

TABLE No. 4

ABSTRACT OF OPERATING EXPENSES CLASS "B" GAS COMPANIES

		Palo Alto Gas Company
<i>Commercial Expenses.</i>		
Promotion .....		\$426 59
Commercial department supplies and expenses.....		2,508 10
Total commercial expenses.....		\$2,934 69
<i>General and Miscellaneous Expenses.</i>		
Salaries and expenses of general officers.....		\$3,504 16
Law expenses—general .....		85 60
Railroad commission expenses.....		1,689 85
Injuries and damages.....		
Relief department and expenses.....		
Gas franchise requirements.....		750 69
Other general expenses.....		2 90
Insurance .....		194 12
Repairs to miscellaneous equipment.....		
Gas expenses transferred.....	Cr.	
Joint operating expenses.....	Cr.	
Undistributed adjustments—balance.....		
Extraordinary repairs .....		
Repairs charged to reserves.....	Cr.	
Total general and miscellaneous expenses.....		\$6,227 32
<i>Other Operating Expenses.</i>		
Other expenses .....		
<i>Taxes.</i>		
Taxes .....		\$1,906 34
<i>General Amortization of Capital.</i>		
Amortization of franchises and patents.....		
Depreciation of plant and equipment.....		\$2,473 38
Total general amortization of capital.....		\$2,473 38
<i>Recapitulation of Expenses.</i>		
Production expenses .....		\$20,107 97
Transmission expenses .....		
Distribution expenses .....		3,219 15
Commercial expenses .....		2,934 69
General and miscellaneous expenses.....		6,227 32
Other operating expenses.....		
Taxes .....		1,906 34
General amortization of capital.....		2,473 38
Total operating expenses.....		\$36,868 85

<sup>1</sup>Credit item.

—Continued.

OPERATING IN CALIFORNIA DURING YEAR ENDING DECEMBER 31, 1913.

Sacramento Natural Gas Company	Santa Barbara Gas and Electric Company	Santa Maria Gas and Power Company	Ventura County Power Company	Western Fuel Gas and Power Company	Total
\$1,214 30	\$470 04		\$110 94	\$63 70	\$5,912 54
5,400 91	3,045 05		2,764 02		23,913 71
\$6,615 21	\$3,515 09		\$2,874 96	\$63 70	\$29,826 25
\$10,403 92	\$3,628 11	\$6,206 11	\$2,178 47	\$6,774 68	\$52,334 76
100 00	289 26		159 90		1,659 24
299 35	3 64				3,774 11
55 25	419 65		99 39		618 29
					750 69
680 00	108 47	1,314 90	102 83	36 00	6,879 04
870 20	383 99	120 82	90 46	29 76	2,981 71
1,277 68	1,698 48		386 31	510 60	4,568 14
	198 41			51 15	115 12
			12,846 68		12,846 68
\$13,686 40	\$6,433 19	\$7,641 83	\$170 68	\$7,402 19	\$70,834 42
					\$412 15
\$5,237 09	\$3,298 22	\$2,869 64	\$2,377 78	\$1,927 25	\$27,966 98
\$27,667 80	\$8,906 27	\$10,640 49	\$5,697 72	\$6,398 76	\$69,471 40
\$27,667 80	\$8,906 27	\$10,640 49	\$5,697 72	\$6,398 76	\$69,471 40
\$18,203 19	\$35,277 75	\$4,336 86	\$21,463 97	\$11,511 06	\$209,953 46
		3,167 92	588 75		11,802 08
8,523 01	7,311 97	2,670 36	5,362 14	4,417 26	47,978 81
6,615 21	3,515 09		2,874 96	63 70	29,826 25
13,686 40	6,433 19	7,641 83	170 68	7,402 19	70,834 42
					412 15
5,237 09	3,298 22	2,869 64	2,377 78	1,927 25	27,966 98
27,667 80	8,906 27	10,640 49	5,697 72	6,398 76	69,471 40
\$79,932 70	\$64,742 49	\$31,327 10	\$38,536 00	\$31,720 22	\$468,245 55

TABLE No. 4

ABSTRACT OF OPERATING EXPENSES CLASS "C" GAS COMPANIES

	Banning Gas and Lighting Company
Production expenses and repairs to capital.....	\$4,640 76
Transmission expenses and repairs to capital.....	21 68
Distribution expenses and repairs to capital.....	428 71
Commercial department labor, supplies and expenses.....	
Salaries and expenses of general officers.....	553 89
Miscellaneous general expenses.....	5 00
Miscellaneous general expenses, repairs and adjustments.....	9 75
Other expenses .....	19 75
Taxes .....	357 88
Depreciation, etc. ....	
Total operating expenses.....	\$6,037 42

<sup>1</sup>Not segregated.<sup>2</sup>Expenses not segregated between gas and electric. Included in electric report.

TABLE No. 4

ABSTRACT OF OPERATING EXPENSES CLASS "C" GAS COMPANIES

	Madera Gas Company
Production expenses and repairs to capital.....	\$531 63
Transmission expenses and repairs to capital.....	
Distribution expenses and repairs to capital.....	510 07
Commercial department labor, supplies and expenses.....	
Salaries and expenses of general officers.....	
Miscellaneous general expenses.....	
Miscellaneous general expenses, repairs and adjustments.....	372 35
Other expenses .....	
Taxes .....	
Depreciation, etc. ....	
Total operating expenses.....	\$1,414 05

TABLE No. 4

ABSTRACT OF OPERATING EXPENSES CLASS "C" GAS COMPANIES

	Pinal Dome Oil Company
Production expenses and repairs to capital.....	\$3,123 02
Transmission expenses and repairs to capital.....	
Distribution expenses and repairs to capital.....	
Commercial department labor, supplies and expenses.....	
Salaries and expenses of general officers.....	1,050 00
Miscellaneous general expenses.....	
Miscellaneous general expenses, repairs and adjustments.....	
Other expenses .....	
Taxes .....	
Depreciation, etc. ....	
Total operating expenses.....	\$4,173 02

<sup>1</sup>Central Natural Gas Company expenses of \$4,246.42 not segregated.



—Continued.

OPERATING IN CALIFORNIA DURING YEAR ENDING DECEMBER 31, 1913.

Beaumont Gas and Power Company	Coalinga Gas and Power Company	Central Natural Gas Company <sup>1</sup>	Escondido Utilities Company <sup>2</sup>	Hemet- San Jacinto Gas Company	Jackson Gas Light Company
\$3,346 42	\$7,249 17			\$3,255 87	\$4,311 98
317 51	1,135 89			214 25	160 85
31 18	1,520 66			81 49	
600 00	2,820 00			3,150 00	1,140 00
127 04	1,783 86			1,025 89	
				45 00	1,040 65
305 39	1,210 91			329 03	246 12
	1,955 85				
\$4,727 54	\$17,676 34	\$4,246 42		\$8,101 53	\$6,899 60

—Continued.

OPERATING IN CALIFORNIA DURING YEAR ENDING DECEMBER 31, 1913.

Joseph McDonald	Midland Counties Public Service Corporation	Napa Valley Electric Company	Needles Gas and Electric Company	Oakdale Gas Company	Oro Water, Light and Power Company
\$6,161 53	\$6,187 38	\$2,457 48	\$2,038 13	\$597 30	\$8,155 83
1,828 23	2,179 49	163 04	225 21	89 77	1,340 05
1,853 15	809 40	18 96			1,259 03
2,455 70	1,929 96	406 17		419 87	1,890 80
233 21	123 61	271 26		88 55	291 60
		303 89			174 54
413 51	956 37	195 50		57 27	1,162 56
	1,591 60				1,242 95
\$12,945 33	\$13,777 81	\$3,816 30	\$2,263 34	\$1,252 76	\$15,517 36

—Concluded.

OPERATING IN CALIFORNIA DURING YEAR ENDING DECEMBER 31, 1913.

Rochester Oil Company	Turlock Gas Company	Ukiah Gas Company	Westside Gas Company	Total	
\$112 39	\$3,937 81	\$2,908 78	\$12,116 04	\$71,131 52	
1,026 30			736 40	1,784 38	
1,511 15	867 46		3,552 91	14,524 59	
232 69	2,088 56	3,515 09	3,629 00	15,039 21	
304 95	1,750 00		5,469 55	23,940 89	
103 40	140 15	3,220 35	3,709 53	11,123 45	
12 45	8 10		14 58	1,981 31	
	677 17			696 92	
422 00	214 49		1,074 74	6,945 77	
2,658 62	1,791 25	2,000 00		11,240 27	
\$6,383 95	\$11,474 99	\$11,644 22	\$30,302 75	\$162,654 73	



# ELECTRIC COMPANIES.

TABLES NOS. 1 TO 4, INCLUSIVE.

TABLE

ABSTRACT OF BALANCE SHEETS OF ELECTRIC COMPANIES OPERAT

	Alturas Electric Power Company	Amador Electric, Light and Power Company
<i>Assets.</i>		
Fixed capital installed prior to January 1, 1913.....	\$314,344 71	\$75,756 32
Fixed capital installed subsequent to January 1, 1913.....	589 45	6,827 12
Total fixed capital.....	\$314,934 16	\$82,583 44
Cash and deposits.....	41 75	11,284 31
Notes receivable.....		
Accounts receivable.....	5,354 36	7,667 52
Other current assets.....		
Investments.....	3,960 70	
Working assets.....		3,930 92
Prepaid expenses.....		87 69
Unamortized discount on securities and expenses.....		45,000 00
Miscellaneous.....	3,068 05	32,415 23
Corporate deficit.....		
Totals.....	\$327,359 02	\$182,969 11
<i>Liabilities.</i>		
Capital stock.....	\$250,000 00	\$90,000 00
Funded debt.....	50,000 00	60,000 00
Invested in plant.....		
Notes payable.....	13,567 86	
Accounts payable.....	1,869 55	2,154 84
Interest and taxes accrued.....	687 50	2,546 52
Miscellaneous.....	175 00	561 00
Reserves.....	3,820 51	11,495 72
Income invested since December 31, 1912, in fixed capital.....		1,399 35
Corporate surplus.....	7,238 60	14,811 68
Totals.....	\$327,359 02	\$182,969 11

<sup>1</sup>Includes water plant.

<sup>2</sup>Includes telephone.

## No. 1.

ING IN CALIFORNIA DURING THE YEAR ENDING DECEMBER 31, 1913.

Bay Point Light and Water Company	Bell Electric Company	Bishop Light and Power Company	Boulder Creek Electric Light and Water Company <sup>1</sup>	Butte County Power, Light and Water Company <sup>1</sup>	California Telephone and Light Company <sup>2</sup>
\$22,658 39	\$60,513 04 2,859 83	\$32,978 15 .208 72	\$62,899 03 670 56	\$165,590 83	\$1,200,931 50 202,566 26
\$22,658 39	\$63,372 87	\$33,186 87 1,494 71	\$63,569 59	\$165,590 83	\$1,403,497 76 8,492 89
			206 28	2,347 47	197 00
3,188 93	7,376 10	3,924 75	3,482 02		19,296 61
					11,001 38
		1 00	207 75		
236 07		3,497 43			14,542 30
		8 01		137 49	2,771 16
					38,230 80
		346 89			1,108 07
\$26,083 39	\$70,748 97	\$42,459 66	\$67,465 64	\$168,075 79	\$1,499,137 97
\$25,000 00	\$64,347 64	\$15,600 00	\$52,000 00	\$100,000 00	\$1,074,050 00 350,000 00
					25,455 73
	3,541 50	1,397 61	98 24	65,590 83	18,293 00
		455 41	125 83		5,534 57
			150 00		11,122 22
1,083 39		775 00			3,216 50
	2,859 83				
		24,231 64	15,091 57	2,484 96	11,465 95
\$26,083 39	\$70,748 97	\$42,459 66	\$67,465 64	\$168,075 79	\$1,499,137 97



TABLE No. 1

## ABSTRACT OF BALANCE SHEETS OF ELECTRIC COMPANIES OPERAT

	California- Oregon Power Company <sup>1</sup>	California Electric Generating Company <sup>2</sup>
<i>Assets.</i>		
Fixed capital installed prior to January 1, 1913.....	\$15,570,999 19	\$8,637,885 50
Fixed capital installed subsequent to January 1, 1913.....	240,842 49	4,407 44
Total fixed capital.....	\$15,811,841 68	\$8,642,292 94
Cash and deposits.....	248,232 85	2,418 26
Notes receivable.....	1,443 13	
Accounts receivable.....	60,676 93	87,680 44
Other current assets.....	15,099 29	3,341 80
Investments.....	87,329 16	
Working assets.....	27,644 48	
Prepaid expenses.....	4,452 84	186 95
Unamortized discount on securities and expenses.....		
Miscellaneous.....	50,103 97	148 20
Corporate deficit.....		
Totals.....	\$16,010,358 63	\$8,736,068 59
<i>Liabilities.</i>		
Capital stock.....	\$10,000,000 00	\$7,500,000 00
Funded debt.....	5,600,000 00	1,141,000 00
Invested in plant.....		
Notes payable.....	6,525 00	
Accounts payable.....	323,405 87	3,197 11
Interest and taxes accrued.....	12,634 83	20,716 66
Miscellaneous.....	45,171 79	186 95
Reserves.....	352 98	56,000 00
Income invested since December 31, 1912, in fixed capital.....		4,407 44
Corporate surplus.....	22,268 16	10,560 43
Totals.....	\$16,010,358 63	\$8,736,068 59

<sup>1</sup>Includes water plant.<sup>2</sup>Credit item.<sup>3</sup>Plant leased to Great Western Power Company.<sup>4</sup>Under construction.

—Continued.

ING IN CALIFORNIA DURING THE YEAR ENDING DECEMBER 31, 1913.

Calistoga Electric Company	Callayoni Electric Plant	Central Oakland Light and Power Company	City Electric Company	California Power and Manufactur- ing Company*	Coast Counties Gas and Electric Company
\$13,500 00 1,305 74	\$8,625 00	\$1,935,285 19 26,582 59	\$7,754,333 83 193,345 01	\$777 91	\$2,581,694 00 131,856 88
\$14,805 74 519 46	\$8,625 00	\$1,961,867 78 691 20 5,525 00	\$7,947,678 84 68,605 81 637 45	\$777 91 217 83	\$2,713,550 88 4,306 39 31,993 24
868 77		24,642 86	966,054 61		59,918 80 1,428 69
			8,000 00	129,747 32	857,955 14
60 03		439 80	10,626 00		83,885 46
		3,385 92	30,838 86	100 00	4,448 75
			286,143 29	2,469 55	
			552,233 92	4,535 76	2,059,426 74
		79,635 93			
\$16,254 00	\$8,625 00	\$2,076,188 49	\$9,870,818 78	\$137,848 37	\$5,816,914 09
\$13,500 00		\$1,194,300 00 493,000 00	\$5,000,000 00 2,543,000 00	\$500 00	\$4,000,000 00 1,539,000 00
	\$8,625 00			134,650 78	108,937 41
2,186 27		384,780 13 4,108 36	675,772 21 50,500 00	2,250 00 447 59	102,237 21 27,961 73
540 00			435,167 55		3,520 95
27 73			441,848 40 724,530 62		35,256 79
\$16,254 00	\$8,625 00	\$2,076,188 49	\$9,870,818 78	\$137,848 37	\$5,816,914 09

TABLE No. 1

ABSTRACT OF BALANCE SHEETS OF ELECTRIC COMPANIES OPERAT

	Coast Valleys Gas and Electric Company	Consolidated Utilities Company
<i>Assets.</i>		
Fixed capital installed prior to January 1, 1913.....	\$5,604,879 51	\$8,197 24
Fixed capital installed subsequent to January 1, 1913 .....	77,220 09	418 32
<b>Total fixed capital.....</b>	<b>\$5,682,099 60</b>	<b>\$8,615 56</b>
Cash and deposits.....	2,619 49	
Notes receivable.....	22,030 00	
Accounts receivable.....	46,861 78	
Other current assets.....		
Investments.....	216,900 62	2,383 93
Working assets.....	31,377 20	
Prepaid expenses.....	1,215 05	
Unamortized discount on securities and expenses.....	54,725 00	
Miscellaneous.....	5,137 99	
Corporate deficit.....		
<b>Totals.....</b>	<b>\$6,062,966 73</b>	<b>\$10,999 49</b>
<i>Liabilities.</i>		
Capital stock.....	\$5,000,000 00	
Funded debt.....	901,000 00	
Invested in plant.....		\$2,581 17
Notes payable.....	51,993 48	8,000 00
Accounts payable.....	27,213 35	
Interest and taxes accrued.....	21,475 32	
Miscellaneous.....		
Reserves.....	2,152 02	
Income invested since December 31, 1912, in fixed capital.....		418 32
Corporate surplus.....	59,132 56	
<b>Totals.....</b>	<b>\$6,062,966 73</b>	<b>\$10,999 49</b>

—Continued.

ING IN CALIFORNIA DURING THE YEAR ENDING DECEMBER 31, 1913.

Consumers Light and Power Company	Corona Gas and Electric Light Company	Downey Light, Power and Water Company	Durham Light and Power Company	Equitable Light and Power Company	Escondido Utilities Company
\$523,808 31 33,107 89	\$76,004 51 333 50	\$30,710 39 12,851 19	\$5,568 00 9,848 85	\$1,400,854 45 28,664 37	\$65,259 89 182 50
\$556,916 20 3,000 00	\$76,338 01 1,129 34	\$43,561 58 170 00	\$15,416 85 13 07	\$1,429,518 82	\$65,442 39 19 71
36,777 98 27 30	2,641 66	825 00	455 50	219 00 124,007 22 180 19	1,973 92
109 60 3,675 37	3,046 64	866 40	597 06	2,000 00 118 40	112 00 3,000 00
3,243 48 7,263 43	15,300 77	20,000 00		2,994 83	61,370 04
\$610,953 36	\$98,456 42	\$65,422 98	\$16,482 48	\$1,593,817 16	\$132,012 05
\$100,000 00 100,000 00	\$50,000 00	\$40,000 00 10,500 00		\$750,000 00 365,000 00	\$100,000 00 5,000 00
3,000 00			\$6,814 89 7,667 73		23,800 00
405,453 36 1,250 00 1,250 00	2,383 30 270 21 22,805 81	399 60 602 29 5,798 92	1,237 32 237 54	475,167 16 3,650 00	2,776 41 435 64
	5,637 51	3,600 00	525 00		
	17,359 59	4,522 17			
\$610,953 36	\$98,456 42	\$65,422 98	\$16,482 48	\$1,593,817 16	\$132,012 05

TABLE No. 1

ABSTRACT OF BALANCE SHEETS OF ELECTRIC COMPANIES OPERAT

	Electric Power Company <sup>1</sup>	Fort Bragg Electric Company
<i>Assets.</i>		
Fixed capital installed prior to January 1, 1913.....	\$675,221 42	\$124,891 63
Fixed capital installed subsequent to January 1, 1913.....	27,366 78	3,123 89
Total fixed capital.....	\$702,588 20	\$128,015 52
Cash and deposits.....		3,810 18
Notes receivable.....		
Accounts receivable.....	485,100 00	28,137 80
Other current assets.....		
Investments.....		250 00
Working assets.....	1,000,000 00	2,359 02
Prepaid expenses.....		204 80
Unamortized discount on securities and expenses.....		
Miscellaneous.....		
Corporate deficit.....		
Totals.....	\$2,187,688 20	\$162,777 32
<i>Liabilities.</i>		
Capital stock.....	\$1,000,000 00	\$100,000 00
Funded debt.....	1,000,000 00	30,000 00
Invested in plant.....		
Notes payable.....		26,893 34
Accounts payable.....	187,688 20	10 00
Interest and taxes accrued.....		1,337 93
Miscellaneous.....		165 00
Reserves.....		4,000 00
Income invested since December 31, 1912, in fixed capital.....		
Corporate surplus.....		371 05
Totals.....	\$2,187,688 20	\$162,777 32

<sup>1</sup>Not operating—under construction.<sup>2</sup>Credit item.<sup>3</sup>Electric and water utilities operated as departments only.



—Continued.  
ING IN CALIFORNIA DURING THE YEAR ENDING DECEMBER 31, 1913.

Gleneden Light and Power Company	Great Western Power Company	Half Moon Bay Light and Power Company	Hemet Milling and Power Company	Holton Power Company	Huntington Beach Company <sup>3</sup>
\$15,280 38	\$41,512,744 74	\$57,953 36	\$22,064 54	\$1,851,358 04	\$147,308 65
1,178 59	611,650 50	18,308 29	418 12	54,586 71	6,667 66
\$16,458 97	\$42,124,395 24	\$76,261 65	\$22,482 66	\$1,905,944 78	\$153,976 31
78 43	614,057 34	439 75	2,274 80	4,521 63	-----
-----	46,206 84	4,326 87	24 30	19,759 95	-----
558 93	669,434 94	8,714 67	842 61	34,220 98	1,234 59
-----	135 00	-----	-----	-----	-----
-----	6,107,312 50	-----	1,000 00	231,737 25	-----
10,197 50	1,120,494 16	3,453 16	1,241 34	10,101 07	5,759 78
-----	87,791 46	725 51	-----	-----	-----
-----	500,645 56	10,393 19	-----	10,000 00	-----
-----	787,720 14	-----	-----	-----	-----
-----	-----	-----	-----	-----	-----
\$27,136 97	\$52,358,193 18	\$104,314 80	\$27,865 71	\$2,216,285 66	\$160,970 68
-----	-----	-----	-----	-----	-----
\$20,000 00	\$27,500,000 00	\$78,625 00	-----	\$1,250,000 00	-----
-----	22,138,000 00	-----	-----	800,000 00	-----
-----	-----	-----	\$25,455 88	-----	-----
-----	455,703 17	15,249 39	-----	65,469 87	-----
762 99	892,300 22	4,122 51	354 11	46,511 46	\$151,549 16
-----	526,277 08	-----	86 52	19,665 00	-----
-----	-----	-----	-----	-----	-----
-----	18,927 76	6,177 21	1,969 20	-----	9,421 52
-----	-----	-----	-----	-----	-----
1,178 59	390 68	-----	-----	-----	-----
5,195 39	826,594 27	140 69	-----	31,639 33	-----
-----	-----	-----	-----	-----	-----
\$27,136 97	\$52,358,193 18	\$104,314 80	\$27,865 71	\$2,216,285 66	\$160,970 68

TABLE No. 1

ABSTRACT OF BALANCE SHEETS OF ELECTRIC COMPANIES OPERAT

	Indian Valley Electric Light and Power Company	Invincible Mines Consolidated
<i>Assets.</i>		
Fixed capital installed prior to January 1, 1913.....	\$318,826 78	\$255,909 94
Fixed capital installed subsequent to January 1, 1913.....	845 51	150 60
Total fixed capital.....	\$319,672 29	\$256,059 94
Cash and deposits.....	89 11	77 13
Notes receivable.....		
Accounts receivable.....	267 25	
Other current assets.....		
Investments.....		
Working assets.....	156,768 54	
Prepaid expenses.....		
Unamortized discount on securities and expenses.....	32,418 40	110,400 00
Miscellaneous.....		
Corporation deficit.....	23,878 76	23,267 61
Totals.....	\$533,094 35	\$389,804 68
<i>Liabilities.</i>		
Capital stock.....	\$500,000 00	\$338,500 00
Funded debt.....		
Invested in plant.....		
Notes payable.....	7,559 60	
Accounts payable.....	19,573 79	36,315 51
Interest and taxes accrued.....	960 96	9,965 54
Miscellaneous.....	5,000 00	5,023 63
Reserves.....		
Income invested since December 31, 1912, in fixed capital.....		
Corporate surplus.....		
Totals.....	\$533,094 35	\$389,804 68

<sup>1</sup>Includes gas and water.

—Continued.

ING IN CALIFORNIA DURING THE YEAR ENDING DECEMBER 31, 1913.

H. G. Lacey Company	Lassen Electric Company	Lompoc Light and Power Company	Loyalton Electric Light Company	Mendocino Electric Light and Power Company	Midland Coun- ties Public Service Corporation <sup>1</sup>
\$114,673 41	\$50,687 94	\$47,470 10	\$33,456 98	\$27,402 38	\$1,928,248 09
18,744 12	12,475 26	8,051 91	-----	876 21	20,763 16
\$133,417 53	\$63,163 20	\$55,522 07	\$33,456 98	\$28,278 59	\$1,949,011 25
2,005 77	129 55	189 34	9 86	200 90	3,603 70
-----	3,357 42	2,844 18	303 66	2,704 59	22,444 83
-----	-----	-----	-----	-----	41,964 07
-----	-----	-----	-----	-----	1,601 38
2,281 77	989 81	1,830 70	594 40	10,000 00	83,983 37
-----	8 30	-----	-----	-----	1,151 15
-----	-----	-----	-----	-----	47,713 08
-----	-----	288 53	10,955 90	-----	175,001 41
\$137,705 07	\$67,648 28	\$60,674 82	\$45,320 80	\$41,184 08	\$2,326,474 24
-----	\$25,000 00	\$38,375 00	\$20,000 00	\$25,000 00	\$1,000,500 00
-----	-----	-----	8,000 60	-----	821,000 00
16,951 97	-----	-----	-----	-----	-----
22,500 00	26,376 75	21,600 00	10,900 00	-----	289,822 01
24,220 00	2,044 07	1,172 81	6,420 80	798 88	115,683 15
-----	970 86	127 01	-----	238 12	16,119 93
-----	2,368 35	-----	-----	-----	21,529 74
7,331 59	3,826 80	-----	-----	-----	58,733 71
-----	4,228 65	-----	-----	-----	-----
36,701 51	2,832 80	-----	-----	15,147 08	3,085 70
\$137,705 07	\$67,648 28	\$60,674 82	\$45,320 80	\$41,184 08	\$2,326,474 24

TABLE NO. 1

ABSTRACT OF BALANCE SHEETS OF ELECTRIC COMPANIES OPERAT

	Middle Yuba Hydroelectric Power Company	Mt. Konecti Light and Power Company
<i>Assets.</i>		
Fixed capital installed prior to January 1, 1913.....	\$103,844 06	\$41,681 50
Fixed capital installed subsequent to January 1, 1913 .....	4,008 08	20,729 80
Total fixed capital .....	\$107,852 14	\$62,411 30
Cash and deposits .....	870 77	1,263 58
Notes receivable .....		
Accounts receivable .....	463 57	408 26
Other current assets .....	248,400 00	
Investments .....		200 00
Working assets .....		
Prepaid expenses .....		
Unamortized discount on securities and expenses.....		
Miscellaneous .....		
Corporate deficit .....	135,757 99	
Totals .....	\$493,344 47	\$64,283 14
<i>Liabilities.</i>		
Capital stock .....	\$400,000 00	\$50,000 00
Funded debt .....		
Invested in plant .....		
Notes payable .....	89,411 34	
Accounts payable .....	3,933 13	6,638 95
Interest and taxes accrued.....		
Miscellaneous .....		
Reserves .....		5,208 19
Income invested since December 31, 1912, in fixed capital .....		
Corporate surplus .....		2,436 00
Totals .....	\$493,344 47	\$64,283 14

—Continued.

ING IN CALIFORNIA DURING THE YEAR ENDING DECEMBER 31, 1913.

Mt. Whitney Power and Electric Company	Napa Valley Electric Company	Nevada- California Power Company	Northern Cali- fornia Power Company, Consolidated	Novato Light and Power Company	Oceanside Electric and Gas Company
\$4,559,235 78	\$100,261 64	\$8,013,057 93	\$9,638,401 55	\$15,865 00	\$24,671 73
591,582 52	6,909 06	516,867 36	163,059 82	2,914 25	30 70
\$5,150,818 30	\$107,176 70	\$8,529,925 29	\$9,801,461 37	\$18,779 25	\$24,702 43
13,794 41	100 16	36,616 09	10,997 11	-----	139 00
35,941 59	-----	-----	3,384 18	-----	-----
324,159 48	4,343 92	1,056,557 66	176,488 36	-----	1,196 75
116,536 89	37 50	920 00	-----	-----	-----
-----	-----	826,113 62	1,250 00	-----	-----
155,839 75	672 90	51,915 21	111,450 26	-----	627 99
7,276 04	-----	710 42	772 36	-----	188 30
188,412 98	-----	-----	8,001,638 89	-----	-----
54,544 33	-----	9,397 86	70,252 83	-----	9,688 27
-----	-----	-----	-----	-----	-----
\$6,047,323 77	\$112,325 18	\$10,512,156 15	\$18,177,695 36	\$18,779 25	\$36,542 74
-----	-----	-----	-----	-----	-----
\$2,625,000 00	\$59,300 00	\$5,000,000 00	\$10,000,000 00	-----	\$18,190 00
2,165,000 00	29,500 00	2,696,000 00	7,167,200 00	-----	-----
-----	-----	-----	-----	18,779 25	-----
319,019 75	9,000 06	-----	115,527 02	-----	12,442 00
150,940 27	9,034 19	179,523 24	115,764 97	-----	1,593 75
35,798 97	-----	65,141 84	74,975 86	-----	105 27
116,536 89	-----	474,330 30	649 51	-----	1,819 00
407,809 16	-----	645,897 39	111,761 34	-----	-----
-----	-----	-----	-----	-----	1,656 43
227,218 73	5,490 99	1,451,263 38	591,816 66	-----	736 29
-----	-----	-----	-----	-----	-----
\$6,047,323 77	\$112,325 18	\$10,512,156 15	\$18,177,695 36	\$18,779 25	\$36,542 74



TABLE NO. 1

## ABSTRACT OF BALANCE SHEETS OF ELECTRIC COMPANIES OPERAT

	Ontario Power Company	Oro Electric Company	Oro Water, Light and Power Company
<i>Assets.</i>			
Fixed capital installed prior to Jan- uary 1, 1913 .....	\$1,017,229 46	\$10,741,955 14	\$1,037,970 33
Fixed capital installed subsequent to January 1, 1913 .....	18,712 61	915,669 27	8,900 72
Total fixed capital .....	\$1,035,942 07	\$11,657,624 41	\$1,046,871 05
Cash and deposits .....	752 96	6,561 25	-----
Notes receivable .....	-----	-----	-----
Accounts receivable .....	10,114 80	32,987 57	1,080 18
Other current assets .....	-----	-----	-----
Investments .....	5,000 00	3,250,000 00	3,821,509 67
Working assets .....	1,914 56	8,254,337 46	-----
Prepaid expenses .....	-----	565 80	-----
Unamortized discount on securities and expenses .....	-----	149,193 83	-----
Miscellaneous .....	-----	326,003 14	-----
Corporate deficit .....	-----	-----	-----
Totals .....	\$1,053,724 39	\$23,677,273 46	\$4,869,460 90
<i>Liabilities.</i>			
Capital stock .....	\$380,000 00	\$10,000,000 00	\$3,250,000 00
Funded debt .....	326,000 00	10,000,000 00	346,000 00
Invested in plant .....	-----	-----	-----
Notes payable .....	-----	174,486 78	-----
Accounts payable .....	183,808 42	98,901 08	-----
Interest and taxes accrued .....	3,442 00	35,543 73	-----
Miscellaneous .....	-----	-----	-----
Reserves .....	15,000 00	3,250,590 82	721,084 45
Income invested since December 31, 1912, in fixed capital .....	18,712 61	-----	-----
Corporate surplus .....	126,761 36	117,751 05	552,376 45
Totals .....	\$1,053,724 39	\$23,677,273 46	\$4,869,460 90

—Continued.

ING IN CALIFORNIA DURING THE YEAR ENDING DECEMBER 31, 1913.

Pacific Gas and Electric Company	Pacific Light and Power Corporation	Phoebe Electric Light and Power Company	Pacific Power Company	Point Arena Electric Light Company	Quincy Electric Light and Power Company
\$110,617,393 85	\$37,561,600 35	\$6,519 66	\$1,882,809 09	\$7,345 02	\$8,000 00
11,312,019 84	1,153,861 81	323 32	43,216 09	-----	-----
\$121,929,413 69	\$38,715,462 16	\$6,842 98	\$1,926,025 18	\$7,345 02	\$8,000 00
978,250 96	311,582 93	5,728 52	3,196 66	-----	-----
207,210 04	472,413 05	-----	-----	-----	-----
1,536,667 93	1,159,466 21	-----	8,602 77	-----	-----
166,798 23	138,467 64	-----	-----	-----	-----
28,319 86	3,668,230 75	-----	1,606 15	-----	-----
12,288,386 76	2,684,845 12	-----	5,176 39	-----	-----
19,076 68	3,723 25	-----	-----	-----	-----
39,853,458 72	2,050,882 82	-----	-----	-----	-----
5,253,179 09	905,936 70	-----	-----	-----	-----
-----	-----	-----	91,017 54	-----	-----
\$182,260,761 96	\$58,265,010 63	\$12,571 50	\$2,035,624 69	\$7,345 02	\$8,000 00
\$73,806,166 66	\$23,591,500 00	\$2,000 00	\$800,033 00	-----	-----
86,402,000 00	22,896,000 00	-----	800,000 00	-----	-----
-----	-----	-----	-----	\$7,345 02	\$8,000 00
7,699,185 88	5,700,079 04	-----	135,710 78	-----	-----
4,366,792 51	1,202,896 07	-----	22,778 61	-----	-----
1,345,940 35	488,987 41	-----	6,253 45	-----	-----
2,887,369 55	9,978 76	-----	270,848 85	-----	-----
3,257,695 95	2,523,368 37	-----	-----	-----	-----
-----	-----	-----	-----	-----	-----
2,495,611 06	1,852,200 98	10,571 50	-----	-----	-----
\$182,260,761 96	\$58,265,010 63	\$12,571 50	\$2,035,624 69	\$7,345 02	\$8,000 00

TABLE No. 1

ABSTRACT OF BALANCE SHEETS OF ELECTRIC COMPANIES OPERAT

	Rialto Light, Power and Water Company	San Diego Con- solidated Gas and Electric Company <sup>1</sup>	San Joaquin Light and Power Corporation
<i>Assets.</i>			
Fixed capital installed prior to Jan- uary 1, 1913 .....	\$11,368 33	\$6,097,298 79	\$23,336,873 63
Fixed capital installed subsequent to January 1, 1913 .....	1,211 95	642,778 72	182,912 58
Total fixed capital .....	\$12,580 28	\$6,740,077 51	\$23,519,786 21
Cash and deposits .....	189 33	78,833 74	20,237 98
Notes receivable .....		7,339 17	259,735 62
Accounts receivable .....	592 87	140,426 69	747,632 76
Other current assets .....			
Investments .....		53,337 42	340,637 96
Working assets .....	353 10	115,196 77	1,066,361 84
Prepaid expenses .....		2,880 03	4,062 84
Unamortized discount on securities and expenses .....	1,000 00	524,238 44	1,750,796 70
Miscellaneous .....		216,932 50	1,905,073 18
Corporate deficit .....			
Totals .....	\$14,715 58	\$7,879,262 27	\$29,614,325 09
<i>Liabilities.</i>			
Capital stock .....	\$10,000 00	\$2,715,000 00	\$17,500,000 00
Funded debt .....		4,165,000 00	8,588,000 00
Invested in plant .....			
Notes payable .....	400 00	398,228 88	1,051,749 40
Accounts payable .....	512 22	125,923 90	539,200 86
Interest and taxes accrued .....		101,121 54	125,316 60
Miscellaneous .....		22,625 00	1,052,685 81
Reserves .....		335,485 18	734,015 22
Income invested since December 31, 1912, in fixed capital .....			
Corporate surplus .....	3,803 36	15,877 77	23,357 20
Totals .....	\$14,715 58	\$7,879,262 27	\$29,614,325 09

<sup>1</sup>Includes gas plant.

—Continued.

ING IN CALIFORNIA DURING THE YEAR ENDING DECEMBER 31, 1913.

Santa Barbara Gas and Electric Company <sup>1</sup>	Santa Catalina Island Company	Sierra and San Francisco Power Company	Snow Mountain Water and Power Company	Southside Light and Power Company	Southern California Edison Company
\$1,489,334 90	\$73,321 12	\$33,961,984 29	\$5,334,228 44	\$1,249,500 00	\$26,592,630 13
41,183 34	745 91	578,048 79	2,086 68	-----	2,899,619 85
\$1,530,518 24	\$74,067 03	\$34,540,033 08	\$5,336,315 12	\$1,249,500 00	\$29,492,249 98
4,849 23	-----	443,954 77	1,249 13	-----	418,615 17
26 60	-----	26,657 88	1,000 00	-----	460,968 35
26,932 74	-----	445,994 21	1,155 41	41,947 53	821,122 63
-----	-----	-----	-----	119 57	838 58
20,294 65	-----	172,454 06	708,612 55	328 00	846,890 26
3,805 42	-----	1,847 99	-----	79,918 89	631,865 26
-----	-----	-----	-----	-----	168,144 26
30,195 19	-----	-----	339,622 72	-----	649,542 09
12,288 50	-----	48,699 22	-----	4,121 68	1,761,328 14
-----	-----	281,525 05	104,291 49	52,657 91	-----
\$1,628,910 57	\$74,067 03	\$35,961,166 26	\$6,492,246 42	\$1,428,593 58	\$35,251,564 72
-----	-----	-----	-----	-----	-----
\$800,900 00	-----	\$20,000,000 00	\$5,000,000 00	\$1,000,000 00	\$14,400,000 00
666,500 00	-----	15,204,023 09	1,250,000 00	400,000 00	15,935,000 00
-----	\$74,067 03	-----	-----	-----	-----
45,200 00	-----	-----	187,624 35	-----	2,273,200 00
41,596 73	-----	193,029 42	9,603 33	18,593 58	449,038 82
60 98	-----	536,054 41	13,934 46	10,000 00	85,404 73
-----	-----	-----	-----	-----	150,000 40
49,785 47	-----	28,059 34	31,084 28	-----	1,737,049 21
-----	-----	-----	-----	-----	-----
24,867 39	-----	-----	-----	-----	221,871 56
-----	-----	-----	-----	-----	-----
\$1,628,910 57	\$74,067 03	\$35,961,166 26	\$6,492,246 42	\$1,428,593 58	\$35,251,564 72

TABLE No. 1

## ABSTRACT OF BALANCE SHEETS OF ELECTRIC COMPANIES OPERAT

	The Southern Sierras Power Company	Surprise Valley Electric Light and Power Company	Truckee Elec- tric Light and Power Company
<i>Assets.</i>			
Fixed capital installed prior to Jan- uary 1, 1913 .....	\$8,632,038 04	\$15,969 95	\$18,945 00
Fixed capital installed subsequent to January 1, 1913 .....	371,398 68	190 44	3,323 23
Total fixed capital .....	\$9,003,436 72	\$16,160 39	\$22,268 23
Cash and deposits .....	88,050 47	61 96	968 01
Notes receivable .....	43,203 66	106 40	-----
Accounts receivable .....	63,755 18	472 20	-----
Other current assets .....	806 68	-----	-----
Investments .....	100,000 00	-----	-----
Working assets .....	72,444 20	17,771 00	2,000 00
Prepaid expenses .....	507 60	-----	-----
Unamortized discount on securities and expenses .....	-----	-----	-----
Miscellaneous .....	241,504 00	-----	-----
Corporate deficit .....	41,968 26	-----	-----
Totals .....	\$9,655,676 77	\$34,571 95	\$25,236 24
<i>Liabilities.</i>			
Capital stock .....	\$5,000,000 00	\$25,000 00	\$10,000 00
Funded debt .....	2,570,000 00	-----	-----
Invested in plant .....	-----	-----	-----
Notes payable .....	137,283 94	6,920 72	-----
Accounts payable .....	1,870,885 51	382 18	-----
Interest and taxes accrued .....	1,932 32	251 90	-----
Miscellaneous .....	75,575 00	43 00	-----
Reserves .....	-----	80 47	-----
Income invested since December 31, 1912, in fixed capital .....	-----	190 44	-----
Corporate surplus .....	-----	1,703 24	15,236 24
Totals .....	\$9,655,676 77	\$34,571 95	\$25,236 24



—Continued.

ING IN CALIFORNIA DURING THE YEAR ENDING DECEMBER 31, 1913.

The Truckee River General Electric Company	Tulare County Power Company	Tuolumne County Electric Power and Light Company	Tuolumne Electric Company	Tuolumne Transmission Company	United Light, Fuel and Power Company
\$10,486,937 44	\$634,391 62	\$43,182 42	\$131,029 58	\$33,335 79	\$145,254 33
87,368 09	94,703 56	1,322 95	2,187 76	782 99	58,357 73
\$10,574,305 53	\$729,095 18	\$44,505 37	\$133,217 34	\$34,118 78	\$203,612 06
26,719 22	612 09	354 15	5 77	1 43	537 16
3,062 57	668 08			2,100 00	
133,177 16	23,191 17	5,919 02	312 87	18,687 23	6,467 37
15,750 00					
11,802 21	6,860 38	2,781 00			4,219 19
233 78	15,860 23	477 16			73 51
	102,054 84	952,073 30	117,086 74		
53,539 99					335 00
	7,433 01		70,781 30	1,714 71	
\$10,818,590 46	\$885,774 98	\$1,006,110 00	\$321,404 02	\$56,622 15	\$215,244 29
\$3,000,000 00	\$572,500 00	\$1,000,000 00	\$145,865 00	\$35,587 00	\$50,000 00
			88,000 00		
7,037,680 65	250,000 00		12,665 10		
188,578 36	23,085 46	3,623 48	19,849 68	21,012 41	152,559 21
7,851 05					
2,621 65	38,989 52		55,024 24	22 74	
35,234 00	1,200 00	2,108 50			6,356 21
546,624 75		378 02			6,328 87
\$10,818,590 46	\$885,774 98	\$1,006,110 00	\$321,404 02	\$56,622 15	\$215,244 29

TABLE No. 1

ABSTRACT OF BALANCE SHEETS OF ELECTRIC COMPANIES OPERAT

	United Light and Power Company	Universal Electric and Gas Company	Ventura County Power Company
<i>Assets.</i>			
Fixed capital installed prior to January 1, 1913 .....	\$432,132 45	\$1,229,885 00	\$1,907,500 20
Fixed capital installed subsequent to January 1, 1913 .....	20,890 32	11,093 80	41,319 38
Total fixed capital .....	\$453,022 77	\$1,240,978 80	\$1,948,819 58
Cash and deposits .....	2,559 69	32,273 50	2,329 49
Notes receivable .....	470 50	2,000,000 00	7,000 00
Accounts receivable .....	1,555,685 03	47,511 66	25,892 58
Other current assets .....	16,566 68	32,459 13	-----
Investments .....	7,747,700 00	-----	6,066 50
Working assets .....	279,788 29	3,763,024 17	17,890 13
Prepaid expenses .....	3,457 25	100 01	6,056 28
Unamortized discount on securities and expenses .....	-----	513,973 09	382,100 06
Miscellaneous .....	-----	-----	1,273,734 18
Corporate deficit .....	117,653 98	-----	33,735 54
Totals .....	\$10,176,904 19	\$7,630,320 36	\$3,703,624 28
<i>Liabilities.</i>			
Capital stock .....	\$5,978,230 00	\$5,000,000 00	\$2,500,000 00
Funded debt .....	3,060,000 00	2,500,000 00	943,000 00
Invested in plant .....	-----	-----	-----
Notes payable .....	378,591 48	-----	120,850 00
Accounts payable .....	556,283 19	21,122 58	25,075 80
Interest and taxes accrued .....	42,255 00	36,885 24	12,298 97
Miscellaneous .....	161,544 52	-----	49,088 00
Reserves .....	-----	18,110 24	11,992 13
Income invested since December 31, 1912, in fixed capital .....	-----	11,093 80	41,319 38
Corporate surplus .....	-----	43,108 50	-----
Totals .....	\$10,176,904 19	\$7,630,320 36	\$3,703,624 28

\*Credit item.

—Concluded.

ING IN CALIFORNIA DURING THE YEAR ENDING DECEMBER 31, 1913.

Vallejo Electric Light and Power Company	Weaverville Electric Company	West Sacramento Electric Company	Western States Gas and Electric Company	Yosemite Power Company	Total
\$148,499 37	\$14,554 41	\$73,013 29	\$9,447,424 34	\$3,808,248 87	\$414,063,499 24
5,419 36	-----	16,283 96	618,859 92	74,723 46	22,276,292 15
\$153,918 73	\$14,554 41	\$89,297 25	\$10,066,284 26	\$3,882,972 33	\$436,339,791 39
3,457 79	42 98	17 42	59,637 18	6,030 13	3,249,564 19
-----	-----	-----	11,598 76	-----	3,700,247 81
19,409 66	1,086 93	43,328 24	132,583 12	24,693 17	11,383,876 34
-----	-----	-----	-----	-----	754,765 93
-----	-----	-----	83,859 90	-----	28,745,369 46
5,026 90	37 35	1,000 00	49,935 68	12,018 32	33,111,263 86
-----	-----	-----	3,015 00	1202 52	466,734 72
-----	-----	-----	523,558 49	-----	57,349,337 75
-----	-----	-----	164,992 63	3,509 92	24,158,851 78
-----	-----	-----	-----	-----	1,118,639 63
\$181,813 08	\$15,721 67	\$133,642 91	\$11,095,465 02	\$3,929,021 35	\$600,378,442 86
\$100,000 00	\$10,000 00	\$100,000 00	\$5,356,500 00	\$2,050,300 00	\$289,657,369 30
-----	-----	-----	4,737,000 00	1,708,000 00	232,596,723 09
-----	-----	-----	-----	-----	198,620 21
-----	-----	7,583 75	596,854 55	3,842 93	28,088,610 46
8,281 57	-----	1,310 05	81,799 26	102,635 41	14,787,520 73
5,505 97	-----	-----	56,217 66	43,875 70	3,864,544 36
29,513 03	-----	-----	98,067 50	-----	5,618,641 68
25,115 41	-----	4,514 83	62,552 49	12,092 62	14,671,526 19
-----	-----	-----	-----	-----	529,703 92
13,397 10	5,721 67	20,234 28	106,473 56	8,274 69	10,365,182 92
\$181,813 08	\$15,721 67	\$133,642 91	\$11,095,465 02	\$3,929,021 35	\$600,378,442 86

TABLE

ABSTRACT OF INCOME AND PROFIT AND LOSS ACCOUNTS OF  
ENDING DECEMBER

	Alturas Electric Power Company	Amador Electric Light and Power Company
Operating revenues -----	\$13,526 05	\$32,629 01
Operating expenses -----	5,935 47	20,915 54
Net operating revenue -----	7,590 58	11,713 47
Net operating loss -----		
Non-operating revenue -----	303 30	1,977 62
Gross corporate income -----	7,893 88	13,691 09
Gross corporate loss -----		
<i>Deductions.</i>		
Non-operating revenue deductions -----		
Interest accrued on funded debt -----	\$2,575 00	\$3,000 00
Other interest deductions -----	924 04	308 87
Rent deductions -----		
Miscellaneous deductions -----	614 72	644 62
Total deductions -----	\$4,113 76	\$3,953 49
Net corporate income for year -----	\$3,780 12	\$9,737 60
Net corporate loss for year -----		
Dividends -----	725 00	5,400 00
Miscellaneous additions to income -----	84 00	
Miscellaneous deductions from income -----	4,265 41	1,841 97
Surplus on December 31, 1912 -----	8,364 89	12,316 05
Deficit on December 31, 1912 -----		
Surplus on December 31, 1913 -----	7,238 60	14,811 68
Deficit on December 31, 1913 -----		

<sup>1</sup>Includes \$480.42 water, net revenue.

<sup>2</sup>Includes \$1,087.11 water, net revenue.

<sup>3</sup>Includes \$496.80 net loss water company.

<sup>4</sup>Includes \$9,268.63 telephone net.

## No. 2.

ELECTRIC COMPANIES OPERATING IN CALIFORNIA DURING YEAR  
ENDING 31, 1913.

Bay Point Light and Water Company	Bell Electric Company	Bishop Light and Power Company	Boulder Creek Electric Light and Water Company	Butte County Power, Light and Water Company	California Telephone and Light Company
\$5,620 09	\$12,318 78	\$14,597 39	\$1,379 25	\$2,268 20	\$46,573 89
3,109 26	8,674 43	11,531 13	1,491 27	1,384 30	27,804 45
2,510 83	3,644 35	3,066 26		883 90	18,769 44
			112 02		
24 93	384 60		165 36		680 32
2,535 76	4,028 95	3,066 26	53 34	883 90	19,449 76
		\$3 00	\$166 31		
					\$4,323 50
					3,594 44
\$500 00					
1,515 01		8 55			1,333 72
\$2,015 01		\$11 55	\$166 31		\$9,251 66
\$520 75	\$4,028 95	\$3,054 71		\$883 90	\$10,198 10
			112 97		
1,001 17					24,713 33
		349 13			
			50 64		
		20,827 80	14,168 07	2,097 86	16,712 55
	4,028 95	24,231 64	15,091 57	2,484 96	11,465 95



TABLE No. 2

ABSTRACT OF INCOME AND PROFIT AND LOSS ACCOUNTS OF  
ENDING DECEM

	California- Oregon Power Company	California Electric Generat- ing Company <sup>1</sup>
Operating revenues -----	\$308,784 25	
Operating expenses -----	134,108 17	\$1,793 40
Net operating revenue -----	174,676 08	
Net operating loss -----		1,793 40
Non-operating revenue -----	5,038 25	241,814 33
Gross corporate income -----	179,714 33	240,020 93
Gross corporate loss -----		
<i>Deductions.</i>		
Non-operating revenue deductions -----		
Interest accrued on funded debt -----	\$181,560 81	\$58,526 38
Other interest deductions -----		
Rent deductions -----		
Miscellaneous deductions -----	12,106 13	
Total deductions -----	\$193,666 94	\$58,526 38
Net corporate income for year -----		\$181,494 55
Net corporate loss for year -----	\$13,952 61	
Dividends -----		150,000 00
Miscellaneous additions to income -----		3,741 25
Miscellaneous deductions from income -----	4,353 91	32,407 44
Surplus on December 31, 1912 -----	13,414 29	7,732 07
Deficit on December 31, 1912 -----		
Surplus on December 31, 1913 -----	22,268 16	10,560 43
Deficit on December 31, 1913 -----		

<sup>1</sup>Plant leased to Great Western Power Company.<sup>2</sup>See water company report.<sup>3</sup>Includes \$36,498.64 gas net revenue.<sup>4</sup>Includes \$27,160.39 water net revenue.

—Continued.

ELECTRIC COMPANIES OPERATING IN CALIFORNIA DURING YEAR  
ENDING 31, 1913.

Calistoga Electric Company	Callayoni Electric Plant	Central Oakland Light and Power Company	City Electric Company	Consolidated Securities Company <sup>2</sup>	Coast Counties Gas and Electric Company
\$4,622 74	\$1,014 91	\$116,703 38	\$1,018,981 27	\$1,920 00	\$269,662 28
4,595 01	720 00	105,579 66	596,555 59	2,239 58	159,034 89
27 73	294 91	11,123 72	422,425 68	319 58	110,627 39
			49,003 55		5,465 59
27 73	294 91	11,123 72	471,429 23	319 58	116,092 98
		\$24,650 00	\$99,218 05		\$70,172 45
			36,795 83		
		240 09	3,212 40		
			2,493 78		5,983 47
		\$24,890 09	\$141,720 06		\$76,155 92
\$27 73	\$294 91		\$329,709 17		\$39,937 06
		\$13,766 37			60,000 00
		100 00	10,248 82		3,997 77
		1,035 46	476,319 71		634 93
			860,892 34		15,458 25
		64,934 10			
27 73	294 91		724,530 62		35,256 79
		79,635 93			

TABLE No. 2

ABSTRACT OF INCOME AND PROFIT AND LOSS ACCOUNTS OF  
ENDING DECEMBER

	Coast Valleys Gas and Electric Company	Consolidated Utilities Company
Operating revenues .....	\$157,262 79	\$5,556 03
Operating expenses .....	80,099 27	4,068 09
Net operating revenue .....	77,163 52	1,487 94
Net operating loss .....		
Non-operating revenue .....	7,213 40	
Gross corporate income .....	84,376 92	1,487 94
Gross corporate loss .....		
<i>Deductions.</i>		
Non-operating revenue deductions .....	\$1,165 62	
Interest accrued on funded debt .....	47,836 11	
Other interest deductions .....	9,983 72	560 00
Rent deductions .....		
Miscellaneous deductions .....		
Total deductions .....	\$58,985 45	560 00
Net corporate income for year .....	\$25,391 47	\$927 94
Net corporate loss for year .....		
Dividends .....		
Miscellaneous additions to income .....	5,894 45	
Miscellaneous deductions from income .....	2,268 19	
Surplus on December 31, 1912 .....	18,610 24	2,071 55
Deficit on December 31, 1912 .....		
Surplus on December 31, 1913 .....	159,132 56	2,999 40
Deficit on December 31, 1913 .....		

<sup>1</sup>Includes net revenue gas \$6,969.11. Water, \$4,535.48.

<sup>2</sup>Includes gas net revenue of \$339.75.

—Continued.

ELECTRIC COMPANIES OPERATING IN CALIFORNIA DURING YEAR  
BER 31, 1913.

Consumers Light and Power Company	Corona Gas and Electric Light Company	Downey Light, Power and Water Company	Durham Light and Power Company	Equitable Light and Power Company	Escondido Utility Company
\$145,501 82	\$23,136 76	\$11,477 10	\$3,616 35	\$108,655 91	\$5,663 81
116,166 01	21,653 03	10,914 90	4,076 64	90,663 08	5,130 62
29,335 81	1,483 73	562 20	-----	17,992 83	533 19
-----	-----	-----	460 29	-----	-----
3,356 51	1,000 20	-----	-----	3,767 39	-----
32,692 32	2,483 93	562 20	-----	21,760 22	533 19
-----	-----	-----	460 29	-----	-----
-----	-----	-----	-----	-----	-----
\$9,023 78	-----	-----	-----	3,285 15	-----
6,000 00	-----	\$735 00	-----	21,900 00	\$300 00
82 00	-----	-----	\$297 54	-----	778 93
1,715 70	-----	-----	-----	374 75	-----
-----	-----	-----	-----	-----	-----
\$10,821 48	-----	\$735 00	\$297 54	\$25,559 90	\$1,078 93
21,870 84	\$2,483 93	-----	-----	-----	-----
-----	-----	172 80	757 83	3,799 68	545 74
-----	1,000 00	-----	-----	-----	-----
-----	-----	-----	-----	36 38	112 00
1,668 81	1,634 20	-----	-----	1,757 38	-----
-----	17,509 86	4,694 97	-----	-----	-----
27,405 46	-----	-----	-----	29,258 02	-----
-----	17,359 59	4,522 17	-----	-----	-----
7,203 43	-----	-----	757 83	34,778 70	293 99
-----	-----	-----	-----	-----	-----

TABLE No. 2

ABSTRACT OF INCOME AND PROFIT AND LOSS ACCOUNTS OF  
ENDING DECEMBER

	Fort Bragg Electric Company	Glendora Light and Power Company
Operating revenues -----	\$30,676 45	\$3,395 05
Operating expenses -----	16,779 78	1,859 12
Net operating revenue -----	13,896 67	1,535 93
Net operating loss -----		
Non-operating revenue -----	3,026 71	
Gross corporate income -----	16,923 38	1,535 93
Gross corporate loss -----		
<i>Deductions.</i>		
Non-operating revenue deductions -----		
Interest accrued on funded debt -----	\$1,500 00	
Other interest deductions -----	2,811 41	
Rent deductions -----		
Miscellaneous deductions -----		\$9 38
Total deductions -----	\$4,311 41	\$9 38
Net corporate income for year -----	\$12,611 97	\$1,526 55
Net corporate loss for year -----		
Dividends -----	15,000 00	
Miscellaneous additions to income -----	521 66	
Miscellaneous deductions from income -----	326 04	1,178 59
Surplus on December 31, 1912 -----	2,563 46	4,847 43
Deficit on December 31, 1912 -----		
Surplus on December 31, 1913 -----	371 05	5,195 39
Deficit on December 31, 1913 -----		

<sup>1</sup>Includes net loss water company of \$11,781.93.



—Continued.

ELECTRIC COMPANIES OPERATING IN CALIFORNIA DURING YEAR  
BER 31, 1913.

Great Western Power Company	Halfmoon Bay Light and Power Company	Hemet Milling and Power Company	Holton Power Company	Huntington Beach Company	Indian Valley Electric Light and Power Company
\$1,845,702 58	\$19,231 13	\$2,498 73	\$128,787 22	\$15,157 86	\$3,035 22
534,090 17	20,092 79	5,142 23	91,762 09	13,098 03	4,187 31
1,311,612 41			37,025 13	2,059 83	
	861 66	2,643 50			1,152 09
258,956 06		1,206 37	32,409 90	307 80	
1,570,568 47			69,435 03	2,367 63	
	861 66	1,337 13			1,152 09
\$10,912 50		\$1,098 56			
999,678 34			\$47,522 58		
49,575 33	\$270 42		8,743 21		
239,823 96			1 00	\$13 80	
4,218 89			1,331 75		
\$1,304,209 02	\$270 42	\$1,098 56	\$57,598 54	\$13 80	
\$266,359 45			\$11,836 49	\$2,353 83	
	\$1,132 08	\$2,435 69			\$1,152 09
			25,004 50		
32,085 26	1,468 44	213 55	20 15		
15,780 65	755 28	183 95	66 83		6,985 46
543,930 21	559 61	2,671 14	47,854 02	10,211 76	
					15,741 21
826,594 27	140 69	265 05	34,639 33	1783 66	
					23,878 76

TABLE NO. 2

ABSTRACT OF INCOME AND PROFIT AND LOSS ACCOUNTS OF  
ENDING DECEMBER

	Invincible Mines Consolidated	H. G. Lacey Company	Lassen Electric Company
Operating revenues -----	\$2,610 10	\$71,293 21	\$13,230 31
Operating expenses -----	5,880 26	54,013 91	5,706 76
Net operating revenue -----		17,279 30	7,523 55
Net operating loss -----	3,270 16		
Non-operating revenue -----	250 00		
Gross corporate income -----		17,279 30	7,523 55
Gross corporate loss -----	3,020 16		
<i>Deductions.</i>			
Non-operating revenue deductions -----		\$7,264 64	
Interest accrued on funded debt -----			\$1,722 67
Other interest deductions -----			
Rent reductions -----			
Miscellaneous deductions -----			197 66
Total deductions -----		\$7,264 64	\$1,920 33
Net corporate income for year -----		\$10,014 66	\$5,603 22
Net corporate loss for year -----	\$3,020 16		
Dividends -----			
Miscellaneous additions to income -----			
Miscellaneous deductions from income -----			4,814 31
Surplus on December 31, 1912 -----		26,686 85	2,043 89
Deficit on December 31, 1912 -----	20,247 45		
Surplus on December 31, 1913 -----		36,701 51	2,832 80
Deficit on December 31, 1913 -----	23,267 61		

<sup>1</sup>See gas report.<sup>2</sup>Includes gas \$10,071.49, water \$3,564.56 net revenue.

—Continued.

ELECTRIC COMPANIES OPERATING IN CALIFORNIA DURING YEAR  
BER 31, 1913.

Lompoc Light and Power Company	Los Angeles Gas and Electric Corporation <sup>1</sup>	Loyalton Electric Light Company	Mendocino Electric Light and Power Company	Midland Counties Public Service Corporation	Middle Yuba Hydro-electric Power Company
\$12,247 75	\$1,438,857 85	\$4,053 55	\$10,353 64	\$170,103 65	\$7,619 43
11,284 24	1,036,564 06	5,010 86	6,818 46	123,520 64	4,445 99
963 51	402,293 79	-----	3,535 18	46,583 01	3,173 44
-----	-----	957 31	-----	-----	-----
-----	-----	-----	-----	4,013 74	-----
963 51	402,293 79	-----	3,535 18	50,596 75	3,173 44
-----	-----	957 31	-----	-----	-----
-----	-----	-----	-----	\$17 09	\$5,281 37
-----	-----	\$490 00	-----	47,738 31	-----
\$1,252 04	-----	889 99	-----	17,483 33	-----
-----	-----	-----	-----	-----	-----
-----	-----	49 00	-----	2,159 72	-----
-----	-----	-----	-----	-----	-----
\$1,252 04	-----	\$1,428 99	-----	\$67,398 45	\$5,281 37
-----	-----	-----	-----	-----	-----
-----	-----	-----	\$3,535 18	-----	-----
\$288 53	-----	\$2,386 30	-----	\$16,801 70	\$2,107 93
-----	-----	-----	1,950 00	13,780 00	-----
-----	-----	-----	-----	2,410 39	-----
-----	-----	-----	-----	10,484 67	-----
-----	-----	-----	13,561 90	28,105 63	-----
-----	-----	8,569 60	-----	-----	133,650 06
-----	-----	-----	15,147 08	23,085 70	-----
288 53	-----	10,955 90	-----	-----	135,757 99
-----	-----	-----	-----	-----	-----

TABLE No. 2

ABSTRACT OF INCOME AND PROFIT AND LOSS ACCOUNT OF  
ENDING DECEMBER

	Mt. Konocti Light and Power Company	Mt. Whitney Power and Electric Company	Napa Valley Electric Company
Operating revenues -----	\$10,735 15	\$567,072 31	\$20,443 77
Operating expenses -----	10,233 09	346,574 47	13,295 21
Net operating revenue -----	502 06	220,497 84	7,148 56
Net operating loss -----			
Non-operating revenue -----		30,862 40	1,739 74
Gross corporate income -----	502 06	251,360 24	8,888 30
Gross corporate loss -----			
<i>Deductions.</i>			
Non-operating revenue deductions -----		\$5,462 62	
Interest accrued on funded debt -----		114,918 35	\$1,770 00
Other interest deductions -----		23,282 75	579 90
Rent deductions -----			116 50
Miscellaneous deductions -----		6,927 68	
Total deductions -----		\$150,591 40	\$2,466 40
Net corporate income for year -----	\$502 06	\$100,768 84	\$6,421 90
Net corporate loss for year -----			
Dividends -----			9,090 00
Miscellaneous additions to income -----		47,052 62	
Miscellaneous deductions from income -----	22 76	55,859 94	
Surplus on December 31, 1912 -----	1,956 70	135,257 21	8,765 74
Deficit on December 31, 1912 -----			
Surplus on December 31, 1913 -----	2,436 00	227,218 73	25,490 99
Deficit on December 31, 1913 -----			

<sup>1</sup>Includes net revenue, gas, \$5,242.68; water, \$11,878.26.

<sup>2</sup>Includes net loss, gas, \$606.65.

<sup>3</sup>See gas report.

—Continued.

ELECTRIC COMPANIES OPERATING IN CALIFORNIA DURING YEAR  
BER 31, 1913.

Needles Gas and Electric Company <sup>2</sup>	Nevada-California Power Company	Northern California Power Company. Consolidated	Novato Light and Power Company	Oceanside Electric and Gas Company	Ontario Power Company
\$18,038 28	\$995,063 83	\$760,346 34	\$2,310 75	\$7,113 99	\$110,169 95
14,398 71	484,760 43	270,568 41	1,600 13	6,233 74	67,105 23
3,639 57	510,303 40	489,777 93	710 62	880 25	43,064 72
	76,959 49	9,555 25		1,835 95	14,287 54
3,639 57	587,262 89	499,333 18	710 62	2,716 20	57,352 26
		\$3,478 94			
	\$164,634 62	351,585 93			\$16,300 00
	29,159 65				11,414 73
		154 02			
	726 65	5,505 37		\$1,888 38	428 96
	\$194,520 92	\$360,724 26		\$1,888 38	\$28,143 69
	\$292,741 97	\$138,608 92	\$710 62	\$1,327 82	\$29,208 57
	190,910 00				
	263,735 89	1,123 37			
	92,515 82	9,754 25		1,656 43	22,164 61
	1,078,211 34	444,717 68		1,064 90	119,717 40
	1,451,263 38	591,816 66	710 62	736 29	126,761 36



TABLE NO. 2

ABSTRACT OF INCOME AND PROFIT AND LOSS ACCOUNT OF  
ENDING DECEMBER

	Oro Electric Corporation	Oro Water, Light and Power Company	Pacific Gas and Electric Company
Operating revenues -----	\$196,918 43	\$37,428 86	\$8,362,540 51
Operating expenses -----	100,158 46	27,947 86	4,787,450 32
Net operating revenue -----	96,759 97	9,481 00	3,575,090 19
Net operating loss -----			
Non-operating revenue -----	24,975 88	289,759 76	583,213 21
Gross corporate income -----	121,735 85	299,240 76	4,158,303 40
Gross corporate loss -----			
<i>Deductions.</i>			
Non-operating revenue deductions -----		\$630 71	\$61,078 38
Interest accrued on funded debt -----	\$42,766 88	20,760 00	3,680,266 46
Other interest deductions -----	5,122 04		221,778 54
Rent deductions -----			\$5,407 20
Miscellaneous deductions -----	2,280 36		1,708,504 03
Total deductions -----	\$50,169 28	\$21,390 71	\$5,666,220 21
Net corporate income for year -----	\$71,566 57	\$277,850 05	
Net corporate loss for year -----			1,507,916 81
Dividends -----	87,500 00		
Miscellaneous additions to income -----			13,337 27
Miscellaneous deductions from income -----		277,587 33	1,314,033 32
Surplus on December 31, 1912 -----	133,684 48	545,824 70	3,011,679 84
Deficit on December 31, 1912 -----			
Surplus on December 31, 1913 -----	117,751 05	\$552,376 45	\$2,971,565 56
Deficit on December 31, 1913 -----			

<sup>1</sup>Includes gas, \$3,560.55; water, \$2,728.48, net revenue.

<sup>2</sup>Credit item.

<sup>3</sup>Includes, gas, \$2,587,287.26; water, \$181,211.32, net revenue.

—Continued.

ELECTRIC COMPANIES OPERATING IN CALIFORNIA DURING YEAR  
BER 31, 1913.

Pacific Light and Power Corporation	Pinole Electric Light and Power Company	Pacific Power Company	Point Arena Electric Light Company	Quincy Electric Light and Power Company	Rialto, Light, Power and Water Company
\$2,634,990 85	\$6,721 87	\$73,040 15	\$2,965 35	\$4,200 00	\$5,207 14
1,875,859 60	2,909 75	30,146 25	3,829 14	3,030 00	4,231 80
759,131 25	3,812 12	42,893 90	-----	1,170 00	975 34
-----	-----	-----	863 79	-----	-----
226,745 22	-----	-----	-----	-----	15 00
985,876 47	3,812 12	42,893 90	-----	1,170 00	990 34
-----	-----	-----	863 79	-----	-----
\$82,713 13	-----	-----	-----	-----	-----
447,326 62	-----	\$48,000 00	-----	-----	-----
63,496 36	-----	20,667 25	-----	-----	\$86 50
-----	-----	-----	-----	\$360 00	-----
6,405 21	-----	-----	-----	-----	26 65
\$599,941 32	-----	\$68,667 25	-----	\$360 00	\$113 15
\$385,935 15	\$3,812 12	-----	-----	\$810 00	\$877 19
-----	-----	\$25,773 35	\$863 79	-----	-----
78,585 48	-----	-----	-----	-----	-----
107,888 56	-----	-----	863 79	-----	34 60
232,431 94	3,360 43	-----	-----	810 00	-----
1,669,394 69	10,119 81	-----	-----	-----	2,891 57
-----	-----	65,244 19	-----	-----	-----
1,852,200 98	10,571 50	-----	-----	-----	3,803 36
-----	-----	91,017 54	-----	-----	-----

TABLE No. 2

ABSTRACT OF INCOME AND PROFIT AND LOSS ACCOUNT OF  
ENDING DECEMBER

	San Diego Consolidated Gas and Electric Company	San Joaquin Light and Power Corporation	Santa Barbara Gas and Electric Company
Operating revenues -----	\$712,267 39	\$1,461,398 22	\$165,396 59
Operating expenses -----	307,149 44	769,808 97	115,672 19
Net operating revenue -----	405,117 95	691,589 25	49,724 40
Net operating loss -----			
Non-operating revenue -----	1,383 13	13,411 31	803 18
Gross corporate income -----	406,501 08	705,000 56	50,527 58
Gross corporate loss -----			
<i>Deductions.</i>			
Non-operating revenue deductions -----		\$1,567 24	\$1,156 62
Interest accrued on funded debt -----	\$189,460 28	343,151 90	39,686 30
Other interest deductions -----	33,669 00	76,348 97	2,268 43
Rent deductions -----		179 00	
Miscellaneous deductions -----	15,337 45	21,499 85	1,091 91
Total deductions -----	\$238,466 73	\$442,746 96	\$44,203 26
Net corporate income for year -----	\$168,034 35	\$262,253 60	\$6,324 32
Net corporate loss for year -----			
Dividends -----	237,562 50	390,000 00	
Miscellaneous additions to income -----		223,512 17	20 19
Miscellaneous deductions from income -----	164,565 06	89,734 18	10,471 85
Surplus on December 31, 1912 -----	21,751 32		4,620 99
Deficit on December 31, 1912 -----		27,890 28	
Surplus on December 31, 1913 -----	<sup>1</sup> 15,877 77	<sup>2</sup> 23,357 20	<sup>3</sup> 24,867 39
Deficit on December 31, 1913 -----			

<sup>1</sup>Includes gas net revenue of \$228,219.66.<sup>2</sup>Includes net revenue, gas, \$42,873.13; water, \$2,342.76.<sup>3</sup>Includes gas net revenue of \$24,373.74.<sup>4</sup>Includes net loss water, \$1,306.06.<sup>5</sup>Includes net revenue, water, \$15,127.62.<sup>6</sup>Includes gas net revenue of \$23,404.27.

—Continued.

ELECTRIC COMPANIES OPERATING IN CALIFORNIA DURING YEAR  
BER 31, 1913.

Santa Catalina Island Company	Sierra and San Francisco Power Company	Snow Mountain Water and Power Company	Southside Light and Power Company	Southern Cali- fornia Edison Company	The Southern Sierras Power Company
\$6,077 03	\$1,031,620 38	\$124,576 27	\$50,223 82	\$4,473,033 15	\$285,389 82
8,678 41	477,789 71	72,529 54	51,797 45	2,865,339 10	207,722 42
-----	552,830 67	52,046 73	-----	1,607,694 05	77,667 40
2,601 38	-----	-----	1,573 63	-----	-----
6,089 52	14,556 24	271 32	364 69	62,452 96	5,112 66
3,468 14	568,886 91	52,318 05	-----	1,670,147 01	82,780 06
-----	-----	-----	1,208 94	-----	-----
-----	-----	-----	-----	\$12,436 16	-----
-----	\$743,034 03	\$62,500 00	\$24,000 00	745,234 34	\$116,000 00
-----	-----	23,502 71	-----	59,084 44	36,665 68
-----	-----	-----	7,138 44	5,475 74	-----
-----	667 55	78 12	-----	36,300 40	853 48
-----	-----	-----	-----	-----	-----
-----	\$743,701 58	\$86,080 83	\$31,138 44	\$858,531 08	\$153,519 16
-----	-----	-----	-----	-----	-----
\$3,488 14	-----	-----	-----	\$811,615 93	-----
-----	\$175,314 67	\$33,762 78	\$32,347 38	-----	\$70,739 10
-----	-----	-----	-----	770,000 00	-----
-----	2,000 05	-----	-----	8,492 13	3,159 46
-----	6,261 45	-----	43 79	78,941 01	-----
-----	-----	-----	-----	227,300 24	25,611 38
-----	117,076 60	70,528 71	20,266 74	-----	-----
*2,182 08	-----	-----	-----	221,871 56	-----
-----	281,525 05	104,291 49	52,657 91	-----	41,968 26
-----	-----	-----	-----	-----	-----

TABLE No. 2

ABSTRACT OF INCOME AND PROFIT AND LOSS ACCOUNT OF  
ENDING DECEMBER

	Surprise Valley Electric Light and Power Company	Truckee Electric Light and Power Company	The Truckee River General Electric Company
Operating revenues -----	\$3,617 11	\$10,410 90	\$327,409 52
Operating expenses -----	2,692 79	9,389 17	107,078 64
Net operating revenue -----	924 32	1,021 73	220,330 88
Net operating loss -----			
Non-operating revenue -----			234 55
Gross corporate income -----	924 32	1,021 73	220,565 43
Gross corporate loss -----			
<i>Deductions.</i>			
Non-operating revenue deductions -----			
Interest accrued on funded debt -----			
Other interest deductions -----	\$592 64		\$88,285 66
Rent deductions -----			
Miscellaneous deductions -----	15 53		2,576 26
Total deductions -----	\$608 17		\$90,861 92
Net corporate income for year -----	\$316 15	\$1,021 73	\$129,703 51
Net corporate loss for year -----			
Dividends -----		900 00	97,500 00
Miscellaneous additions to income -----			565 21
Miscellaneous deductions from income -----	1,640 69		963 20
Surplus on December 31, 1912 -----	3,027 78	15,114 51	514,522 47
Deficit on December 31, 1912 -----			
Surplus on December 31, 1913 -----	1,703 24	15,236 24	<sup>2</sup> 546,624 75
Deficit on December 31, 1913 -----			

<sup>1</sup>Credit item.<sup>2</sup>Includes net revenue, water, \$296.76.



—Continued.

ELECTRIC COMPANIES OPERATING IN CALIFORNIA DURING YEAR  
BER 31, 1913.

Tulare County Power Company	Tuolumne Electric Company	Tuolumne County Electric Power and Light Company	Tuolumne Transmission Company	United Light Fuel and Power Company	United Light and Power Company
\$111,136 96	\$2,414 04	\$21,167 94	\$5,599 67	\$36,368 50	\$160,045 78
101,805 30	5,580 14	19,527 86	6,751 94	34,526 05	97,518 50
9,331 66	-----	1,640 08	-----	1,842 45	62,527 28
-----	3,166 10	-----	1,152 27	-----	-----
5,000 83	-----	-----	-----	174 19	72,783 63
14,352 49	-----	1,640 08	-----	2,016 64	135,310 91
-----	3,166 10	-----	1,152 27	-----	-----
\$2,740 48	\$1,362 07	-----	\$242 53	-----	-----
-----	3,600 00	-----	-----	-----	\$148,320 00
14,918 91	612 00	-----	-----	-----	24,970 57
466 69	-----	-----	-----	\$54 30	1 00
112 95	-----	-----	-----	319 58	12,556 06
\$18,239 03	\$5,574 07	-----	\$242 53	\$373 88	\$170,735 57
-----	-----	\$1,640 08	-----	\$1,642 76	-----
\$3,906 54	\$8,740 17	-----	\$1,394 80	-----	\$35,424 66
-----	-----	2,666 70	-----	-----	-----
-----	-----	1,280 54	-----	11 43	658 80
-----	-----	-----	-----	28 22	610 19
-----	-----	124 10	-----	4,702 90	-----
3,526 47	62,041 13	-----	319 91	-----	82,277 93
-----	-----	378 02	-----	6,328 87	-----
7,433 01	70,781 30	-----	1,714 71	-----	117,653 98
-----	-----	-----	-----	-----	-----

TABLE No. 2

ABSTRACT OF INCOME AND PROFIT AND LOSS ACCOUNT OF  
ENDING DECEMBER

	Universal Electric and Gas Company	Ventura County Power Company	Vacaville Water and Light Company <sup>3</sup>
Operating revenues -----	\$127,764 70	\$139,754 87	\$14,823 01
Operating expenses -----	114,040 34	85,332 87	11,538 83
Net operating revenue -----	13,724 36	54,422 00	3,284 18
Net operating loss -----			
Non-operating revenue -----	123,471 80	2,479 62	
Gross corporate income -----	137,196 16	56,901 62	3,284 18
Gross corporate loss -----			
<i>Deductions.</i>			
Non-operating revenue deductions -----	\$1,138 07		
Interest accrued on funded debt -----	125,000 00	\$57,530 00	
Other interest deductions -----		7,644 23	
Rent deductions -----			
Miscellaneous deductions -----	319 18		
Total deductions -----	\$126,457 25	\$65,174 23	
Net corporate income for year -----	\$10,738 91		
Net corporate loss for year -----		\$8,272 61	
Dividends -----			
Miscellaneous additions to income -----	221 44		
Miscellaneous deductions from income -----	11,250 05	108,389 42	
Surplus on December 31, 1912 -----	43,398 20	53,374 27	
Deficit on December 31, 1912 -----			
Surplus on December 31, 1913 -----	43,108 50		
Deficit on December 31, 1913 -----		\$33,735 54	

<sup>1</sup>Includes net revenue, gas, \$101,253.81.

<sup>2</sup>Includes net revenue, gas, \$13,580.89; water, \$15,971.33.

<sup>3</sup>See water report.

<sup>4</sup>Net loss of Consolidated Securities Company, \$319.58. Net revenue of Los Angeles Gas and Electric Corporation, \$402,293.79. Net revenue Needles Gas and Electric Company, \$3,639.57. Net revenue Vacaville Water and Light Company, \$3,284.18, not included, as same appears on water and gas reports.

<sup>5</sup>Net revenue of numerous utilities amounting to \$3,345,136.66 included in this amount, same being water and gas.

—Concluded.

ELECTRIC COMPANIES OPERATING IN CALIFORNIA DURING YEAR  
BER 31, 1913.

Vallejo Electric Light and Power Company	Weaverville Electric Company	West Sacramento Electric Company	Western States Gas and Electric Company	Yosemite Power Company	Total
\$79,199 50	\$3,860 54	\$32,521 19	\$880,652 77	\$65,554 25	\$30,237,917 24
58,149 64	2,489 06	21,127 33	493,142 29	46,354 99	17,502,366 06
21,049 86	1,371 48	11,392 86	387,510 48	19,199 26	12,735,551 18
				175 89	2,189,180 89
21,049 86	1,371 48	11,393 86	387,510 48	19,375 15	14,924,732 07
\$5,456 10				\$961 45	\$212,642 52
			\$211,627 90	18,480 00	9,335,402 81
			47,521 66	440 85	926,464 57
					254,420 19
		\$290 28		834 41	1,842,600 64
\$5,456 10		\$290 28	\$259,149 56	\$20,716 71	\$12,571,530 73
\$15,593 76	\$1,371 48	\$11,103 58	\$128,360 92		\$1,944,303 38
				\$1,341 56	
10,750 00	1,500 00		148,750 00		2,324,288 68
222 35					735,463 12
4,975 78			89,308 42		3,146,193 97
13,306 77	171 50	9,130 70	114,917 25	9,616 25	9,172,905 52
13,397 10	42 98	20,234 28	106,473 56	8,274 69	9,727,326 03

TABLE

ABSTRACT OF OPERATING REVENUES OF ELECTRIC COMPANIES

	Alturas Electric Power Company	Amador Electric Light and Power Company
Municipal street lighting—arc.....		
Municipal street lighting—incandescent.....	\$1,748 42	\$1 652 00
Municipal lighting—miscellaneous.....	333 60	
Municipal power.....	219 35	
Commercial lighting—flat rate.....	2,670 64	
Commercial lighting—metered.....	5,493 57	27,866 63
Commercial power—flat rate.....	433 38	
Commercial power—metered.....	778 41	2,944 46
Railway power.....		
Other electrical corporations.....	1,848 68	
Rent of meters.....		
Breakdown service.....		
Joint electric rent revenue.....		
Miscellaneous electric revenue.....		
Rent of electric appliances.....		
Electric merchandise and jobbing revenue.....		165 92
Sale of by-products.....		
Steam sales revenue.....		
Total revenues.....	\$13,526 05	\$32,629 01

TABLE No. 3

ABSTRACT OF OPERATING REVENUES OF ELECTRIC COMPANIES

	California- Oregon Power Company	California Elec- tric Generating Company <sup>1</sup>
Municipal street lighting—arc.....	\$20,251 64	
Municipal street lighting—incandescent.....		
Municipal street lighting—miscellaneous.....		
Municipal power.....		
Commercial lighting—flat rate.....	94,455 20	
Commercial lighting—metered.....	92,104 51	
Commercial power—flat rate.....	31,448 32	
Commercial power—metered.....	61,270 45	
Railway power.....		
Other electrical corporations.....		
Rent of meters.....		
Breakdown service.....		
Joint electric rent revenue.....		
Miscellaneous electric revenue.....	3,711 72	
Rent of electric appliances.....		
Electric merchandise and jobbing revenue.....	5,542 41	
Sale of by-products.....		
Steam sales revenue.....		
Total revenue.....	\$308,784 25	

<sup>1</sup>No revenue—leased plant.

No. 3.

OPERATING IN CALIFORNIA FOR YEAR ENDING DECEMBER 31, 1913.

Bay Point Light and Water Company	Bell Electric Company	Bishop Light and Power Company	Boulder Creek Electric Light and Water Company	Butte County Power, Light and Water Company	California Tele- phone and Light Company
			\$73 25		
	\$813 60	\$1,080 00	9 55		\$1,179 15
	234 00				
	257 00				3,852 80
\$2,010 80	4,542 49	80 75	365 30	\$2,268 20	464 80
1,979 09	4,496 36	9,328 50	926 05		31,206 83
1,046 30	434 50				
583 90	858 77	2,240 10			9,870 31
	332 48	907 60			
	349 58				
		960 44			
			5 10		
\$5,620 09	\$12,318 78	\$14,597 39	\$1,379 25	\$2,268 20	\$46,573 89

—Continued.

OPERATING IN CALIFORNIA FOR YEAR ENDING DECEMBER 31, 1913.

Calistoga Electric Company	Callayoni Electric Plant	Central Oakland Light and Power Company	City Electric Company	Consolidated Securities Company	Coast Counties Gas and Electric Company
					\$10,464 10
\$540 00				\$37 75	7,320 95
					421 75
					7,312 55
	\$828 60	\$247 50	\$210 00	124 75	7,853 28
3,953 42	126 31	73,255 16	409,869 22	420 00	127,948 30
	60 00		225 00		965 55
129 32		23,820 64	231,007 52	1,337 50	107,375 80
			343,079 77		
		5,612 23	17,524 88		
			1,136 65		
		975 40	1,773 05		
			574 50		
		94 10	15 00		
		12,698 35	13,565 68		
\$4,622 74	\$1,014 91	\$116,703 38	\$1,018,981 27	\$1,920 00	\$269,662 28



TABLE No. 3

ABSTRACT OF OPERATING REVENUES OF ELECTRIC COMPANIES

	Coast Valleys Gas and Electric Company	Consolidated Utilities Company
Municipal street lighting—arc.....	\$10,739 75	
Municipal street lighting—incandescent.....	2,897 57	\$504 94
Municipal lighting—miscellaneous .....	1,314 55	
Municipal power .....	98 90	
Commercial lighting—flat rate.....	1,691 80	
Commercial lighting—metered .....	80,872 15	3,119 11
Commercial power—flat rate.....	6,946 35	
Commercial power—metered .....	45,239 07	1,931 98
Railway power .....	4,767 06	
Other electrical corporations.....		
Rent of meters.....		
Breakdown service .....		
Joint electric rent revenue.....		
Miscellaneous electric revenue.....		
Rent of electric appliances.....		
Electric merchandise and jobbing revenue.....	2,695 59	
Sale of by-products.....		
Steam sales revenue.....		
<b>Total revenues .....</b>	<b>\$157,262 79</b>	<b>\$5,556 03</b>

<sup>1</sup>Credit item.

TABLE No. 3

ABSTRACT OF OPERATING REVENUES OF ELECTRIC COMPANIES

	Fort Bragg Electric Company	Glendora Light and Power Company
Municipal street lighting—arc.....		
Municipal street lighting—incandescent.....		
Municipal lighting—miscellaneous .....		
Municipal power .....		
Commercial lighting—flat rate.....		
Commercial lighting—metered .....	\$22,943 14	\$3,320 30
Commercial power—flat rate.....		
Commercial power—metered .....	7,434 80	
Railway power .....		
Other electrical corporations.....		
Rent of meters.....		
Breakdown service .....		
Joint electrical rent revenue.....		
Miscellaneous electric revenue.....		
Rent of electric appliances.....		
Electric merchandise and jobbing revenue.....	298 51	74 75
Sale of by-products.....		
Steam sales revenue.....		
<b>Total revenue .....</b>	<b>\$30,676 45</b>	<b>\$3,395 05</b>

<sup>1</sup>Credit item.

—Continued.

OPERATING IN CALIFORNIA FOR YEAR ENDING DECEMBER 31, 1913.

Consumers Light and Power Company	Corona Gas and Electric Light Company	Downey Light, Power and Water Company	Durham Light and Power Company	Equitable Light and Power Company	Escondido Utilities Company
	\$2,300 00				
	1,471 30	\$1,579 20	\$228 00		\$1,018 75
			15 00		
\$1,802 00			312 25		1,003 80
61,156 30	14,851 89	7,901 65	1,697 50	\$46,401 59	3,641 26
1,657 20			25 00	2,400 00	
29,198 32	4,411 66	1,996 25	1,338 60	18,197 62	
				238 00	
90 25					
				7 25	
39 51	101 91			199 75	
51,558 24				41,511 20	
\$145,501 82	\$23,136 76	\$11,477 10	\$3,616 35	\$108,655 91	\$5,663 81

—Continued.

OPERATING IN CALIFORNIA FOR YEAR ENDING DECEMBER 31, 1913.

Great Western Power Company	Half Moon Bay Light and Power Company	Hemet Milling and Power Company	Holton Power Company	Huntington Beach Company	Indian Valley Electric Light and Power Company
\$6,841 40		\$240 00	\$2,715 22	\$114 33	
11,367 45	\$747 66	14 50	594 97	1,033 75	\$70 55
5,861 82			1,790 69		
15,086 25			7,648 10		
85,300 31		52 25	454 50		97 75
164,786 01	3,911 30	2,010 39	78,590 31	7,356 43	2,247 71
680 00			7,050 00	131 40	
639,978 38	12,554 50	25 28	24,966 78	6,464 46	
59,774 86					
856,621 91			3,132 00		
63 00				4 10	
			27 00		
598 81	2,017 67	156 31	1,817 65	40 14	619 21
				13 25	
\$1,845,702 58	\$19,231 13	\$2,498 73	\$128,787 22	\$15,157 86	\$3,035 22

TABLE No. 3

ABSTRACT OF OPERATING REVENUES OF ELECTRIC COMPANIES

	Invincible Mines, Consolidated	H. G. Lacey Company	Lassen Electric Company
Municipal street lighting—arc.....		\$936 00	-----
Municipal street lighting—incandes- cent .....		2,356 00	\$538 57
Municipal lighting—miscellaneous .....			-----
Municipal power .....		185 65	-----
Commercial lighting—flat rate.....		17,554 30	2,461 40
Commercial lighting—metered .....		30,801 65	6,782 38
Commercial power—flat rate.....			1,723 20
Commercial power—metered .....	\$2,610 10	17,276 11	93 17
Railway power .....			-----
Other electrical corporations .....			-----
Rent of meters.....			-----
Breakdown service .....			-----
Joint electrical rent revenue.....		600 00	-----
Miscellaneous electric revenue.....		1,583 50	-----
Rent of electric appliances.....			-----
Electric merchandise and jobbing revenue .....			1,631 59
Sale of by-products.....			-----
Steam sales revenue.....			-----
Total revenue .....	\$2,610 10	\$71,293 21	\$13,230 31

TABLE No. 3

ABSTRACT OF OPERATING REVENUES OF ELECTRIC COMPANIES

	Mt. Konociti Light and Power Company	Mt. Whitney Power and Electric Company	Napa Valley Electric Company <sup>1</sup>
Municipal street lighting—arc.....		\$7,950 99	-----
Municipal street lighting—incandes- cent .....	\$429 00	2,493 10	-----
Municipal lighting—miscellaneous .....		1,302 39	-----
Municipal power .....	289 80	10,064 01	-----
Commercial lighting—flat rate.....	419 50	4,690 01	-----
Commercial lighting—metered .....	7,200 33	101,445 34	-----
Commercial power—flat rate.....		296,963 47	-----
Commercial power—metered .....	2,135 92	109,507 97	-----
Railway power .....		16,269 29	-----
Other electrical corporations .....		5,815 66	-----
Rent of meters.....	260 60		-----
Breakdown service .....			-----
Joint electric rent revenue.....			-----
Miscellaneous electric revenue.....			-----
Rent of electric appliances.....			-----
Electric merchandise and jobbing revenue .....		10,570 08	-----
Sale of by-products.....			-----
Steam sales revenue.....			-----
Total revenue .....	\$10,735 15	\$567,072 31	\$20,443 77

<sup>1</sup>Not segregated.

—Continued.

OPERATING IN CALIFORNIA FOR YEAR ENDING DECEMBER 31, 1913.

Lompoc Light and Power Company	Los Angeles Gas and Electric Corporation	Levalton Electric Light Company	Mendocino Electric Light and Power Company	Midland Counties Public Service Corporation	Middle Yuba Hydro-electric Power Company
	\$275,126 94			\$4,328 20	
\$1,360 00	20,746 80	\$96 00		7,974 33	
	1,897 94			102 05	
	1,877 69			1,062 30	
381 60		3,704 21	\$1,089 55	322 50	\$237 50
8,071 70	933,113 29	253 34	3,061 50	96,263 51	1,436 52
383 05				2,999 97	
972 85	201,320 20			47,855 92	5,685 59
				3,440 22	
	1,684 74				
73 21			6,202 59	239 00	
	90 25			663 50	
1,005 31				4,852 15	259 82
\$12,247 75	\$1,438,857 85	\$4,053 55	\$10,353 64	\$170,103 65	\$7,619 43

—Continued.

OPERATING IN CALIFORNIA FOR YEAR ENDING DECEMBER 31, 1913.

Needles Gas and Electric Company	Nevada-Calif- ornia Power Company	Northern Calif- ornia Power Company, Consolidated	Novato Light and Power Company	Oceanside Electric and Gas Company	Ontario Power Company
\$387 00	\$2,920 00	\$9,173 12		\$600 00	\$6,374 84
	4,283 70	5,639 46		180 00	
		2,647 85		111 00	
		3,248 08			
	1,387 30	24,003 31		804 00	7,152 77
17,651 28	110,865 24	105,198 37	\$2,310 75	4,167 55	40,088 55
		16,632 28			40,137 62
	864,750 82	343,515 76		1,251 44	15,006 18
	6,410 17	243,423 79			1,181 52
		673 70			
		51 05			
	388 88	15 00			
	4,057 72	6,124 57			228 47
\$18,038 28	\$995,063 83	\$760,346 34	\$2,310 75	\$7,113 99	\$110,169 95

TABLE No. 3

ABSTRACT OF OPERATING REVENUES OF ELECTRIC COMPANIES

	Oro Electric Corporation	Oro Water, Light and Power Company	Pacific Gas and Electric Company
Municipal street lighting—arc-----		\$831 00	\$379,526 64
Municipal street lighting—incandescent-----		1,787 80	126,807 48
Municipal lighting—miscellaneous-----	\$62 08	1,459 65	36,366 75
Municipal power-----	10 80	344 15	33,679 17
Commercial lighting—flat rate-----		5,489 20	259,362 56
Commercial lighting—metered-----	1,629 75	21,839 25	3,202,358 29
Commercial power—flat rate-----		454 30	23,041 55
Commercial power—metered-----	176,589 45	4,075 15	2,861,599 94
Railway power-----			696,324 41
Other electrical corporations-----	15,075 53		343,429 94
Rent of meters-----			
Breakdown service-----			1,627 81
Joint electric rent revenue-----			
Miscellaneous electric revenue-----		487 95	265,784 52
Rent of electric appliances-----			872 85
Electric merchandise and jobbing revenue-----	1,160 12	660 41	
Sale of by-products-----	2,390 70		
Steam sales revenue-----			131,758 60
Total revenue-----	\$196,918 43	\$37,428 86	\$8,362,540 51

¹Not segregated.

TABLE No. 3

ABSTRACT OF OPERATING REVENUES OF ELECTRIC COMPANIES

	San Diego Consolidated Gas and Electric Company	San Joaquin Light and Power Corporation	Santa Barbara Gas and Electric Company
Municipal street lighting—arc-----	\$40,445 07	\$40,033 20	\$12,449 75
Municipal street lighting—incandescent-----	12,004 15	10,281 85	602 30
Municipal lighting—miscellaneous-----	4,976 35	7,689 09	
Municipal power-----	16,327 45	12,622 40	378 10
Commercial lighting—flat rate-----	16,057 47	6,070 53	1,163 40
Commercial lighting—metered-----	465,653 11	568,099 36	111,039 22
Commercial power—flat rate-----		170,927 75	
Commercial power—metered-----	142,721 73	589,055 32	26,407 12
Railway power-----		44,020 40	10,911 20
Other electrical corporations-----	3,261 34		
Rent of meters-----			
Breakdown service-----			
Joint electric rent revenue-----			
Miscellaneous electric revenue-----		432 00	280 00
Rent of electric appliances-----	1,061 08	126 34	53 50
Electric merchandise and jobbing revenue-----	1,738 93	12,039 98	1,913 30
Sale of by-products-----	1,320 00		
Steam sales revenue-----	6,700 71		198 70
Total revenue-----	\$712,267 39	\$1,461,398 22	\$165,396 59

¹Not segregated.



—Continued.

OPERATING IN CALIFORNIA FOR YEAR ENDING DECEMBER 31, 1913.

Pacific Light and Power Corporation	Pineole Electric Light and Power Company <sup>1</sup>	Pacific Power Company	Point Arena Electric Light Company	Quincy Electric Light and Power Company <sup>1</sup>	Rialto Light. Power and Water Company
\$15,579 63					
52,161 51			\$306 00		\$285 48
401 70		\$1,596 95	1,614 00		
593,006 63		336 20	1,045 35		3,747 64
506,522 74		71,038 24			1,117 11
1,212,103 15					
252,264 54					
2,950 95		68 76			57 51
\$2,634,990 85	\$6,721 87	\$73,040 15	\$2,965 35	\$4,200 00	\$5,207 14

—Continued.

OPERATING IN CALIFORNIA FOR YEAR ENDING DECEMBER 31, 1913.

Santa Catalina Island Company	Sierra and San Francisco Power Company	Snow Mountain Water and Power Company <sup>1</sup>	Southside Light and Power Company	Southern California Edison Company	The Southern Sierras Power Company
				\$60,071 84	
\$441 65	\$3,814 30			83,671 70	\$2,368 52
	677 71			14,175 58	
	10,710 42			93,396 65	7,047 12
275 05	1,868 20		\$234 60	11,357 50	
5,360 33	78,021 10		23,741 12	1,996,122 17	52,506 08
	563 10			176 75	
	128,895 77		12,172 55	1,644,950 25	117,065 27
	716,182 73			377,150 16	
	88,890 27			135,758 98	102,430 44
					307 15
	49 70		10 00	280 83	
				5,891 37	
	294 03		1,010 13	50,029 37	3,665 24
	1,653 05				
			13,055 42		
\$6,077 03	\$1,031,620 38	\$124,576 27	\$50,223 82	\$4,473,033 15	\$285,389 82

TABLE No. 3

ABSTRACT OF OPERATING REVENUES OF ELECTRIC COMPANIES

	Surprise Valley Electric Light and Power Company	Truckee Electric Light and Power Company	The Truckee River General Electric Company
Municipal street lighting—arc-----			\$2,829 50
Municipal street lighting—incandes- cent-----	\$563 49		624 35
Municipal lighting—miscellaneous-----			
Municipal power-----			
Commercial lighting—flat rate-----	17 26	\$10,410 90	13,250 25
Commercial lighting—metered-----	2,510 38		33,507 52
Commercial power—flat rate-----	19 31		1,500 00
Commercial power—metered-----	491 14		260,475 32
Railway power-----			
Other electric corporations-----			15,000 00
Rent of meters-----			
Breakdown service-----			
Joint electric rent revenue-----			
Miscellaneous electric revenue-----	15 53		65 66
Rent of electric appliances-----			
Electric merchandise and jobbing revenue-----			156 92
Sale of by-products-----			
Steam sales revenue-----			
Total revenue-----	\$3,617 11	\$10,410 90	\$327,409 52

TABLE No. 3

ABSTRACT OF OPERATING REVENUES OF ELECTRIC COMPANIES

	Universal Electric and Gas Company	Ventura County Power Company	Vacaville Water and Light Company
Municipal street lighting—arc-----			
Municipal street lighting—incandes- cent-----		\$5,433 45	\$1,307 10
Municipal lighting—miscellaneous-----		1,498 15	42 00
Municipal power-----		2,877 30	
Commercial lighting—flat rate-----			6,965 02
Commercial lighting—metered-----	\$83,748 95	84,877 74	3,170 21
Commercial power—flat rate-----			1,786 30
Commercial power—metered-----	29,192 05	41,923 87	1,171 85
Railway power-----			
Other electric corporations-----			
Rent of meters-----			
Breakdown service-----	141 60		
Joint electric rent revenue-----			
Miscellaneous electric revenue-----			
Rent of electric appliances-----	44 00	5 00	
Electric merchandise and jobbing revenue-----		3,139 36	380 53
Sale of by-products-----	8,201 35		
Steam sales revenue-----	6,436 75		
Total revenue-----	\$127,764 70	\$139,754 87	\$14,823 01

Not segregated: Napa Valley Electric, \$20,443.77; Pinole Electric Light and Power Company, \$6,721.87; Quincy Electric Light and Power Company, \$4,200.00; Snow Mountain Water and Power Company, \$124,576.27.

—Continued.

OPERATING IN CALIFORNIA FOR YEAR ENDING DECEMBER 31, 1913.

Tulare County Power Company	Tuolumne Electric Company	Tuolumne County Electric Power and Light Company	Tuolumne Transmission Company	United Light, Fuel and Power Company	United Light and Power Company
		\$995 61		\$2,019 85	
\$31 05				96 02	
446 80				1 00	
178 79					
6,083 46		19,947 88		16,959 83	
96,238 88					
7,882 28	\$2,414 04		\$5,599 67	1,444 28	
					\$159,903 20
59 80				81 67	101 77
		224 45			40 81
215 90				15,765 85	
\$111,136 96	\$2,414 04	\$21,167 94	\$5,599 67	\$36,368 50	\$160,045 78

—Concluded.

OPERATING IN CALIFORNIA FOR YEAR ENDING DECEMBER 31, 1913.

Vallejo Electric Light and Power Company	Weaverville Electric Company	West Sacramento Electric Company	Western States Gas and Electric Company	Yosemite Power Company	Total
\$9,269 85			\$60,004 34	\$3,808 65	\$986,386 25
814 80		\$648 00	4,307 33	317 15	393,570 89
				114 95	86,162 02
				2,759 91	231,803 75
2,330 95	\$2,902 70	55 00	20,008 90	554 36	633,210 21
56,268 46	893 09	2,042 83	382,199 09	21,093 33	10,600,300 06
			1,846 25	15 02	708,911 80
4,334 84		29,387 72	346,654 44	18,473 89	9,879,592 94
			59,363 79		3,703,290 24
				6,611 21	2,106,215 83
	40 00				3,074 73
					2,443 11
			1,677 50		2,277 50
	15 00		3,440 85	9,255 65	295,387 16
			116 75		10,897 11
6,180 60	9 75	287 64	783 53	2,550 13	131,057 38
		100 00	250 00		14,144 25
					293,249 50
\$79,199 50	\$3,860 54	\$32,521 19	\$880,652 77	\$65,554 25	\$90,237,917 24

TABLE

## ABSTRACT OF OPERATING EXPENSES CLASS "A" ELECTRIC COMPANIES

	California- Oregon Power Company	Central Oakland Light and Power Company
<i>Production Expenses.</i>		
Superintendence .....	\$360 00	\$878 60
Water collection labor and expense .....		
Water for hydraulic power .....		
Steam generation labor .....		4,543 84
Fuel for steam .....		9,037 05
Steam generator supplies .....		942 03
Steam from other sources .....		
Producer gas labor .....		
Fuel for gas .....		
Producer gas supplies .....		
Power gas from other sources .....		
Electric plant labor .....	15,200 21	4,857 51
Electric plant supplies .....	1,566 59	21 56
Electric energy from other sources .....		28,583 81
General labor and supplies .....		170 35
Repairs to dams, water conduits and penstocks .....	1,215 79	
Repairs to power plant buildings and general structures .....	279 24	258 11
Repairs to hydraulic power plant equipment .....	378 91	
Repairs to boilers, furnaces and accessories .....		933 12
Repairs to steam power plant equipment .....		1,343 64
Repairs to gas producers and accessories .....		
Repairs to gas power plant equipment .....		
Repairs to miscellaneous production equipment .....	462 75	9 90
Total production expenses .....	\$19,463 49	\$51,579 52
<i>Transmission Expenses.</i>		
Superintendence .....	\$350 00	
Inspecting and patrolling .....	13,612 87	
Substation labor .....		
Substation supplies and expenses .....	3,644 80	
General labor and supplies .....		
Repairs to overhead transmission system .....	4,974 08	
Repairs to underground transmission system .....		
Repairs to substation buildings and general structures .....	438 38	
Repairs to substation equipment .....		
Repairs to miscellaneous transmission equipment .....	448 30	
Total transmission expenses .....	\$23,468 43	

<sup>1</sup>Credit item.<sup>2</sup>Credit item—inter-company adjustment of operating expenses.

## No. 4.

OPERATING IN CALIFORNIA DURING YEAR ENDING DECEMBER 31, 1913.

City Electric Company	Coast Counties Gas and Electric Company	Coast Valleys Gas and Electric Company	Consumers Light and Power Company	Equitable Light and Power Company	Great Western Power Company
\$4,605 98	\$1,238 15 1,449 60	\$500 01	\$366 92	\$458 83	\$12,884 87 1,444 86
20,573 46	2,779 07	1,082 05	8,457 51	13,007 25	6,436 10
194,714 42	11,217 80	3,366 96	15,062 33	29,017 89	61,367 75
9,422 41	565 31	670 94	2,217 79	6,516 92	1,801 83
5,058 83	2,873 18	2,494 77	35 42	4,869 59	14,114 04
864 95		318 39	6,010 84	6,020 48	3,229 35
162,482 42	89,316 30	40,879 19	170 44	9,972 78	22,212 10
119 12	111 84	619 05	246 84	273 40	4,768 42
	89 56				1,736 75
1,021 16	26 72	122 70	173 65	287 35	1,694 14
	36 97				10,831 46
7,673 22	1,096 55	245 07	981 10	1,907 03	4,041 54
12,896 49	440 91	355 62	2,261 80	3,309 65	4,667 08
5 63	99 32	46 51	35 35 26,129 66	35,276 47 97 60	2,665 05
\$419,438 09	\$111,341 28	\$50,701 26	\$62,149 65	\$40,462 30	\$153,895 34
	\$534 15				\$3,815 24
	132 42	\$21 01			11,430 55
	1,280 45	16 35			24,576 64
	272 04	39 25			2,708 56
	158 89	414 57			5,955 14
	1,698 64	370 51			2,018 48
	18 05				
	1,091 17				237 57
	5 33	265 61			10,684 45
		90 01			301 73
	\$5,165 04	\$1,217 31			\$61,728 36



TABLE No. 4

## ABSTRACT OF OPERATING EXPENSES CLASS "A" ELECTRIC COMPANIES

	Holton Power Company	Los Angeles Gas and Electric Corporation
<i>Production Expenses.</i>		
Superintendence .....	\$827 60	\$12,007 29
Water collection labor and expense .....	1,899 97	-----
Water for hydraulic power .....	10,749 70	-----
Steam generating labor .....	241 25	28,135 91
Fuel for steam .....	1,450 09	143,786 53
Steam generator supplies .....	81 99	10,769 40
Steam from other sources .....	-----	-----
Producer gas labor .....	3,984 10	-----
Fuel for gas .....	18,022 23	-----
Producer gas supplies .....	110 03	-----
Power gas from other sources .....	-----	-----
Electric plant labor .....	7,042 07	10,775 29
Electric plant supplies .....	3,569 15	300 22
Electric energy from other sources .....	-----	171,391 31
General labor and supplies .....	89 48	5,700 82
Repairs to dams, water conduits and penstocks .....	642 99	-----
Repairs to power plant buildings and general structures .....	14 53	1,058 01
Repairs to hydraulic power plant equipment .....	2,866 63	-----
Repairs to boilers, furnaces and accessories .....	163 83	9,132 74
Repairs to steam power plant and equipment .....	698 29	6,609 34
Repairs to gas producers and accessories .....	1,274 37	-----
Repairs to gas power plant equipment .....	1,986 63	-----
Repairs to miscellaneous production equipment .....	50	78 04
Total production expenses .....	\$53,815 25	\$399,744 90
<i>Transmission Expenses.</i>		
Superintendence .....	\$1 15	-----
Inspecting and patrolling .....	179 53	-----
Substation labor .....	-----	-----
Substation supplies and expenses .....	-----	-----
General labor and supplies .....	29 85	-----
Repairs to overhead transmission system .....	125 80	-----
Repairs to underground transmission system .....	-----	-----
Repairs to substation buildings and general structures .....	9 35	-----
Repairs to substation equipment .....	68 83	-----
Repairs to miscellaneous transmission equipment .....	80 10	-----
Total transmission expenses .....	\$494 61	-----

<sup>1</sup>Credit item.

—Continued.

OPERATING IN CALIFORNIA DURING YEAR ENDING DECEMBER 31, 1913.

Midland Counties Public Service Corporation	Mt. Whitney Power and Electric Company	Nevada- California Power Company	Northern Cali- fornia Power Company, Consolidated	Ontario Power Company	Oro Electric Corporation
\$312 11	\$900 00	\$2,758 85	\$6,910 37		\$1,513 28
	1,511 68	4,320 46	8,958 68	\$185 00	4,387 69
		3,136 72			
3,130 93	2,913 48			360 38	2,566 00
4,878 83	11,363 23			397 69	5,433 78
365 71	1,269 62			131 89	206 61
753 13	9,074 93	17,998 71	22,585 70	3,057 70	7,250 38
271 41	1,061 89	1,856 27	684 03	89 99	82 41
40,036 50		119,563 83		22,703 70	44,062 98
10 93	6,104 18	9,377 41	9,897 02		847 61
	5,509 67	6,735 92	555 62		9,554 40
77 44	2,948 51	4,817 36	482 50	5 12	107 70
	6,572 12	8,564 26	2,678 01	124 32	278 89
407 12	1,813 13			38 70	45 31
313 70	1,359 42			68 63	64 57
7 06	1,210 41	252 25	1,282 22		236 57
\$50,564 87	\$53,612 27	\$179,382 04	\$54,034 15	\$27,163 12	\$76,638 18
\$1,054 13		\$1,627 35	\$2,304 34		
1,082 79	\$349 87	9,564 20	6,492 57		
469 75		7,482 24	1,780 62		
28 90		2,154 22	323 74		
16 71	92 65		985 97		
891 16	2,156 06	2,241 95	7,791 63		\$484 58
			13 12		
11 17		637 58	46 17		
21 12		6,744 26	332 99		731 61
4 25			588 49		83 00
\$3,579 98	\$2,598 58	\$30,451 80	\$20,659 64		\$1,299 19

TABLE No. 4

## ABSTRACT OF OPERATING EXPENSES CLASS "A" ELECTRIC COMPANIES

	Pacific Gas and Electric Company	Pacific Light and Power Corporation
<i>Production Expenses.</i>		
Superintendence .....	\$31,664 89	\$15,768 46
Water collection labor and expense .....	39,075 03	7,261 70
Water for hydraulic power .....		7,350 06
Steam generator labor .....	132,303 54	29,496 69
Fuel for steam .....	570,012 87	607,589 53
Steam generator supplies .....	15,594 23	12,248 55
Steam from other sources .....		
Producer gas labor .....		
Fuel for gas .....		
Producer gas supplies .....		
Power gas from other sources .....		
Electric plant labor .....	39,971 21	73,741 75
Electric plant supplies .....	3,926 45	612 96
Electric energy from other sources .....	1,006,613 64	32,514 40
General labor and supplies .....	53,885 23	10,923 38
Repairs to dams, water conduits and penstocks .....	50,663 45	38,518 98
Repairs to power plant buildings and general structures .....	8,137 92	6,607 33
Repairs to hydraulic power plant equipment .....	14,084 11	9,853 00
Repairs to boilers, furnaces and accessories .....	33,794 31	49,160 66
Repairs to steam power plant equipment .....	13,810 07	87,478 86
Repairs to gas producers and accessories .....		
Repairs to gas power plant equipment .....		
Repairs to miscellaneous production equipment .....	10,477 55	120 18
Total production expenses .....	\$2,024,014 50	\$989,246 49
<i>Transmission Expenses.</i>		
Superintendence .....	\$18,237 93	\$3,372 56
Inspecting and patrolling .....	58,300 17	14,084 76
Substation labor .....	38,329 86	
Substation supplies and expenses .....	2,882 91	
General labor and supplies .....	24,895 09	
Repairs to overhead transmission system .....	37,062 49	20,886 58
Repairs to underground transmission system .....		
Repairs to substation buildings and general structures .....	754 37	
Repairs to substation equipment .....	5,156 09	2,283 01
Repairs to miscellaneous transmission equipment .....	4,007 11	
Total transmission expenses .....	\$189,626 02	\$40,626 91

—Continued.

OPERATING IN CALIFORNIA DURING YEAR ENDING DECEMBER 31, 1913.

San Diego Consolidated Gas and Electric Company	San Joaquin Light and Power Corporation	Santa Barbara Gas and Electric Company	Sierra and San Francisco Power Company	Snow Mountain Water and Power Company	Southern California Edison Company
\$954 35	\$1,445 71	\$1,343 30	\$7,016 18		\$36,269 00
	7,604 36		7,848 83	\$720 00	7,663 29
13,396 21	15,121 94	5,033 60	11,437 45		19,552 30
119,340 90	129,352 34	28,530 17	98,404 88		413,411 43
8,732 74	3,044 42	998 75	1,257 24		9,120 85
10,488 87	14,624 09	3,834 35	17,058 90		63,141 39
2,402 89	1,162 98	1,407 15	2,267 56		9,381 69
	55,314 16		16,689 18		12,577 61
2,580 94	3,967 32	821 88	2,871 02		33,361 45
	7,022 06		20,328 54	468 48	4,102 05
141 06	1,726 55	213 63	1,684 19	199 46	6,699 87
	4,294 00		2,663 49	342 62	17,435 97
5,308 36	3,024 21	2,320 88	11,223 77		27,977 93
3,883 14	2,976 26	4,851 35	1,459 01		47,571 02
1,921 55	792 46	35 50	1,650 50	242 86	5,416 37
\$169,151 01	\$251,472 86	\$49,390 56	\$203,860 74	\$1,973 42	\$713,682 22
	\$150 76		\$2,847 55	\$1,800 00	\$23,637 40
	3,783 93		5,976 87		18,752 45
	2,743 11		14,574 32		10,784 75
	497 39		631 59		2,096 24
	2,514 15		553 21	105 15	8,600 78
	7,304 24		6,595 10	538 70	8,096 95
				31 95	23 18
	671 23		354 70		378 53
	1,262 75		479 25	76 60	1,270 10
	770 08		604 94	128 62	399 33
	\$19,697 64		\$32,617 53	\$2,681 02	\$74,039 71

TABLE No. 4

## ABSTRACT OF OPERATING EXPENSES CLASS "A" ELECTRIC COMPANIES

	The Southern Sierras Power Company	Tulare County Power Company
<i>Production Expenses.</i>		
Superintendence .....	\$3,059 20	\$1,166 99
Water collection labor and expense.....	62 92	-----
Water for hydraulic power.....	11 33	-----
Steam generation labor .....	6,326 02	2,902 87
Fuel for steam .....	25,204 60	35,201 39
Steam generator supplies .....	740 49	1,223 63
Steam from other sources.....	-----	-----
Producer gas labor .....	-----	-----
Fuel for gas .....	-----	-----
Producer gas supplies .....	-----	-----
Power gas from other sources.....	-----	-----
Electric plant labor .....	6,095 21	562 88
Electric plant supplies .....	805 64	157 96
Electric energy from other sources.....	6,472 95	29,345 95
General labor and supplies.....	2,625 95	157 50
Repairs to dams, water conduits and penstocks.....	12 17	-----
Repairs to power plant buildings and general structures .....	172 31	-----
Repairs to hydraulic power plant equipment.....	26 97	-----
Repairs to boilers, furnaces and accessories.....	939 10	1,160 78
Repairs to steam power plant equipment.....	907 28	608 77
Repairs to gas producers and accessories.....	-----	-----
Repairs to gas power plant equipment.....	-----	-----
Repairs to miscellaneous production equipment.....	84 19	-----
Total production expenses .....	\$53,546 33	\$72,488 72
<i>Transmission Expenses.</i>		
Superintendence .....	\$791 65	\$132 58
Inspecting and patrolling .....	9,988 65	2 66
Substation labor .....	1,739 23	421 84
Substation supplies and expenses.....	327 74	-----
General labor and supplies.....	406 32	-----
Repairs to overhead transmission system.....	656 20	63 49
Repairs to underground transmission system.....	-----	-----
Repairs to substation buildings and general structures .....	65 88	-----
Repairs to substation equipment.....	229 89	6 51
Repairs to miscellaneous transmission equipment.....	58 62	-----
Total transmission expenses .....	\$14,264 18	\$627 08

<sup>1</sup>Credit item.<sup>2</sup>Not segregated.<sup>3</sup>The Truckee River General Electric Company production expenses of \$33,120.10 and transmission expenses of \$12,519.26 not segregated.



—Continued.

OPERATING IN CALIFORNIA DURING YEAR ENDING DECEMBER 31, 1913.

The Truckee River General Electric Company <sup>2</sup>	United Light and Power Company	Universal Electric and Gas Company	Ventura County Power Company	Western States Gas and Electric Company	Total
	\$2,340 25			\$2,383 30	\$149,934 49
	14,236 21			4,698 90	113,329 18
				1,850 00	23,097 81
		\$10,946 01	\$2,235 25	7,839 55	250,818 66
	59,207 40	37,024 98	7,353 75	17,805 87	2,637,634 28
	3,475 89	2,018 38	444 80	1,650 31	95,512 73
					3,984 10
					18,022 23
				14,585 91	14,475 88
	3,071 81	3,545 11	285 10	16,011 84	380,473 97
	44 51	1,070 75	92 54	955 70	50,236 31
			29,530 14	172,165 18	2,112,598 57
	482 59	112 33		1,828 30	151,954 36
	08			4,175 87	151,332 38
		595 91	36 60	567 32	40,156 39
				2,682 04	83,713 77
	629 19	1,643 55	630 24	3,653 08	169,944 52
	3,899 43	1,566 93	480 37	1,475 83	205,357 46
					1,274 37
	199 49	350 40	19 20	53 32	133,254 49
					53,947 04
\$33,120 10	\$87,586 85	\$58,874 35	\$41,107 99	\$235,210 50	\$6,788,712 35
			\$333 57	\$458 02	\$61,448 38
			313 25	4,027 96	158,096 51
				7,089 89	111,289 05
			592 85	1,717 65	17,917 88
				446 49	45,174 97
			647 33	8,756 23	113,360 20
					60 20
			63 05	181 17	4,940 32
			262 76	2,553 40	32,434 56
			15 17	87 29	7,667 04
\$12,519 26			\$2,227 98	\$25,318 10	\$564,908 37

TABLE No. 4

ABSTRACT OF OPERATING EXPENSES CLASS "A" ELECTRIC COMPANIES

	California- Oregon Power Company	Central Oakland Light and Power Company
<i>Distribution Expenses.</i>		
Superintendence -----	\$420 00	\$167 88
Substation labor -----		6,484 99
Substation supplies and expenses -----		1,602 88
Storage battery labor -----		
Storage battery supplies and expenses -----		
Setting and removing transformers and meters.---	3,285 16	737 47
Inspecting and patrolling -----		476 19
Electric meter operations -----		1,411 59
Commercial arc labor -----		19 75
Commercial arc supplies and repairs -----		12 58
Commercial incandescent lamp installation and renewals -----		24 25
Inspection and repairs of consumers installations.	1,272 75	1 75
Municipal street arc labor -----		
Municipal street arc supplies -----		
General labor and supplies -----	3,272 90	7 66
Repairs to substation buildings and general struc- tures -----		326 61
Repairs to substation equipment -----		1,458 50
Repairs to overhead distribution system -----	4,635 63	640 72
Repairs to underground distribution system -----		1,480 10
Repairs to line transformers and devices -----	1,349 05	857 98
Repairs to electric services -----		2,384 71
Repairs to electric meters -----	531 42	107 19
Repairs to municipal street lighting system -----		
Repairs to commercial arc lamps -----		
Repairs to installations on consumers premises -----	2,774 20	87 06
Repairs to miscellaneous distribution equipment -----	810 43	
Total distribution expenses -----	\$18,351 54	\$18,274 70

<sup>1</sup>Credit item.<sup>2</sup>Includes \$3,299.44 inter-company adjustment of operating expenses.

—Continued.

OPERATING IN CALIFORNIA DURING YEAR ENDING DECEMBER 31, 1913.

City Electric Company	Coast Counties Gas and Electric Company	Coast Valleys Gas and Electric Company	Consumers Light and Power Company	Equitable Light and Power Company	Great Western Power Company
\$1,131 74	\$2,955 11	\$633 36	\$133 04	\$157 24	\$8,428 85
9,958 45	116 12	138 60			10,551 24
1,223 96		86 06	43	42 80	793 58
1,244 17	1,593 95	1,254 96	187 13	200 59	4,104 82
6,384 05	187 63	41 66	422 28	330 64	5,670 52
3,499 35	79 19	109 16	459 94	315 78	6,034 49
	106 37				39 96
		34 48			4 03
406 85	9 22	13 20			456 52
10 55	843 30	31 63	869 55	728 64	6,108 45
	474 20	521 68			556 93
		224 11			231 70
1,009 90	1,030 85	381 57	23,307 78	83	1,835 43
97 87	22 43	14 11	2 65	57 60	356 82
1,954 72	386 69	33 21	51 98		2,477 34
4,989 84	4,537 05	1,276 57	5 43		10,757 69
3,296 26	32 52		1,177 70	612 77	7,085 04
260 28	356 15	137 44	1 07	1 07	3,212 86
1,131 97	171 05	305 35	757 51	1,460 46	1,635 11
216 68	209 76	245 11	140 79	150 46	310 25
	342 62	204 59			1,195 39
	11 55	36 39			59 30
270 12	98 07	107 89	264 81	2,834 00	879 15
287 00	564 17	478 20	12 05	3,162 06	216 24
\$37,373 76	\$14,128 00	\$6,309 33	\$7,794 14	\$3,730 82	\$73,001 71

TABLE No. 4

## ABSTRACT OF OPERATING EXPENSES CLASS "A" ELECTRIC COMPANIES

	Holton Power Company	Los Angeles Gas and Electric Corporation
<i>Distribution Expenses.</i>		
Superintendence -----	\$295 80	\$23,029 75
Substation labor -----	5 70	2,409 43
Substation supplies and expenses -----	123 68	539 81
Storage battery labor -----		
Storage battery supplies and expenses -----		
Setting and removing transformers and meters -----	1,096 49	11,381 84
Inspecting and patrolling -----	271 65	11,209 86
Electric meter operations -----	57 90	4,845 65
Commercial arc labor -----	25	2,231 77
Commercial arc supplies and repairs -----	3 00	789 01
Commercial incandescent lamp installation and renewals -----		50,293 58
Inspection and repairs of consumers installations -----	75 80	8,293 50
Municipal street arc labor -----	144 10	
Municipal street arc supplies -----	135 96	
General labor and supplies -----	293 52	23,321 11
Repairs to substation buildings and general struc- tures -----	45 03	3 58
Repairs to substation equipment -----	37 80	80 29
Repairs to overhead distribution system -----	1,128 38	3,742 89
Repairs to underground distribution system -----		4,526 55
Repairs to line transformers and devices -----	9 75	752 18
Repairs to electric services -----	87 45	5,752 86
Repairs to electric meters -----	15 20	1,699 79
Repairs to municipal street lighting system -----	124 85	2,503 15
Repairs to commercial arc lamps -----	2 25	328 46
Repairs to installations on consumers premises -----	16 95	86 79
Repairs to miscellaneous distribution equipment -----	28 50	644 44
Total distribution expenses -----	\$4,000 01	\$158,466 25

—Continued.

OPERATING IN CALIFORNIA DURING YEAR ENDING DECEMBER 31, 1913.

Midland Counties Public Service Corporation	Mt. Whitney Power and Electric Company	Nevada-California Power Company	Northern California Power Company, Consolidated	Ontario Power Company	Oro Electric Corporation
\$2,190 68	\$3,092 33	\$6,525 41	\$5,158 49		\$1,284 21
869 57	6,567 17		7,220 35	\$1,672 83	4,612 55
67 61	837 09		1,343 04	186 02	418 16
69 40					
1 15					
1,527 67	5,554 35	3,000 90	2,866 67	665 69	
566 30			1,581 47	357 82	803 78
1,625 58		1,971 06	2,085 41	1,154 17	543 52
2 70			3 49		
3 01		48 81	15 51		
94 75				776 32	
1,559 37	8,875 74	1,442 64	1,915 81		639 26
317 87	759 84	118 36	1,531 01	972 88	
164 73	409 14	94 53	320 64		
123 16	6,194 80	3,223 90	1,661 16		875 32
74 87	459 65		386 88		85 02
759 81	2,503 57		7,647 15	271 29	255 00
1,200 86	10,070 70	4,373 15	7,304 07	2,558 45	1,383 74
			172 18		
502 60	171 58	316 27	2,982 00	597 45	76 85
490 25	642 13		847 00		
127 94	2,118 32	664 70	344 41		184 30
657 81	386 72	314 00	1,424 11		
4 93			92		
410 23			346 15	884 42	
51 47	1,652 57	50 72	1,483 92		863 76
\$13,464 32	\$50,295 70	\$22,144 45	\$48,641 84	\$10,097 34	\$12,025 47



TABLE No. 4

ABSTRACT OF OPERATING EXPENSES CLASS "A" ELECTRIC COMPANIES

	Pacific Gas and Electric Company	Pacific Light and Power Corporation
<i>Distribution Expenses.</i>		
Superintendence -----	\$81,589 40	\$23,896 46
Substation labor -----	212,244 62	11,196 14
Substation supplies and expenses -----	33,877 97	1,063 34
Storage battery labor -----	2,806 44	
Storage battery supplies and expenses -----	1,593 75	
Setting and removing transformers and meters -----	85,080 21	14,571 14
Inspection and patrolling -----	36,732 80	1,020 00
Electric meter operations -----		1,000 09
Commercial arc labor -----	3,214 40	1,748 81
Commercial arc supplies and repairs -----	1,550 75	842 92
Commercial incandescent lamp installation and renewals -----	16,799 93	11,563 29
Inspection and repairs of consumers installation -----	39,000 54	3,418 65
Municipal street arc labor -----	32,120 32	10,672 38
Municipal street arc supplies -----	22,102 54	5,585 07
General labor and supplies -----	269,557 05	
Repairs to substation buildings and general struc- tures -----	8,684 32	381 23
Repairs to substation equipment -----	57,919 31	10,776 62
Repairs to overhead distribution system -----	69,710 38	28,001 23
Repairs to underground distribution system -----	35,671 60	17,996 80
Repairs to line transformers and devices -----	8,489 31	3,109 26
Repairs to electric services -----	28,481 37	3,419 66
Repairs to electric meters -----	14,703 75	16,262 28
Repairs to municipal street lighting system -----	21,306 56	12,702 13
Repairs to commercial arc lamps -----	1,128 21	3,803 49
Repairs to installations on consumers premises -----	2,433 37	
Repairs to miscellaneous distribution equipment -----	64,156 80	6,667 02
Total distribution expenses -----	\$1,150,955 70	\$189,698 01

—Continued.

OPERATING IN CALIFORNIA DURING YEAR ENDING DECEMBER 31, 1913.

San Diego Con- solidated Gas and Electric Company	San Joaquin Light and Power Corporation	Santa Barbara Gas and Electric Company	Sierra and San Francisco Power Company	Snow Mountain Water and Power Company	Southern California Edison Company
	\$4,371 73	\$1,703 45	\$5,450 72	\$2,673 35	\$75,159 76
\$744 07	6,542 95		245 27	5,293 40	46,232 83
122 58	2,596 44		612 42	530 05	7,463 72
	21 32				1,020 00
	20 04				741 85
6,610 77	5,883 18	1,248 77	2,791 31		53,419 61
1,012 87	3,113 70	2 35	1,001 23	4,464 42	15,797 33
5,154 68	9,783 82	43 14	192 97		22,103 74
75 41	507 90	63 25	92 98		3,489 68
90 85	208 00	2 09	80 08		1,218 94
376 21	99 60	1,827 23	2 48		94,958 66
9,547 37	15,095 52	1,297 99	860 89		47,586 71
4,346 40	3,039 32	491 90	1 95		4,657 50
1,974 86	1,242 61	387 70	14 06		6,928 97
1,688 76	2,034 74	586 84	700 22	1,592 60	9,389 76
17 79	300 57	15 75	56 76		2,099 26
182 83	7,553 56		97 90		12,857 05
6,923 23	15,269 05	4,013 90	2,898 99		95,152 12
927 95			77 88		4,278 64
2,059 14	7,284 22	541 61	654 22		9,803 83
751 89	2,133 70	803 78	174 55		17,911 07
637 65	653 67	21 05	62 69		6,372 33
1,468 05	1,623 69	775 46	116 52		6,996 14
160 82		29 87	5 05		2,730 97
3 25	4,767 08	155 75	176 29		2,767 75
1,042 80	1,103 62		1,370 42		291 93
\$45,920 23	\$95,250 03	\$14,011 88	\$17,737 85	\$14,553 82	\$551,430 15

TABLE No. 4

## ABSTRACT OF OPERATING EXPENSES CLASS "A" ELECTRIC COMPANIES

	The Southern Sierras Power Company	Tulare County Power Company
<i>Distribution Expenses.</i>		
Superintendence .....	\$8,435 80	\$651 35
Substation labor .....	1,334 15	1,124 65
Substation supplies and expenses .....	328 23	12 15
Storage battery labor .....		
Storage battery supplies and expenses .....		
Setting and removing transformers and meters .....	1,385 10	424 32
Inspecting and patrolling .....	2,158 20	385 64
Electric meter operations .....	3,862 22	24 63
Commercial arc labor .....	33 96	
Commercial arc supplies and repairs .....	7 26	
Commercial incandescent lamp installation and renewal .....	2,295 55	
Inspection and repairs of consumers installations .....	2,766 07	1,794 66
Municipal street arc labor .....	20 88	
Municipal street arc supplies .....	16 74	
General labor and supplies .....	2,532 52	41 63
Repairs to substation buildings and general struc- tures .....	160 38	
Repairs to substation equipment .....	132 39	84
Repairs to overhead distribution system .....	3,081 32	1,276 99
Repairs to underground distribution system .....		
Repairs to line transformers and devices .....	3,462 78	176 50
Repairs to electric services .....	463 96	1,285 36
Repairs to electric meters .....	88 51	
Repairs to municipal street lighting system .....	165 35	
Repairs to commercial arc lamps .....	4 02	
Repairs to installations on consumers premises .....	170 12	35 89
Repairs to miscellaneous distribution equipment .....	76 50	51 79
Total distribution expenses .....	\$32,982 01	\$7,286 40

<sup>1</sup>Not segregated.<sup>2</sup>Credit item.<sup>3</sup>Expenses of the Truckee River General Electric Company of \$6,326.33 not segregated.

—Continued.

OPERATING IN CALIFORNIA FOR YEAR ENDING DECEMBER 31, 1913.

The Truckee River General Electric Company <sup>1</sup>	United Light and Power Company	Universal Electric and Gas Company	Ventura County Power Company	Western States Gas and Electric Company	Total
	\$18 80		\$626 16	\$2,866 16	\$263,009 43
					335,565 08
					53,872 02
	17 85				3,935 01
	823 25				3,180 04
		1,089 65	1,067 66	6,442 36	218,715 94
		1,008 64	882 01	8 69	95,891 73
	2 50	1,067 68		3,186 75	70,615 01
		127 00			11,757 68
		116 75		689 73	5,702 64
		1 59		2,083 68	182,082 91
		1,748 86	201 24	5,457 84	161,445 08
			156 70	2,140 82	63,045 04
			120 29	1,656 15	41,609 80
		1,005 54		1,815 05	337,484 60
					13,649 18
					107,437 85
			5,726 59	13,750 06	304,409 03
		829 66		192 91	78,358 56
		206 44	394 68	1,433 13	49,199 70
		315 99	647 57	2,422 02	74,476 77
		79 11	375 40	1,278 13	47,600 89
				3,098 56	55,405 70
					8,306 23
				223 59	19,792 93
		95 52	485 19	55 85	79,378 85
\$6,326 33	\$824 80	\$7,692 43	\$10,683 49	\$48,801 48	<sup>3</sup> \$2,692,254 03

TABLE No. 4

## ABSTRACT OF OPERATING EXPENSES CLASS "A" ELECTRIC COMPANIES

	California- Oregon Power Company	Central Oakland Light and Power Company
<i>Commercial Expenses.</i>		
New business expenses.....	\$3,270 06	\$4,194 40
Free installation expenses.....		
Commercial department salaries and expenses.....	7,852 25	1,921 83
Commercial department indexing.....	2,049 83	103 21
Commercial department collections.....	3,065 62	790 15
Miscellaneous commercial expenses.....	638 55	302 95
Total commercial expenses.....	\$16,876 31	\$7,312 54
<i>General and Miscellaneous Expenses.</i>		
Salaries of general officers.....	\$11,601 86	\$1,575 19
Salaries of general office clerks.....	13,742 99	3,010 33
Miscellaneous general office supplies and expenses.....	7,568 19	3,401 77
Law expenses—general.....	1,145 29	47 95
Railroad Commission expenses.....		
Injuries and damages.....		88 41
Relief department and expenses.....		
Electric franchise requirements.....		
Other general expenses.....	3,107 40	280 54
Insurance.....	4,414 06	2,842 39
Repairs to general structures.....		85 07
Repairs to general equipment—office equipment.....		13 50
Repairs to general equipment—shop equipment.....		
Repairs to general equipment—store equipment.....		
Repairs to general equipment—stable and garage equipment.....	1,638 24	5 80
Repairs to general equipment—miscellaneous.....		
Repairs to telephone lines.....		
Repairs to roads—trestles and bridges.....		
Electric expenses transferred.....Cr.		
Joint operating expenses.....Cr.		
Undistributed adjustments—balances.....		12,399 52
Extraordinary repairs.....		
Repairs charged to reserve.....Cr.		
Total general and miscellaneous expenses.....	\$43,218 03	\$8,951 43

<sup>1</sup>Credit item.<sup>2</sup>Includes inter-company adjustment of operating expense, \$2,618.03.<sup>3</sup>Includes inter-company adjustment of operating expense, \$3,391.88.<sup>4</sup>Credit item—inter-company adjustment of operating expenses, \$1,875.38.<sup>5</sup>Credit item—inter-company adjustment of operating expenses.



—Continued.

OPERATING IN CALIFORNIA DURING YEAR ENDING DECEMBER 31, 1913.

City Electric Company	Coast Counties Gas and Electric Company	Coast Valleys Gas and Electric Company	Consumers Light and Power Company	Equitable Light and Power Company	Great Western Power Company
\$22,362 43	\$2,166 67	\$4,189 97	\$1,906 64	\$1,873 52	\$54,555 75
1,023 68	13 28	1 61			1,624 06
10,534 41	5,178 97	3,864 80	587 57	582 25	28,109 84
819 20	960 22	237 27	245 63	209 07	4,126 10
3,579 34	1,678 37	214 84	559 63	498 78	9,418 02
128 04	1,176 20	38 06	<sup>2</sup> 2,950 67	<sup>4</sup> 956 96	2,956 59
\$38,447 10	\$11,173 71	\$8,546 55	\$6,250 14	\$2,206 66	\$100,790 36
\$12,000 00	\$5,640 00	\$3,779 41	\$888 54	\$1,055 57	\$28,137 51
4,205 00	655 40	600 35	1,752 04	1,752 01	9,472 65
2,139 46	2,007 25	4,273 79	1,105 66	1,117 92	23,636 43
2,557 40	900 00	491 40	61 82	71 82	7,900 86
2 25	342 50	2,800 90			588 63
1,498 93	3,000 00	82 14		19 75	6,579 26
435 00	941 85	98 91	<sup>3</sup> 3,601 19	208 65	2,183 25
4,106 88	1,200 00	2,194 31	743 71	1,329 77	4,204 81
247 84	767 21	5 82			470 10
69 67	69 34	30 63			72 73
	7 28	5 94			
	1 17	84 21			66 25
	2,222 86	825 75			
	27 38		2 46	2 50	
	68 22	41 25			1,161 01
		<sup>1</sup> 9,347 10			<sup>1</sup> 44 00
	<sup>1</sup> 15,178 01				
		<sup>1</sup> 66 57	<sup>1</sup> 866 32	<sup>1</sup> 866 32	
				<sup>5</sup> 2,695 68	
\$27,262 43	\$2,672 45	\$5,901 14	\$7,289 10	\$1,995 99	\$84,429 49

TABLE NO. 4

## ABSTRACT OF OPERATING EXPENSES CLASS "A" ELECTRIC COMPANIES

	Holton Power Company	Los Angeles Gas and Electric Corporation
<i>Commercial Expenses.</i>		
New business expenses.....	\$1,429 77	\$14,144 64
Free installation expenses.....	50 70	755 37
Commercial department salaries and expenses.....	8,027 18	22,226 68
Commercial department indexing.....	488 11	9,272 79
Commercial department collections.....	1,895 10	21,386 10
Miscellaneous commercial expenses.....	226 55	5,376 00
Total commercial expenses.....	\$12,117 41	\$73,161 58
<i>General and Miscellaneous Expenses.</i>		
Salaries of general officers.....	\$7,570 29	\$14,422 75
Salaries of general office clerks.....	2,364 70	8,210 44
Miscellaneous general office supplies and expenses...	1,174 34	8,070 39
Law expenses—general .....	118 98	4,498 47
Railroad Commission expenses.....		28 36
Injuries and damages.....	2,177 55	3,685 59
Relief department and expenses.....		319 60
Electric franchise requirements.....		
Other general expenses.....	97 62	15,489 41
Insurance .....	2,324 55	197 97
Repairs to general structures.....	131 04	886 00
Repairs to general equipment—office equipment.....	158 27	72 97
Repairs to general equipment—shop equipment.....		
Repairs to general equipment—store equipment.....		
Repairs to general equipment—stable and garage equipment .....	42 24	
Repairs to general equipment—miscellaneous.....		
Repairs to telephone lines.....	175 06	
Repairs to roads, trestles and bridges.....		
Electric expenses transferred.....Cr.		
Joint operating expenses.....Cr.		
Undistributed adjustments—balances .....		1774 31
Extraordinary repairs .....		
Repairs charged to reserve.....Cr.		
Total general and miscellaneous expenses.....	\$16,334 64	\$55,107 64

<sup>1</sup>Credit item.

—Continued.

OPERATING IN CALIFORNIA DURING YEAR ENDING DECEMBER 31, 1913.

Midland Counties Public Service Corporation	Mt. Whitney Power and Electric Company	Nevada- California Power Company	Northern Cali- fornia Power Company, Consolidated	Ontario Power Company	Oro Electric Corporation
\$7,136 81	\$22,578 49	\$2,729 77	\$2,695 80	\$208 72	\$101 43
108 00	2,159 17	1 46	30 65	-----	53 91
1,510 06	1,726 85	10,457 05	8,344 31	-----	6,618 54
877 63	9,521 76	1,083 47	2,092 85	-----	438 19
1,785 20	6,027 59	650 53	1,885 01	-----	52 33
-----	-----	161 56	619 80	-----	206 02
\$11,417 70	\$42,013 86	\$15,083 84	\$15,668 42	\$208 72	\$7,470 42
\$1,517 94	\$20,384 90	\$20,104 50	\$20,100 00	\$3,597 72	\$5,455 00
6,435 23	14,705 92	11,724 27	6,015 23	-----	3,927 00
7,364 84	12,380 96	14,111 65	14,399 53	932 50	2,072 06
1,858 87	2,736 83	9,887 60	4,322 62	500 00	809 55
-----	-----	800 25	541 73	-----	-----
2,220 00	641 32	-----	2,004 26	295 05	-----
-----	273 49	-----	-----	-----	-----
225 88	21,601 36	7,742 28	995 00	2,244 81	223 91
1,346 34	7,302 39	7,942 97	145 53	316 90	2,283 04
3 14	-----	193 11	50 87	-----	50 00
6 90	-----	-----	45 27	-----	-----
-----	-----	-----	32 99	-----	-----
-----	-----	-----	10 47	-----	-----
70	-----	8 40	366 49	-----	-----
210 67	425 13	-----	2,067 74	-----	-----
-----	-----	183 27	52 54	-----	-----
<sup>1</sup> 1,118 29	-----	-----	-----	-----	<sup>1</sup> 18,000 00
-----	7,995 76	-----	<sup>1</sup> 27,205 29	184 30	360 25
-----	-----	-----	-----	4,033 64	-----
<sup>1</sup> 429 67	-----	-----	<sup>1</sup> 44,867 00	-----	-----
\$19,642 55	\$88,448 06	\$72,698 30	<sup>1</sup> \$20,922 02	\$12,104 92	<sup>1</sup> \$2,819 19

TABLE No. 4

## ABSTRACT OF OPERATING EXPENSES CLASS "A" ELECTRIC COMPANIES

	Pacific Gas and Electric Company	Pacific Light and Power Corporation
<i>Commercial Expenses.</i>		
New business expenses.....	\$112,894 33	\$6,961 59
Free installation expenses.....	11,527 81	
Commercial department salaries and expenses.....	284,666 70	14,510 63
Commercial department indexing.....	28,862 31	5,332 23
Commercial department collections.....	67,704 90	7,595 45
Miscellaneous commercial expenses.....	2,186 50	
Total commercial expenses.....	\$507,842 55	\$34,399 90
<i>General and Miscellaneous Expenses.</i>		
Salaries of general officers.....	\$57,465 63	\$76,088 49
Salaries of general office clerks.....	91,110 97	12,681 15
Miscellaneous general office supplies and expenses...	30,017 37	46,130 48
Law expenses—general.....	14,247 89	25,632 80
Railroad Commission expenses.....	403 10	
Injuries and damages.....	29,962 19	16,743 43
Relief department and expenses.....	2,390 26	
Electric franchise requirements.....		
Other general expenses.....	87,846 88	8,708 11
Insurance.....	7,780 20	1,581 42
Repairs to general structures.....		
Repairs to general equipment—office equipment.....		660 28
Repairs to general equipment—shop equipment.....		
Repairs to general equipment—store equipment.....		
Repairs to general equipment—stable and garage equipment.....		
Repairs to general equipment—miscellaneous.....		
Repairs to telephone lines.....		1,838 93
Repairs to roads, trestles and bridges.....		
Electric expenses transferred.....Cr.		
Joint operating expenses.....Cr.		
Undistributed adjustments—balances.....		2,835 06
Extraordinary repairs.....		
Repairs charged to reserve.....Cr.		
Total general and miscellaneous expenses.....	\$321,224 49	\$192,900 15

\*Credit item.

—Continued.

OPERATING IN CALIFORNIA DURING YEAR ENDING DECEMBER 31, 1913.

San Diego Con- solidated Gas and Electric Company	San Joaquin Light and Power Corporation	Santa Barbara Gas and Electric Company	Sierra and San Francisco Power Company	Snow Mountain Water and Power Company	Southern California Edison Company
\$7,764 80	\$37,935 92	\$1,878 85	\$23,668 30	-----	\$134,116 84
40 71	923 69	4 50	52 70	-----	516 00
13,594 52	19,215 10	3,835 37	3,946 97	-----	81,137 61
4,305 62	8,651 24	720 78	993 97	-----	25,774 62
4,250 92	13,732 14	1,074 12	832 80	-----	37,118 44
			240 23	-----	
\$29,956 57	\$80,458 09	\$7,513 62	\$29,734 97	-----	\$278,663 51
\$26,016 67	\$56,155 34	\$1,663 44	\$60,340 84	\$8,900 00	\$91,030 20
7,894 25	28,727 46	1,605 12	17,845 91	600 00	114,751 86
7,424 38	52,102 84	3,477 93	23,583 20	1,279 32	101,718 18
3,996 97	4,340 40	537 89	8,143 39	1,688 95	20,346 84
1,420 67	20 40	6 76	12,076 19	-----	559 90
137 49	4,999 92	780 35	1,065 94	11 40	28,942 70
64 63				-----	9,389 55
2,701 97	4,088 32	3,323 10	1,326 56	3,736 51	7,221 31
9,431 37	3,213 42	714 04	11,710 70		10,919 49
437 35	381 38	36 94	48 75	60 00	1,533 56
258 72	138 55	-----	37 27	-----	-----
80 71	-----	-----	13 06	-----	-----
-----	-----	-----	11 25	-----	-----
-----	-----	-----	2,463 19	-----	-----
-----	536 39	-----	-----	-----	-----
-----	5,153 92	-----	3,283 76	-----	2,522 99
-----	790 52	-----	368 85	-----	-----
128,587 58	1310 50	1108 16	-----	-----	110,365 08
-----	-----	1182 99	1807 47	-----	5,305 66
-----	17,811 89	-----	-----	-----	-----
\$31,277 60	\$152,526 47	\$11,854 42	\$141,511 39	\$16,276 18	\$383,877 16



TABLE No. 4

## ABSTRACT OF OPERATING EXPENSES CLASS "A" ELECTRIC COMPANIES

	The Southern Sierras Power Company	Tulare County Power Company
<i>Commercial Expenses.</i>		
New business expenses-----	\$38,561 82	\$2,314 25
Free installation expenses-----	107 71	51 81
Commercial department salaries and expenses-----	9,997 07	2,378 34
Commercial department indexing-----	753 05	594 99
Commercial department collections-----	2,000 73	187 10
Miscellaneous commercial expenses-----	2,087 69	84 00
Total commercial expenses-----	\$53,508 07	\$5,610 49
<i>General and Miscellaneous Expenses.</i>		
Salaries of general officers-----	\$15,057 70	\$1,934 20
Salaries of general office clerks-----	7,558 54	3,539 42
Miscellaneous general office supplies and expenses--	9,405 16	2,411 89
Law expenses—general-----	7,808 86	1,094 10
Railroad Commission expenses-----	1,924 60	171 15
Injuries and damages-----	2,148 70	194 00
Relief department and expenses-----		
Electric franchise requirements-----		
Other general expenses-----	4,095 94	
Insurance-----	607 52	246 35
Repairs to general structures-----		
Repairs to general equipment—office equipment-----		1 40
Repairs to general equipment—shop equipment-----		12 83
Repairs to general equipment—store equipment-----		20 00
Repairs to general equipment—stable and garage equipment-----		3,311 05
Repairs to general equipment—miscellaneous-----		
Repairs to telephone lines-----		25 69
Repairs to roads, trestles and bridges-----		
Electric expenses transferred-----Cr.		
Joint operating expenses-----Cr.		
Undistributed adjustments—balances-----		
Extraordinary repairs-----	30 25	
Repairs charged to reserve-----Cr.		
Total general and miscellaneous expenses-----	\$48,637 27	\$12,962 08

<sup>1</sup>Credit item.<sup>2</sup>Not segregated.<sup>3</sup>Commercial expenses of \$6,098.25 and general and miscellaneous expenses of \$29,595.76 of The Truckee River General Electric Company not segregated..

—Continued.

OPERATING IN CALIFORNIA DURING YEAR ENDING DECEMBER 31, 1913.

The Tuacakee River General Electric Company <sup>2</sup>	United Light and Power Company	Universal Electric and Gas Company	Ventura County Power Company	Western States Gas and Electric Company	Total
-----	-----	\$1,927 19	\$279 66	\$10,687 91	\$524,536 33
-----	-----	-----	-----	2,973 88	22,020 70
-----	-----	11,008 85	4,140 75	10,403 10	576,377 (0)
-----	-----	367 95	808 87	4,357 20	114,048 16
-----	-----	1,068 35	2,118 81	4,293 66	195,464 03
-----	-----	11 25	574 30	46 75	19,054 75
\$6,098 25	-----	\$14,383 59	\$7,922 39	\$32,762 50	<sup>3</sup> \$1,457,599 82
-----	\$1,333 47	\$4,200 00	\$2,378 88	\$12,186 51	\$572,582 55
-----	2,238 27	-----	2,139 48	16,848 39	396,114 38
-----	1,162 27	703 02	1,175 43	46,151 79	432,500 00
-----	82 00	298 75	462 80	6,466 32	133,057 42
-----	31 75	-----	-----	1,622 30	23,341 44
-----	-----	79 28	570 64	201 32	108,129 62
-----	-----	-----	-----	-----	12,164 04
-----	-----	-----	-----	3,226 93	3,500 42
-----	377 61	-----	273 30	1,268 91	184,445 58
-----	485 94	2,172 79	233 66	13,899 73	105,892 25
-----	-----	-----	12 54	33 17	5,433 89
-----	5 50	-----	4 23	114 15	1,759 38
-----	-----	45 65	-----	14 80	180 27
-----	-----	-----	-----	49 29	265 16
-----	-----	-----	913 19	1,665 99	13,098 78
-----	-----	277 72	5 59	40 71	1,268 34
-----	-----	-----	75 21	294 95	17,344 53
-----	-----	-----	-----	-----	1,395 18
-----	-----	-----	-----	-----	<sup>1</sup> 49,880 71
-----	-----	1,103 56	-----	-----	<sup>2</sup> 33,178 01
-----	-----	-----	-----	-----	<sup>1</sup> 15,384 20
-----	-----	-----	-----	-----	4,063 89
-----	-----	-----	<sup>1</sup> 5,542 34	-----	<sup>1</sup> 61,346 58
\$29,595 76	\$5,716 81	\$8,880 77	\$2,702 61	\$104,085 26	<sup>3</sup> \$1,886,343 38

TABLE No. 4

## ABSTRACT OF OPERATING EXPENSES CLASS "A" ELECTRIC COMPANIES

	California-Oregon Power Company	Central Oakland Light and Power Company
<i>Other Expenses.</i>		
By-product expense .....		
Steam sales expense.....		\$15,854 67
Total other expenses.....		\$15,854 67
<i>Taxes.</i>		
Taxes .....	\$12,730 37	\$3,606 80
<i>General Amortization of Capital.</i>		
Amortization of franchises and patents.....		
Depreciation of plant equipment—		
Depreciation of production capital.....		
Depreciation of transmission capital.....		
Depreciation of distribution capital.....		
Depreciation of general capital.....		
Total general amortization of capital.....		
<i>Recapitulation of Expenses.</i>		
Production expenses .....	\$19,463 49	\$51,579 52
Transmission expenses .....	23,468 43	
Distribution expenses .....	18,351 54	18,274 70
Commercial expenses .....	16,876 31	7,312 54
General and miscellaneous expenses.....	43,218 03	8,951 43
Other expenses .....		15,854 67
Taxes .....	12,730 37	3,606 80
General amortization of capital.....		
Total operating expenses.....	\$134,108 17	\$105,579 66

<sup>1</sup>Includes \$7,144.82 inter-company's adjustment of operating expenses.<sup>2</sup>Includes credit item, inter-company adjustment of operating expenses, \$12,313.99.

—Continued.

OPERATING IN CALIFORNIA DURING YEAR ENDING DECEMBER 31, 1913.

City Electric Company	Coast Counties Gas and Electric Company	Coast Valleys Gas and Electric Company	Consumers Light and Power Company	Equitable Light and Power Company	Great Western Power Company
\$29,134 32			<sup>1</sup> \$27,579 28	<sup>2</sup> \$38,074 57	
\$29,134 32			\$27,579 28	\$38,074 57	
\$44,899 89	\$14,554 41	\$6,205 00	\$5,103 70	\$4,192 74	\$60,244 91
		\$1,218 68			
		\$1,218 68			
\$419,438 09	\$111,341 28	\$50,701 26	\$62,149 65	\$40,462 30	\$153,895 34
	5,165 04	1,217 31			61,728 36
37,373 76	14,128 00	6,309 33	7,794 14	3,730 82	73,001 71
38,447 10	11,173 71	8,546 55	6,250 14	2,206 66	100,790 36
27,262 43	2,672 45	5,901 14	7,289 10	1,995 99	84,429 49
29,154 32			27,579 28	38,074 57	
44,899 89	14,554 41	6,205 00	5,103 70	4,192 74	60,244 91
		1,218 68			
\$556,555 59	\$159,034 89	\$80,099 27	\$116,166 01	\$90,663 08	\$534,090 17

TABLE No. 4

## ABSTRACT OF OPERATING EXPENSES CLASS "A" ELECTRIC COMPANIES

	Holton Power Company	Los Angeles Gas and Electric Corporation
<i>Other Expenses.</i>		
By-product expense -----		
Steam sales expense -----		
Total other expenses -----		
<i>Taxes.</i>		
Taxes -----	\$5,000 17	\$63,991 72
<i>General Amortization of Capital.</i>		
Amortization of franchises and patents -----		
Depreciation of plant equipment—		
Depreciation of production capital -----		\$84,530 17
Depreciation of transmission capital -----		
Depreciation of distribution capital -----		199,754 19
Depreciation of general capital -----		1,807 57
Total general amortization of capital -----		\$286,091 93
<i>Recapitulation of Expenses.</i>		
Production expenses -----	\$53,815 25	\$399,744 90
Transmission expenses -----	494 61	
Distribution expenses -----	4,000 01	158,466 29
Commercial expenses -----	12,117 41	73,161 58
General and miscellaneous expenses -----	16,334 64	55,107 64
Other expenses -----		
Taxes -----	5,000 17	63,991 72
General amortization of capital -----		286,091 93
Total operating expenses -----	\$91,762 09	\$1,036,561 06

<sup>1</sup>Credit item.



—Continued.

OPERATING IN CALIFORNIA DURING YEAR ENDING DECEMBER 31, 1913.

Midland Counties Public Service Corporation	Mt. Whitney Power and Electric Company	Nevada- California Power Company	Northern Cali- fornia Power Company, Consolidated	Ontario Power Company	Oro Electric Corporation
\$7,569 26	\$19,078 09	\$15,000 00	\$32,816 71	\$6,564 77	\$4,953 57
\$2,902 91					
5,148 19					
5,750 32					
3,480 54	\$90,527 91	\$150,000 00	\$119,669 67	\$10,966 36	\$590 82
\$17,281 96	\$90,527 91	\$150,000 00	\$119,669 67	\$10,966 36	\$590 82
\$50,564 87	\$53,612 27	\$179,382 04	\$54,034 15	\$27,163 12	\$76,638 18
3,579 98	2,598 58	30,451 80	20,659 64		1,299 19
13,464 32	50,295 70	22,144 45	48,641 84	10,097 34	12,025 47
11,417 70	42,013 86	15,083 84	15,668 42	208 72	7,470 42
19,642 55	88,448 06	72,698 30	120,922 02	12,104 92	12,819 19
7,569 26	19,078 09	15,000 00	32,816 71	6,564 77	4,953 57
17,281 96	90,527 91	150,000 00	119,669 67	10,966 36	590 82
\$123,520 64	\$346,574 47	\$484,760 43	\$270,568 41	\$67,105 23	\$100,158 46

TABLE No. 4

## ABSTRACT OF OPERATING EXPENSES CLASS "A" ELECTRIC COMPANIES

	Pacific Gas and Electric Company	Pacific Light and Power Corporation
<i>Other Expenses.</i>		
By-product expense -----		
Steam sales expense -----	\$245,175 80	
Total other expenses -----	\$245,175 80	
<i>Taxes.</i>		
Taxes -----	\$348,611 26	\$104,287 14
<i>General Amortization of Capital.</i>		
Amortization of franchises and patents -----		
Depreciation of plant and equipment—		
Depreciation of production capital -----	<sup>2</sup>	\$191,089 60
Depreciation of transmission capital -----		44,491 71
Depreciation of distribution capital -----		73,837 31
Depreciation of general capital -----		15,282 38
Total general amortization of capital -----		\$324,701 00
<i>Recapitulation of Expenses.</i>		
Production expenses -----	\$2,024,014 50	\$989,246 49
Transmission expenses -----	189,626 02	40,626 91
Distribution expenses -----	1,150,955 70	189,698 01
Commercial expenses -----	507,842 55	34,399 90
General and miscellaneous expenses -----	321,224 49	192,900 15
Other expenses -----	245,175 80	
Taxes -----	348,611 26	104,287 14
General amortization of capital -----		324,701 00
Total operating expenses -----	\$4,787,450 32	\$1,875,859 60

<sup>1</sup>Credit item.<sup>2</sup>Depreciation not segregated to departments. Total amount of \$1,462,462.53 deducted from income account.

—Continued.

OPERATING IN CALIFORNIA DURING YEAR ENDING DECEMBER 31, 1913.

San Diego Con- solidated Gas and Electric Company	San Joaquin Light and Power Corporation	Santa Barbara Gas and Electric Company	Sierra and San Francisco Power Company	Snow Mountain Water and Power Company	Southern California Edison Company
\$1,335 42					
\$1,335 42					
\$26,508 61	\$45,093 89	\$6,807 98	\$42,922 78	\$5,960 82	\$202,727 25
	\$42,722 10				
	32,622 03				
	50,899 74				
	1933 88	\$26,093 73	\$9,404 45	\$31,084 28	\$660,919 10
	\$125,309 99	\$26,093 73	\$9,404 45	\$31,084 28	\$660,919 10
\$169,151 01	\$251,472 86	\$49,390 56	\$203,860 74	\$1,973 42	\$713,682 22
	19,697 64		32,617 53	2,681 02	74,039 71
45,520 23	95,250 03	14,011 88	17,737 85	14,553 82	551,430 15
29,956 57	80,458 09	7,513 62	29,734 97		278,663 51
31,277 60	152,526 47	11,854 42	141,511 39	16,276 18	383,877 16
4,335 42					
26,508 61	45,093 89	6,807 98	42,922 78	5,960 82	202,727 25
	125,309 99	26,093 73	9,404 45	31,084 28	660,919 10
\$307,149 44	\$769,808 97	\$115,672 19	\$477,789 71	\$72,529 54	\$2,865,339 10

TABLE No. 4

## ABSTRACT OF OPERATING EXPENSES CLASS "A" ELECTRIC COMPANIES

	Southern Sierras Power Company	Tulare County Power Company
<i>Other Expenses.</i>		
By-product expenses .....		
Steam sales expense .....		
Total other expenses .....		
<i>Taxes.</i>		
Taxes .....	\$4,784 56	\$1,630 53
<i>General Amortization of Capital.</i>		
Amortization of franchises and patents .....		
Depreciation of plant and equipment—		
Depreciation of production capital .....		
Depreciation of transmission capital .....		
Depreciation of distribution capital .....		
Depreciation of general capital .....		\$1,200 00
Total general amortization of capital .....		\$1,200 00
<i>Recapitulation of Expenses.</i>		
Production expenses .....	\$53,546 33	\$72,488 72
Transmission expenses .....	14,264 18	627 08
Distribution expenses .....	32,982 01	7,286 40
Commercial expenses .....	53,503 07	5,610 49
General and miscellaneous expenses .....	48,637 27	12,962 08
Other expenses .....		
Taxes .....	4,784 56	1,630 53
General amortization of capital .....		1,200 00
Total operating expenses .....	\$207,722 42	\$101,805 30

<sup>1</sup>Not segregated.<sup>2</sup>Other expenses of \$2,056.95. The Truckee River General Electric Company not segregated.

—Continued.

OPERATING IN CALIFORNIA DURING YEAR ENDING DECEMBER 31, 1913.

The Truckee River General Electric Company <sup>1</sup>	United Light and Power Company	Universal Electric and Gas Company	Ventura County Power Company	Western States Gas and Electric Company	Total
		\$147 24			\$360,301 30
\$2,056 05		\$147 24			\$362,357 35
\$17,362 89	\$3,390 04	\$5,951 72	\$6,191 69	\$46,964 45	\$1,175,707 72
		\$9,264 39			\$330,569 17
					82,261 93
		8,660 40			338,901 96
		185 45	\$14,496 72		1,135,993 78
		\$18,110 24	\$14,496 72		\$1,887,666 84
\$33,120 10	\$87,586 85	\$58,874 35	\$41,107 99	\$235,210 50	\$6,788,712 35
12,519 26			2,227 98	25,318 10	564,908 37
6,326 33	824 80	7,692 43	10,683 49	48,801 48	2,692,254 03
6,098 25		14,383 59	7,922 39	32,762 50	1,457,599 82
29,595 76	5,716 81	8,880 77	2,702 61	104,085 26	1,886,343 38
2,056 05		147 24			362,357 35
17,362 89	3,390 04	5,951 72	6,191 69	46,964 45	1,175,707 72
		18,110 24	14,496 72		1,887,666 84
\$107,078 64	\$97,518 50	\$114,040 34	\$85,332 87	\$493,142 29	\$16,815,549 86



TABLE No. 4

## ABSTRACT OF OPERATING EXPENSES CLASS "B" ELECTRIC COMPANIES

	Amador Electric Light and Power Company
<i>Production Expenses.</i>	
Superintendence .....	
Water collection labor expense.....	
Water for hydraulic power.....	
Steam generation .....	
Steam from other sources.....	
Producer gas generation.....	
Power gas from other sources.....	
Plant supplies and expenses .....	
Electric energy from other sources.....	\$7,051 60
General labor and supplies.....	
Repairs to dams, water conduits and penstocks.....	
Repairs to power plant buildings and general structures.....	
Repairs to equipment.....	
Total production expenses.....	\$7,051 60
<i>Transmission Expenses.</i>	
Superintendence .....	
Inspecting and patrolling.....	
Substation labor and expenses.....	
General labor and supplies.....	
Repairs to transmission system.....	
Repairs to substation buildings and equipment.....	
Total transmission expenses.....	
<i>Distribution Expenses.</i>	
Superintendence .....	
Substation labor and supplies.....	
Storage battery labor and supplies.....	
Setting and removing transformers and meters.....	\$90 50
Inspecting and patrolling.....	18 90
Electric meter operations.....	14 74
Commercial lamp labor and expenses.....	37 00
Municipal labor and expenses.....	
General labor and supplies.....	1,270 27
Repairs to substation buildings and equipment.....	
Repairs to distribution system.....	790 85
Total distribution expenses.....	\$2,222 26

—Continued.

OPERATING IN CALIFORNIA DURING YEAR ENDING DECEMBER 31, 1913.

California Telephone and Light Company	Fort Bragg Electric Company	H. G. Lacey Company	Oro Water, Light and Power Company	Pacific Power Company	Southside Light and Power Company
				\$1,265 50	\$258 91
				2,715 96	
				56 70	
					7,567 40
				6,414 94	108 78
\$12,262 51	\$6,179 83	\$25,196 25	\$15,075 53	2,447 82	
				307 31	99 40
				525 95	
				506 36	123 16
				1,091 75	4,761 94
\$12,262 51	\$6,179 83	\$25,196 25	\$15,075 53	\$15,332 29	\$12,919 59
				\$1,144 97	
				3,953 78	
				2,442 36	
				4 20	
				66 14	
				601 08	
				\$8,212 53	
			\$510 62		\$150 76
\$292 67		\$768 85			
201 42		490 00	296 57	\$3 35	240 71
		423 00			310 10
46 17	\$25 50	491 25	186 22		230 05
2 67		890 55	668 27		235 26
38 91			63 94		
28 57			85 85		112 64
13 62					
2,657 74	2,603 64	3,714 08	1,259 34	7 45	2,832 46
\$3,281 77	\$2,629 14	\$6,779 73	\$3,070 81	\$10 80	\$4,111 98

TABLE No. 4

## ABSTRACT OF OPERATING EXPENSES CLASS "B" ELECTRIC COMPANIES

	United Light, Fuel and Power Company
<i>Production Expenses.</i>	
Superintendence .....	
Water collection labor expense .....	
Water for hydraulic power .....	
Steam generation .....	
Steam from other sources .....	\$12,493 05
Producer gas generation .....	
Power gas from other sources .....	
Plant supplies and expenses .....	
Electric energy from other sources .....	7,003 23
General labor and supplies .....	
Repairs to dams, water conduits and penstocks .....	
Repairs to power plant buildings and general structures .....	
Repairs to equipment .....	
Total production expenses .....	\$19,496 28
<i>Transmission Expenses.</i>	
Superintendence .....	
Inspecting and patrolling .....	
Substation labor and expenses .....	
General labor and supplies .....	
Repairs to transmission system .....	
Repairs to substation buildings and equipment .....	
Total transmission expenses .....	
<i>Distribution Expenses.</i>	
Superintendence .....	\$611 70
Substation labor and supplies .....	
Storage battery labor and supplies .....	
Setting and removing transformers and meters .....	237 00
Inspecting and patrolling .....	17 85
Electric meter operations .....	27 86
Commercial lamp labor and expenses .....	4 25
Municipal labor and expenses .....	166 22
General labor and supplies .....	94 83
Repairs to substation buildings and equipment .....	
Repairs to distribution system .....	1,483 53
Total distribution expenses .....	\$2,643 24

\*Credit item.

—Continued.

OPERATING IN CALIFORNIA DURING YEAR ENDING DECEMBER 31, 1913.

Vallejo Electric Light and Power Company	Yosemite Power Company	Total
		\$1,524 41
	\$1,743 87	4,459 83
		56 70
		7,567 40
		12,493 05
	3,326 15	9,849 87
\$21,149 41		96,366 18
	28 60	378 11
	3,051 06	3,577 01
	318 15	947 67
149 41	791 52	6,794 62
\$21,298 82	\$9,202 15	\$144,014 85
		\$1,144 97
	\$78 89	4,032 67
		2,442 36
	4 84	9 04
	744 03	810 17
\$43 81		644 89
\$43 81	\$827 76	\$9,084 10
	\$1,357 91	\$2,630 99
\$1,339 75	375 79	2,777 06
935 10	829 09	3,323 74
		771 85
1,701 76		2,723 55
525 62	607 79	2,971 41
1,216 69	1,097 61	2,583 37
820 23	2,057 94	4,470 33
	746 94	760 56
1,327 15	1,234 53	17,910 77
\$7,866 30	\$8,307 60	\$40,923 63

TABLE No. 4

## ABSTRACT OF OPERATING EXPENSES CLASS "B" ELECTRIC COMPANIES

	Amador Electric Light and Power Company
<i>Commercial Expenses.</i>	
Promotion .....	\$14 38
Commercial department supplies and expenses.....	1,851 95
Total commercial expenses.....	\$1,866 33
<i>General and Miscellaneous Expenses.</i>	
Salaries and expenses of general officers.....	\$2,385 69
Law expenses—general .....	
Railroad commission expenses.....	
Injuries and damages.....	10 00
Relief department and expenses .....	
Electric franchise requirements.....	
Other general expenses.....	24 60
Insurance .....	40 51
Repairs to miscellaneous equipment.....	
Electric expenses transferred—Cr.....	
Joint operating expenses—Cr.....	
Undistributed adjustments—balances .....	126 24
Extraordinary repairs .....	
Repairs charged to reserve—Cr.....	
Total general and miscellaneous expenses.....	\$2,587 04
<i>Other Expenses.</i>	
By-product expense .....	
Steam sales expense.....	
Total other expenses.....	
<i>Taxes.</i>	
Taxes .....	\$1,481 47
<i>General Amortization of Capital.</i>	
Depreciation—etc. ....	\$5,706 84
<i>Recapitulation of Expenses.</i>	
Production expenses .....	\$7,051 60
Transmission expenses .....	
Distribution expenses .....	2,222 26
Commercial expenses .....	1,866 33
General and miscellaneous expenses.....	2,587 04
Other expenses .....	
Taxes .....	1,481 47
Amortization of general capital.....	5,706 84
Total operating expenses.....	\$20,915 54

<sup>1</sup>Credit item.<sup>2</sup>Inter-company adjustment of operating expense.



—Continued.

OPERATING IN CALIFORNIA DURING YEAR ENDING DECEMBER 31, 1913.

California Telephone and Light Company	Fort Bragg Electric Company	H. G. Lacey Company	Oro Water, Light and Power Company	Pacific Power Company	Southside Light and Power Company
\$336 11			\$51 56		\$1,810 53
4,523 36		\$3,111 47	1,730 03		3,362 28
\$4,859 47		\$3,111 47	\$1,781 59		\$5,172 81
\$3,617 49		\$10,407 70	\$2,836 20	\$2,648 39	\$3,550 12
367 77		400 00	163 80		71 26
77 95				49 24	
160 21	\$1,555 76	1,095 69		171 00	208 65
522 73	352 54		453 31		652 06
				1,179 37	2 43
			174 54		1866 31
62 83					2,744 07
\$4,808 98	\$1,908 30	\$11,903 39	\$3,627 85	\$4,048 00	\$6,362 28
					\$3,228 69
					18,684 87
					\$21,913 56
\$1,702 23	\$2,062 51	\$1,595 10	\$1,974 58	\$2,542 63	\$1,317 23
\$889 49	\$4,000 00	\$5,427 97	\$2,417 50		
\$12,262 51	\$6,179 83	\$25,196 25	\$15,075 53	\$15,332 29	\$12,919 59
3,281 77	2,629 14	6,779 73	3,070 81	8,212 53	4,111 98
4,859 47		3,111 47	1,781 59	10 80	5,172 81
4,808 98	1,908 30	11,903 39	3,627 85	4,048 00	6,362 28
1,702 23	2,062 51	1,595 10	1,974 58	2,542 63	21,913 56
889 49	4,000 00	5,427 97	2,417 50		1,317 23
\$27,804 45	\$16,779 78	\$54,013 91	\$27,947 86	\$30,146 25	\$51,797 45

TABLE No. 4

ABSTRACT OF OPERATING EXPENSES CLASS "B" ELECTRIC COMPANIES

	United Light, Fuel and Power Company
<i>Commercial Expenses.</i>	
Promotion .....	\$622 30
Commercial department supplies and expenses.....	701 77
Total commercial expenses.....	\$1,324 07
<i>General and Miscellaneous Expenses.</i>	
Salaries and expenses of general officers.....	\$4,106 58
Law expenses—general .....	290 10
Railroad commission expenses.....	63 48
Injuries and damages .....	
Relief department and expenses.....	
Electric franchise requirements.....	
Other general expenses .....	3 17
Insurance .....	43 32
Repairs to miscellaneous equipment.....	137 78
Electric expenses transferred—Cr.....	
Joint operating expenses—Cr.....	
Undistributed adjustments—balances.....	
Extraordinary repairs .....	
Repairs charged to reserve—Cr.....	
Total general and miscellaneous expenses.....	\$4,644 43
<i>Other Expenses.</i>	
By-product expense .....	
Steam sales expense .....	\$878 79
Total other expenses .....	\$878 79
<i>Taxes.</i>	
Taxes .....	\$732 98
<i>General Amortization of Capital.</i>	
Depreciation—etc. ....	\$4,806 26
<i>Recapitulation of Expenses.</i>	
Production expenses .....	\$19,496 28
Transmission expenses .....	
Distribution expenses .....	2,643 24
Commercial expenses .....	1,324 07
General and miscellaneous expenses.....	4,644 43
Other expenses .....	878 79
Taxes .....	732 98
Amortization of general capital.....	4,806 26
Total operating expenses .....	\$34,526 05

—(Continued.)

OPERATING IN CALIFORNIA FOR YEAR ENDING DECEMBER 31, 1913

Vallejo Electric Light and Power Company	Yosemite Power Company	Total			
-----	\$1,690 14	\$4,525 02			
-----	2,154 40	17,435 26			
-----	\$3,844 54	\$21,960 28			
\$13,615 00	\$7,148 06	\$50,315 23			
640 00	-----	1,932 93			
-----	107 11	248 54			
-----	-----	59 24			
-----	136 10	136 10			
4,451 75	1,383 56	9,054 39			
448 46	627 80	3,140 73			
-----	211 35	1,530 93			
-----	-----	-----			
-----	605 80	40 27			
-----	-----	2,806 90			
-----	-----	-----			
\$19,155 21	\$10,219 78	\$69,265 26			
-----	-----	\$3,228 69			
-----	-----	19,563 66			
-----	-----	\$22,792 35			
\$3,744 75	\$2,729 02	\$19,882 50			
\$6,040 75	\$11,224 14	\$40,512 95			
\$21,298 82	\$9,202 15	\$144,014 85			
43 81	827 76	9,084 10			
7,866 30	8,307 60	40,923 63			
-----	3,844 54	21,960 28			
19,155 21	10,219 78	69,265 26			
-----	-----	22,792 35			
3,744 75	2,729 02	19,882 50			
6,040 75	11,224 14	40,512 95			
\$58,149 64	\$46,354 99	\$368,435 92			

TABLE No. 4

## ABSTRACT OF OPERATING EXPENSES CLASS "C" ELECTRIC COMPANIES

	Alturas Electric Power Company	Bay Point Light and Water Company
Production expenses and repairs to capital.....	\$1,561 02	\$2,960 00
Transmission expenses and repairs to capital.....		149 26
Distribution expenses and repairs to capital.....	80 46	
Commercial department labor, supplies and ex- penses .....		
Salaries and expenses of general officers.....	1,713 02	
Miscellaneous general expenses .....		
Miscellaneous general repairs .....		
Other expenses .....		
Taxes .....	694 09	
Depreciation, etc. ....	1,886 88	
Total operating expenses .....	\$5,935 47	\$3,109 26

<sup>1</sup>Not segregated.

TABLE No. 4

## ABSTRACT OF OPERATING EXPENSES CLASS "C" ELECTRIC COMPANIES

	California Electric Generating Company	Consolidated Securities Company
Production expenses and repairs to capital.....		\$1,920 00
Transmission expenses and repairs to capital.....		
Distribution expenses and repairs to capital.....		26 76
Commercial department labor, supplies and ex- penses .....		
Salaries and expenses of general officers.....		142 45
Miscellaneous general expenses .....		
Miscellaneous general repairs .....		39 37
Other expenses .....		
Taxes .....	\$1,793 40	111 00
Depreciation, etc. ....		
Total operating expenses .....	\$1,793 40	\$2,239 58

<sup>1</sup>Includes electric and gas expenses.

—Continued.

OPERATING IN CALIFORNIA FOR YEAR ENDING DECEMBER 31, 1913.

Bell Electric Company	Bishop Light and Power Company	Boulder Creek Electric Light and Water Company	Butte County Power, Light and Water Company	Calistoga Electric Company	Callayoni Electric Plant <sup>1</sup>
-----	\$6,410 17	\$856 69	\$1,200 00	\$2,660 21	-----
\$1,384 98	1,662 35	38 94	-----	590 66	-----
460 12	1,782 59	145 16	-----	-----	-----
6,028 42	958 50	300 00	-----	600 00	-----
-----	34 97	61 50	63 38	-----	-----
-----	82 55	4 75	-----	-----	-----
-----	-----	18 00	-----	-----	-----
800 91	600 00	66 23	120 92	204 14	-----
-----	-----	-----	-----	540 00	-----
\$8,674 43	\$11,531 13	\$1,491 27	\$1,384 30	\$4,595 01	\$720 00

—Continued.

OPERATING IN CALIFORNIA FOR YEAR ENDING DECEMBER 31, 1913.

Consolidated Utilities Company	Corona Gas and Electric Light Company	Downey Light, Power and Water Company	Durham Light and Power Company	Escondido Utilities Company	Glendora Light and Power Company
\$3,413 70	\$8,451 40	\$3,984 90	\$1,611 29	\$5,034 02	-----
234 30	4,872 82	240 00	700 75	1,963 80	\$279 27
144 20	3,381 28	738 00	425 00	44 50	-----
-----	1,610 21	1,800 00	1,049 40	960 00	646 88
-----	259 33	150 00	-----	163 00	-----
-----	42 99	-----	-----	-----	760 45
275 89	1,232 00	402 00	40 20	680 56	172 52
-----	1,800 00	3,600 00	250 00	-----	-----
\$4,068 09	\$21,653 03	\$10,914 90	\$4,076 64	\$8,845 88	\$1,859 12



TABLE No. 4

ABSTRACT OF OPERATING EXPENSES CLASS "C" ELECTRIC COMPANIES

	Half Moon Bay Light and Power Company	Hemet Milling and Power Company
Production expenses and repairs to capital.....	\$8,398 25	\$2,008 17
Transmission expenses and repairs to capital.....		72
Distribution expenses and repairs to capital.....	1,907 51	387 68
Commercial department labor, supplies and ex- penses .....	852 22	76 26
Salaries and expenses of general officers.....	3,051 35	286 48
Miscellaneous general expenses .....	2,555 34	105 15
Miscellaneous general repairs .....		2 00
Other expenses .....		
Taxes .....	105 04	306 57
Depreciation, etc. ....	3,223 08	1,969 20
Total operating expenses .....	\$20,092 79	\$5,142 23

TABLE No. 4

ABSTRACT OF OPERATING EXPENSES CLASS "C" ELECTRIC COMPANIES

	Mendocino Electric Light and Power Company
Production expenses and repairs to capital.....	
Transmission expenses and repairs to capital.....	
Distribution expenses and repairs to capital.....	
Commercial department labor, supplies and expenses.....	\$986 33
Salaries and expenses of general officers.....	2,070 69
Miscellaneous general expenses .....	4,141 41
Miscellaneous general repairs .....	
Other expenses .....	20 00
Taxes .....	476 24
Depreciation, etc. ....	
Total operating expenses .....	\$7,694 67

—Continued.

OPERATING IN CALIFORNIA FOR YEAR ENDING DECEMBER 31, 1913.

Huntington Beach Company	Indian Valley Electric Light and Power Company	Invincible Mines Consolidated	Lassen Electric Company	Lompoc Light and Power Company	Loyalton Electric Light Company
\$5,225 72	\$1,610 40	\$5,628 67	\$650 76	\$7,800 06	\$4,581 18
78 44	98 00	-----	147 44	-----	-----
543 96	110 19	-----	150 71	328 89	-----
116 74	582 40	-----	2,453 48	163 30	-----
4,215 03	1,103 77	-----	-----	2,585 78	-----
318 05	60	-----	174 81	7 00	187 50
69	156 12	-----	-----	-----	-----
-----	87 03	-----	-----	-----	-----
284 21	408 80	251 59	218 16	399 21	242 18
2,315 19	-----	-----	1,911 40	-----	-----
\$13,098 03	\$4,187 31	\$5,880 26	\$5,706 76	\$11,281 24	\$5,010 86

—Continued.

OPERATING IN CALIFORNIA FOR YEAR ENDING DECEMBER 31, 1913.

Middle Yuba Hydro-Electric Power Company	Mt. Konocti Light and Power Company	Napa Valley Electric Company	Needles Gas and Electric Company	Novato Light and Power Company	Oceanside Electric and Gas Company
-----	\$1,940 01	\$5,114 79	\$8,319 88	-----	\$3,653 83
\$1,196 25	-----	830 26	-----	-----	-----
1,654 37	903 15	26 26	359 50	\$1,533 80	430 27
-----	1,952 00	105 98	-----	-----	362 25
-----	1,606 75	2,494 96	4,639 31	60 00	1,023 40
1,285 44	639 11	1,666 34	1,080 02	-----	52 10
-----	-----	1,855 67	-----	-----	6 33
-----	149 40	-----	-----	-----	526 47
309 93	234 48	1,200 95	-----	6 33	179 09
-----	2,808 19	-----	-----	-----	-----
\$4,445 99	\$10,233 09	\$13,295 21	\$14,398 71	\$1,600 13	\$6,233 74

TABLE No. 4

## ABSTRACT OF OPERATING EXPENSES CLASS "C" ELECTRIC COMPANIES

	Pinole Electric Light and Power Company
Production expenses and repairs to capital.....	
Transmission expenses and repairs to capital.....	
Distribution expenses and repairs to capital.....	\$1,541 25
Commercial department labor, supplies and expenses.....	
Salaries and expenses of general officers.....	
Miscellaneous general expenses .....	300 00
Miscellaneous general repairs .....	
Other expenses .....	
Taxes .....	318 40
Depreciation, etc. ....	750 00
Total operating expenses .....	\$2,909 75

TABLE No. 4

## ABSTRACT OF OPERATING EXPENSES CLASS "C" ELECTRIC COMPANIES

	Tuolumne Electric Company
Production expenses and repairs to capital.....	\$5,580 14
Transmission expenses and repairs to capital.....	
Distribution expenses and repairs to capital.....	
Commercial department labor, supplies and expenses.....	
Salaries and expenses of general officers.....	
Miscellaneous general expenses .....	
Miscellaneous general repairs .....	
Other expenses .....	
Taxes .....	
Depreciation, etc. ....	
Total operating expenses .....	\$5,580 14

<sup>1</sup>Includes expenses of Callayoni electric plant of \$720.00 not segregated.

—Continued.

OPERATING IN CALIFORNIA FOR YEAR ENDING DECEMBER 31, 1913.

Point Arena Electric Light Company	Quincy Electric Light and Power Company	Itialto Light. Power and Water Company	Santa Catalina Island Company	Surprise Valley Electric Light and Power Company	Truckee Electric Light and Power Company
\$3,829 14	\$3,030 00	\$1,599 80	\$6,631 33	\$1,780 68	\$3,360 00
-----	-----	-----	36 74	100 56	1,200 00
-----	-----	249 52	-----	140 00	-----
-----	-----	1,865 96	-----	28 01	3,600 00
-----	-----	-----	-----	111 50	-----
-----	-----	516 52	283 34	221 82	740 95
-----	-----	-----	1,727 00	310 22	488 22
-----	-----	-----	-----	-----	-----
\$3,829 14	\$3,030 00	\$4,231 80	\$8,678 41	\$2,692 79	\$9,289 17

—Concluded.

OPERATING IN CALIFORNIA FOR YEAR ENDING DECEMBER 31, 1913.

Tuolumne County Electric Power and Light Company	Tuolumne Transmission Company	Vacaville Water and Light Company	Weaverville Electric Company	West Sacramento Electric Company	Total
\$12,556 28	\$6,751 94	\$7,227 30	\$494 10	\$11,951 76	\$159,820 59
-----	-----	14 00	-----	-----	2,514 37
-----	-----	-----	-----	2,248 27	25,538 30
2,567 02	-----	-----	37 35	1,088 55	18,854 25
2,000 00	-----	2,564 25	1,478 00	519 00	49,125 66
-----	-----	786 88	372 66	287 80	16,658 35
-----	-----	-----	-----	-----	2,301 97
-----	-----	-----	-----	-----	2,302 30
1,149 70	-----	687 70	106 95	417 12	16,006 41
1,254 86	-----	258 70	-----	4,514 83	29,119 55
-----	-----	-----	-----	-----	-----
\$19,527 86	\$6,751 94	\$11,538 83	\$2,489 06	\$21,127 33	<sup>1</sup> \$322,971 75





# TELEPHONE AND TELEGRAPH COMPANIES.

TABLES NOS. 1 AND 2.

TABLE

ABSTRACT OF BALANCE SHEETS OF TELEPHONE AND TELEGRAPH  
DECEMBER

	Alpaugh Telephone and Telegraph Company	Antelope Valley Telephone Company	Bass and Rolinson Telephone Company
<i>Assets.</i>			
Organization, franchises and patent rights -----			\$9,668 00
Cost of plant, buildings, lands, etc.-----		\$4,640 54	
Equipment -----	\$1,344 00		187 95
Miscellaneous -----			349 25
Total fixed capital-----	\$1,344 00	\$4,640 54	\$10,205 20
Treasury securities -----			
Other investments -----			
Cash and deposits-----	52 71		195 68
Notes receivable -----			
Accounts receivable -----			809 94
Material and supplies-----		739 00	
Deferred debit items-----			
Miscellaneous -----			
Deficit -----			
Totals -----	\$1,396 71	\$5,379 54	\$11,210 82
<i>Liabilities.</i>			
Capital stock -----	\$1,347 00		
Installment on stock subscription-----			
Capital invested -----		\$5,379 54	\$10,265 93
Bonds -----			
Notes payable -----			
Accounts payable -----			908 77
Interest and taxes accrued-----			36 12
Deferred credit items-----			
Miscellaneous -----			
Surplus -----	49 71		
Totals -----	\$1,396 71	\$5,379 54	\$11,210 82

## No. 1.

COMPANIES OPERATING IN CALIFORNIA DURING YEAR ENDING  
31, 1913.

George Berg Telephone Line	H. E. Bigelow Telephone Company	Butte Valley Telephone Company	Calaveras Telephone Company	California and Oregon Telegraph Company	California Northern Tele- phone and Telegraph Company
					\$12,830 75
	\$5,000 00		\$4,000 00	\$46,930 73	60,753 40
\$1,600 00		\$1,387 20			
\$1,600 00	\$5,000 00	\$1,387 20	\$4,000 00	\$46,930 73	\$73,584 15
				1,294 25	1,370 42
		146 00		41 19	
				1,744 55	1,652 77
				2 40	41 97
					22,500 00
				9 98	87 16
				1,137 63	
\$1,600 00	\$5,000 00	\$1,533 20	\$4,000 00	\$51,160 73	\$99,236 47
		\$1,300 00		\$36,700 00	\$85,007 00
\$1,600 00	\$5,000 00		\$4,000 00		
				7,361 98	5,000 00
				3,354 01	2,732 71
				272 49	445 15
					1,923 85
				3,472 25	
		233 20			4,127 76
\$1,600 00	\$5,000 00	\$1,533 20	\$4,000 00	\$51,160 73	\$99,236 47

TABLE No. 1

ABSTRACT OF BALANCE SHEETS OF TELEPHONE AND TELEGRAPH  
DECEMBER

	Campbell Telephone Company	Capay Valley Telephone Company	Central Telephone Company
<i>Assets.</i>			
Organization, franchises and patent rights .....			
Cost of plant, buildings, lands, etc.....			\$4,500 00
Equipment .....	\$3,158 79	\$1,200 00	
Miscellaneous .....			
Total fixed capital.....	\$3,158 79	\$1,200 00	\$4,500 00
Treasury securities .....			
Other investments .....			
Cash and deposits.....	170 54		
Notes receivable .....			
Accounts receivable .....	35 70		
Material and supplies.....			
Deferred debit items.....	253 50		
Miscellaneous .....			
Deficit .....			
Totals .....	\$3,618 53	\$1,200 00	\$4,500 00
<i>Liabilities.</i>			
Capital stock .....	\$2,620 00		
Installment on stock subscription.....			
Capital invested .....		\$1,200 00	\$4,500 00
Bonds .....			
Notes payable .....			
Accounts payable .....			
Interest and taxes accrued.....			
Deferred credit items.....			
Miscellaneous .....			
Surplus .....	998 53		
Totals .....	\$3,618 53	\$1,200 00	\$4,500 00

—Continued.

COMPANIES OPERATING IN CALIFORNIA DURING YEAR ENDING  
31, 1913.

Chetco Southern Telephone Company	Chileno Valley Telephone Company	Chinese Camp, Jamestown and Sonora Telegraph Company	Coachella Valley Home Telephone and Telegraph Company	Colusa County Telephone Company	Coley-Craig Escalon Telephone Company
				\$22,720 65	
			\$11,060 08	147,980 85	
\$4,606 35	\$2,218 56	\$1,200 00 10 70	3,254 81		\$2,695 17
\$4,606 35	\$2,218 56	\$1,210 70	\$14,314 89	\$170,701 50 57,000 00	\$2,695 17
236 13	22 97		56 62	3,702 21	
			410 80		
3,162 97			446 03	5,971 03	
				1,508 68	
	345 00				
				266 48	
\$8,005 45	\$2,586 53	\$1,210 70	\$15,228 34	\$239,149 90	\$2,695 17
\$5,000 00	\$2,300 00	\$1,200 00	\$10,435 00	\$85,708 00	
					\$2,695 17
				85,000 00	
			3,138 71	60,000 00	
1,951 29			33 83	3,554 85	
				1,087 67	
	200 00		1,341 12	520 08	
			70 64	2,295 65	
1,054 16	86 53	10 70	209 04	983 65	
\$8,005 45	\$2,586 53	\$1,210 70	\$15,228 34	\$239,149 90	\$2,695 17



TABLE No. 1

ABSTRACT OF BALANCE SHEETS OF TELEPHONE AND TELEGRAPH  
DECEMBER

	Corcoran Telephone and Telegraph Exchange	Corona Home Telephone and Telegraph Company	Corona Union Telephone and Telegraph Company
<i>Assets.</i>			
Organization, franchises and patent rights .....			\$25,000 00
Cost of plant, buildings, lands, etc. ....		\$2,500 00	
Equipment .....	\$2,965 75	79,950 00	
Miscellaneous .....			
Total fixed capital .....	\$2,965 75	\$82,450 00	\$25,000 00
Treasury securities .....		15,942 50	
Other investments .....			
Cash and deposits .....			1,339 63
Notes receivable .....			
Accounts receivable .....		1,218 79	
Material and supplies .....			
Deferred debit items .....			
Miscellaneous .....		337 75	
Deficit .....		75 47	
Totals .....	\$2,965 75	\$100,024 51	\$26,339 63
<i>Liabilities.</i>			
Capital stock .....		\$50,000 00	\$25,000 00
Installment on stock subscription .....			
Capital invested .....	\$2,389 30		
Bonds .....		50,000 00	
Notes payable .....			
Accounts payable .....	576 45		1,339 63
Interest and taxes accrued .....			
Deferred credit items .....			
Miscellaneous .....		24 51	
Surplus .....			
Totals .....	\$2,965 75	\$100,024 51	\$26,339 63

—Continued.

COMPANIES OPERATING IN CALIFORNIA DURING YEAR ENDING  
31, 1913.

John C. Danner Company	Del Norte Peoples Telephone Company	Des Palos Telephone Company	Downey Home Telephone and Telegraph Company	Ducor California Hot Springs Telephone and Telegraph Company	Eel River and Southern Telephone Company
		\$81 50			
	\$8,477 35	5,987 57	\$49,438 09	\$4,100 00	\$12,329 57
\$945 00	2,777 02	100 00			
			334 00		
\$945 00	\$11,254 37	\$6,169 07	\$49,772 09	\$4,100 00	\$12,329 57
	170 85	460 64	1,181 21	150 81	1,122 69
	985 04	432 00	21 04		21 29
			277 71		
\$945 00	\$12,410 26	\$7,061 71	\$51,252 05	\$4,250 81	\$13,473 55
	\$7,942 50	\$5,027 00	\$25,000 00	\$4,100 00	\$10,550 00
\$945 00	1,000 00		15,000 00		
			1,200 00		
	855 40	46 94	38 49		
	82 11				
		200 00			
	207 93		772 60		755 00
	2,322 32	1,787 77	9,246 96	150 81	2,168 55
\$945 00	\$12,410 26	\$7,061 71	\$51,252 05	\$4,250 81	\$13,473 55

TABLE No. 1

ABSTRACT OF BALANCE SHEETS OF TELEPHONE AND TELEGRAPH  
DECEMBER

	Evans Telephone Company	Federal Telegraph Company	Forest Hill Telephone Exchange
<i>Assets.</i>			
Organization, franchises and patent rights .....		\$1 00	
Cost of plant, buildings, lands, etc.....	\$2,500 00	293,910 21	
Equipment .....	1,500 00		\$1,000 00
Miscellaneous .....		2,060 64	
Total fixed capital.....	\$4,000 00	\$295,971 85	\$1,000 00
Treasury securities .....			
Other investments .....			
Cash and deposits.....		2,985 73	174 39
Notes receivable .....			
Accounts receivable .....	7 80	59,545 45	
Material and supplies.....	75 00	24,712 75	
Deferred debit items.....			
Miscellaneous .....	25 00	33,350 91	
Deficit .....			
Totals .....	\$4,107 80	\$416,566 69	\$1,174 39
<i>Liabilities.</i>			
Capital stock .....		\$100,000 00	
Installment on stock subscription.....			
Capital invested .....	\$4,107 80		\$1,174 39
Bonds .....			
Notes payable .....		85,919 00	
Accounts payable .....		14,098 24	
Interest and taxes accrued.....			
Deferred credit items.....			
Miscellaneous .....			
Surplus .....		216,549 45	
Totals .....	\$4,107 80	\$416,566 69	\$1,174 39

—Continued.

COMPANIES OPERATING IN CALIFORNIA DURING YEAR ENDING  
31, 1913.

Powder Independent Telephone Company	Gilroy Telephone Company	Glenn County Telephone Company	Guglielmetti Telephone Company	Home Telephone and Telegraph Company of Los Angeles	Home Telephone Company of Colusa
		\$28,244 00			
\$18,759 40	\$13,135 66	87,940 79	\$7,260 68	\$7,923,172 15	
					\$650 00
\$18,759 40	\$13,135 66	\$116,184 79	\$7,260 68	\$7,923,172 15	\$650 00
133 18	694 61	71 86		69,976 68	600 67
15 00				16,000 00	
171 45	221 05		256 40	81,541 32	
	169 75		70 88	46,683 37	
		15,352 30		4,238,809 60	
149 50		7,495 65		4,136 81	
			593 70		
\$19,221 53	\$14,221 07	\$139,104 60	\$8,181 66	\$12,380,319 93	\$1,250 67
\$8,310 00	\$8,600 00	\$100,000 00		\$6,000,000 00	\$650 00
62 20			\$8,181 66		
				4,318,000 00	
2,900 00	1,500 00	26,899 53		347,506 13	
1,210 24		3,632 45		127,500 50	
				36,146 06	
				702,072 61	
1,030 00	95 35	7 75		844,073 12	
5,719 09	4,025 72	8,564 87		5,021 51	600 67
\$19,231 53	\$14,221 07	\$139,104 60	\$8,181 66	\$12,380,319 93	\$1,250 67

TABLE No. 1

ABSTRACT OF BALANCE SHEETS OF TELEPHONE AND TELEGRAPH  
DECEMBER

	Home Telephone Company of Covina	Home Telephone and Telegraph Company of Pasadena	Home Telephone and Telegraph Company of Santa Barbara
<i>Assets.</i>			
Organization franchises and patent rights -----	\$3,125 00	\$210,725 00	\$2,000 00
Cost of plant, buildings, lands, etc. ....	156,752 54	1,333,673 54	356,215 46
Equipment -----		469,110 25	7,393 50
Miscellaneous -----			
Total fixed capital -----	\$159,877 54	\$2,013,508 79	\$365,608 96
Treasury securities -----			
Other investments -----	795 57		
Cash and deposits -----		7,993 13	1,759 06
Notes receivable -----		100 00	
Accounts receivable -----	790 56	15,403 07	5,902 19
Material and supplies -----	1,659 05	47,714 22	9,837 33
Deferred debit items -----	1,337 25		156,229 32
Miscellaneous -----	4,294 58	1,373 59	7,699 21
Deficit -----			
Totals -----	\$168,754 55	\$2,086,092 80	\$543,517 95
<i>Liabilities.</i>			
Capital stock -----	\$88,300 00	\$519,000 00	\$220,000 00
Installment on stock subscription -----			
Capital invested -----			
Bonds -----	44,200 00	471,500 00	200,000 00
Notes payable -----	18,000 00	911,972 16	20,000 00
Accounts payable -----	2,869 68	37,049 48	3,788 88
Interest and taxes accrued -----		25,209 38	2,513 77
Deferred credit items -----	6,864 26	102,754 77	
Miscellaneous -----	1,667 74		5,635 00
Surplus -----	6,852 87	18,607 01	91,580 30
Totals -----	\$168,754 55	\$2,086,092 80	\$543,517 95

<sup>1</sup>Credit item—overdraft.



—Continued.

COMPANIES OPERATING IN CALIFORNIA DURING YEAR ENDING  
31, 1913.

Home Telephone and Telegraph Company of Santa Barbara County	Honey Lake Valley Mutual Telephone Association	Hughson Telephone Company	Huntington Beach Company	Imperial Telephone Company	Interstate Telegraph Company
\$2,103 10	\$1,296 10		\$4,892 11	\$15,000 00	\$496,481 32
145,939 59	16,707 00	\$4,268 88	1,041 34	115,647 05	271,990 08
	401 86		7,689 55	982 94	
\$148,042 69	\$18,404 96	\$4,268 88	\$13,623 00	\$131,629 99	\$768,471 40
31,300 00					
	110 31			1,022 72	4,047 45
				184 75	189 65
			193 93	3,370 77	6,566 30
	1,831 37		324 63	1,456 32	3,091 35
225,766 00					
	3 50			9 98	1,795 12
	1,063 56				29,302 24
\$405,108 69	\$21,413 70	\$4,268 88	\$14,141 56	\$137,674 53	\$813,463 51
\$200,000 00	\$10,000 00	\$1,200 00		\$25,000 00	\$500,000 00
			\$14,141 56		
181,000 00				10,000 00	250,000 00
15,000 00	10,000 00				
6,184 48	38 81			57,934 99	40,838 87
	480 55				124 64
	894 34			3,559 40	17,500 00
				600 00	5,000 00
2,924 21		68 88		40,580 14	
\$405,108 69	\$21,413 70	\$4,268 88	\$14,141 56	\$137,674 53	\$813,463 51

TABLE No. 1

ABSTRACT OF BALANCE SHEETS OF TELEPHONE AND TELEGRAPH  
DECEMBER

	Kerman Telephone Company	Klamath Telephone and Telegraph Company	Lindsay Home Telephone and Telegraph Company
<i>Assets.</i>			
Organization franchises and patent rights			
Cost of plant, buildings, lands, etc.	\$9,157 08	\$17,075 76	\$24,606 32
Equipment		147 35	
Miscellaneous			233 56
Total fixed capital	\$9,157 08	\$17,223 11	\$24,839 88
Treasury securities	26,640 00		
Other investments			
Cash and deposits	102 21	151 16	48 96
Notes receivable		2,043 61	
Accounts receivable	881 89		1,224 81
Material and supplies			
Deferred debit items			4,640 62
Miscellaneous	105 00		
Deficit	3,612 86		
Totals	\$40,499 04	\$19,417 88	\$30,754 27
<i>Liabilities.</i>			
Capital stock	\$35,000 00	\$15,000 00	\$25,000 00
Installment on stock subscription			
Capital invested			
Bonds			
Notes payable	1,750 00		500 00
Accounts payable	1,521 53		552 13
Interest and taxes accrued			
Deferred credit items	2,224 86		1,474 40
Miscellaneous	2 65		748 25
Surplus		4,417 88	2,479 49
Totals	\$40,499 04	\$19,417 88	\$30,754 27

—Continued.

COMPANIES OPERATING IN CALIFORNIA DURING YEAR ENDING  
31, 1913.

Los Gatos Telephone Company	Lost Hills Telephone and Telegraph Company	Monrovia Telephone and Telegraph Company	Morgan Hill Telephone Company	Nevada, Cali- fornia and Oregon Telephone and Telegraph Company	New Freeport Telephone and Telegraph Company
	\$50,000 00	\$10,075 00	\$75 00	\$611 00	
\$26,986 61		82,814 50	2,425 00	44,514 54	\$48,164 59
	25,000 00	24,189 34			2,269 08
		1,127 88			188 25
\$26,986 61	\$75,000 00	\$118,206 72	\$2,500 00	\$45,125 54	\$50,621 92
		28,500 00			
218 61	27 39	2,126 07		41 35	1,328 61
597 46	291 55	1,181 53			2,557 86
1,431 75	105 00				5,440 00
					500 00
	3,609 68	3,917 03			
\$29,234 43	\$79,033 62	\$153,931 35	\$2,500 00	\$45,166 89	\$60,448 39
\$22,550 00	\$50,000 00	\$100,000 00		\$45,000 00	\$27,300 00
			\$2,500 00		
	25,000 00	25,000 00			
1,000 00	250 00	3,500 00			5,500 00
386 37	264 37	3,903 42			96 25
200 50	519 25	239 71			
		21,288 22			
325 30	3,000 00				
4,772 26				166 89	27,552 14
\$29,234 43	\$79,033 62	\$153,931 35	\$2,500 00	\$45,166 89	\$60,448 39

TABLE NO. 1

ABSTRACT OF BALANCE SHEETS OF TELEPHONE AND TELEGRAPH  
DECEMBER

	Northern Trinity Telephone and Telegraph Company	Ontario and Upland Telephone Company	Oxnard Home Telephone Company
<i>Assets.</i>			
Organization, franchises and patent rights -----			\$10,000 00
Cost of plant, buildings, lands, etc. ....	\$2,032 16	\$144,969 53	97,795 79
Equipment -----		56,491 53	
Miscellaneous -----			
Total fixed capital -----	\$2,032 16	\$201,461 06	\$107,795 79
Treasury securities -----			
Other investments -----			
Cash and deposits -----		595 97	1,925 81
Notes receivable -----			
Accounts receivable -----		2,038 68	944 60
Material and supplies -----		1,264 99	62 84
Deferred debit items -----			14,767 92
Miscellaneous -----		631 17	20 19
Deficit -----		19,148 75	
Totals -----	\$2,032 16	\$225,140 62	\$125,517 15
<i>Liabilities.</i>			
Capital stock -----	\$2,021 00	\$100,000 00	\$75,000 00
Installment on stock subscriptions -----			
Capital invested -----			
Bonds -----			41,000 00
Notes payable -----		89,500 00	400 00
Accounts payable -----		24,181 18	1,632 41
Interest and taxes accrued -----		3,261 80	637
Deferred credit items -----		7,837 64	1,928 72
Miscellaneous -----		360 00	433 28
Surplus -----	11 16		4,484 98
Totals -----	\$2,032 16	\$225,140 62	\$125,517 15

—Continued.

COMPANIES OPERATING IN CALIFORNIA DURING YEAR ENDING  
31, 1913.

Pacific Telephone and Telegraph Company	Paso Robles and Shandon Telephone Company	Placerville Telephone Exchange	Pomona Valley Telephone and Telegraph Company	Postal Telegraph Cable Company	Raymond Telephone Company
\$14,155,922 79					
58,313,749 63	\$4,737 22	\$8,000 00	\$177,363 42	\$100,000 00	
19,503,876 60	1,000 00	5,991 17	4,475 75		\$14,311 40
\$91,973,549 02	\$5,737 22	\$13,991 17	\$181,839 17	\$100,000 00	\$14,311 40
1,500,504 79		225 00			
1,216,087 15	35 81	274 10	1,139 43	44,248 46	405 20
1,856,098 77					
3,832,600 03	62 56		2,854 24	169,858 27	843 62
1,551,433 42		200 00		3,220 08	35 00
2,290,659 88					
410,482 73					
				37,954 49	
\$104,631,215 79	\$5,835 59	\$14,690 27	\$185,832 84	\$355,281 30	\$15,595 22
\$50,000,000 00	\$4,180 00		\$100,000 00	\$100,000 00	
		\$11,094 55			\$15,291 24
11,664,000 00			38,400 00		
	215 00	3,500 00	41,600 00		
890,296 51	64 55	95 72	148 84	255,281 30	303 98
247,151 30			1,766 60		
9,851,247 46	710 62				
1,630,000 00	3 95		917 40		
348,520 52	661 47		3,000 00		
\$104,631,215 79	\$5,835 59	\$14,690 27	\$185,832 84	\$355,281 30	\$15,595 22



TABLE No. 1

ABSTRACT OF BALANCE SHEETS OF TELEPHONE AND TELEGRAPH  
DECEMBER

	Redondo Home Telephone Company	Reedley Telephone Company	Rio Vista Telephone and Telegraph Company
<i>Assets.</i>			
Organization, franchises and patent rights .....			
Cost of plant, buildings, lands, etc. ....	\$33,540 75	\$10,000 00	\$4,150 00
Equipment .....		2,434 51	
Miscellaneous .....			
Total fixed capital .....	\$33,540 75	\$12,434 51	\$4,150 00
Treasury securities .....	1,500 00		
Other investments .....			
Cash and deposits .....	188 81	885 56	412 86
Notes receivable .....			
Accounts receivable .....		216 60	
Material and supplies .....	654 55		
Deferred debit items .....	34,266 74		
Miscellaneous .....			
Deficit .....			
Totals .....	\$70,150 85	\$13,536 67	\$4,562 86
<i>Liabilities.</i>			
Capital stock .....	\$40,000 00	\$8,807 00	\$4,150 00
Installment on stock subscription .....			
Capital invested .....	30,000 00		
Bonds .....			
Notes payable .....		1,855 00	
Accounts payable .....		1,358 38	
Interest and taxes accrued .....			
Deferred credit items .....		653 99	
Miscellaneous .....			
Surplus .....	150 85	862 30	412 86
Totals .....	\$70,150 85	\$13,536 67	\$4,562 86

<sup>1</sup>Credit item—overdraft.

—Continued.

COMPANIES OPERATING IN CALIFORNIA DURING YEAR ENDING  
31, 1913.

Riverside Home Telephone and Telegraph Company	Roseville Home Telephone Company	San Diego Home Telephone Company	San Fernando Valley Home Telephone Company	The Sanger Telephone Company	Santa Monica Bay Home Telephone Company
\$157 75					\$25,000 00
299,722 41	\$10,968 06	\$1,013,246 95	\$95,255 05	\$10,188 75	181,119 53
				72 76	46,510 82
		1,835 07			800 00
\$299,880 16	\$10,968 06	\$1,015,082 02	\$95,255 05	\$10,261 51	\$253,430 35
		1,531,500 00			294,617 68
				86 00	
441 28	174 54	15,712 35	1301 85	81 80	205 22
791 55				291 85	2,361 16
				46 25	
238,250 00		730,115 00			187,002 00
3,398 22		335 39		117 15	
20,069 77			746 36		
\$562,830 98	\$11,142 60	\$3,292,744 76	\$95,699 56	\$10,884 56	\$737,616 41
\$238,250 00	\$7,500 00	\$1,500,000 00	\$50,000 00		\$500,000 00
				\$4,059 23	
275,500 00		1,500,000 00	40,000 00		185,500 00
15,463 00		50,800 00		5,700 00	14,141 74
2,065 89	1,397 21	1,051 80		1,125 33	5,357 31
2,295 84					3,168 50
	438 72				15,688 22
29,256 25		7,972 65	5,699 56		3,222 86
	1,806 67	232,920 31			10,537 78
\$562,830 98	\$11,142 60	\$3,292,744 76	\$95,699 56	\$10,884 56	\$737,616 41

TABLE No. 1

ABSTRACT OF BALANCE SHEETS OF TELEPHONE AND TELEGRAPH  
DECEMBER

	Santa Paula Home Telephone Company	Sierra Madre Telephone and Telegraph Company	Sierra Telegraph Company
<i>Assets.</i>			
Organization, franchises and patent rights -----	\$10,000 00	\$5,000 00	-----
Cost of plant, buildings, lands, etc.-----	72,054 35	20,004 44	\$12,400 00
Equipment -----	-----	7,007 53	-----
Miscellaneous -----	-----	-----	-----
Total fixed capital-----	\$82,054 35	\$32,011 97	\$12,400 00
Treasury securities -----	-----	-----	-----
Other investments -----	-----	-----	-----
Cash and deposits -----	1,560 02	724 15	-----
Notes receivable -----	-----	-----	-----
Accounts receivable -----	681 27	552 46	-----
Material and supplies -----	100 00	-----	-----
Deferred debit items -----	17,162 92	-----	-----
Miscellaneous -----	14 96	-----	-----
Deficit -----	-----	-----	-----
Totals -----	\$101,573 52	\$33,288 58	\$12,400 00
<i>Liabilities.</i>			
Capital stock -----	\$60,000 00	\$17,400 00	\$12,400 00
Installment on stock subscriptions -----	-----	-----	-----
Capital invested -----	-----	-----	-----
Bonds -----	33,000 00	-----	-----
Notes payable -----	3,237 50	8,000 00	-----
Accounts payable -----	974 96	-----	-----
Interest and taxes accrued -----	299 09	-----	-----
Deferred credit items -----	767 68	-----	-----
Miscellaneous -----	336 63	-----	-----
Surplus -----	2,957 66	7,888 58	-----
Totals -----	\$101,573 52	\$33,288 58	\$12,400 00

<sup>1</sup>Contract stock, \$300,000.00.

—Continued.

COMPANIES OPERATING IN CALIFORNIA DURING YEAR ENDING  
31, 1913.

The Siskiyou Telephone Company	Smeltzer Home Telephone and Telegraph Company	Southwestern Home Telephone Company	Tehama County Telephone Company	The Tulare Home Telephone and Telegraph Company	The Turlock Home Telephone and Telegraph Company
					\$2,000 00
\$16,604 17	\$21,437 99	\$482,906 95	\$70,500 00		2,800 00
2,441 14				\$34,570 73	14,666 62
200 00				1,039 33	550 00
\$19,245 31	\$21,437 99	\$482,906 95	\$70,500 00	\$35,610 06	\$20,016 62
		34,473 27			
263 23	392 12	7,295 33		744 76	213 94
	169 33	4,500 00			
435 10	2,780 93	2,497 06		679 03	378 95
391 04		8,303 18			373 65
			27,983 38		
111 40	662 13	\$305,930 07			
			398 96		
\$20,446 08	\$25,442 50	\$845,905 86	\$98,882 34	\$37,033 85	\$20,983 16
\$10,000 00	\$3,995 00	\$405,136 50	\$76,446 00	\$24,930 00	
					\$17,252 19
		318,000 00			
256 00	1,500 00	100,550 00	14,964 70		2,950 00
1,148 70	174 09	5,333 77	5,178 64	687 02	389 85
		6,877 56			391 12
		1,711 43		10,544 30	
1,500 00		8,296 60	2,293 00		
7,547 38	19,773 41			872 53	
\$20,446 08	\$25,442 50	\$845,905 86	\$98,882 34	\$37,033 85	\$20,983 16

TABLE No. 1

ABSTRACT OF BALANCE SHEETS OF TELEPHONE AND TELEGRAPH  
DECEMBER

	Tuolumne Telephone Exchange	Union Home Telephone and Telegraph Corporation	United States Long Distance Telephone and Telegraph Company
<i>Assets.</i>			
Organization, franchises and patent rights -----		\$1,648,325 05	
Cost of plant, buildings, lands, etc. ....	\$4,000 00	1,086,342 97	\$3,881,183 63
Equipment -----			
Miscellaneous -----			
Total fixed capital -----	\$4,000 00	\$2,734,668 02	\$3,881,183 63
Treasury securities -----			
Other investments -----			106,111 75
Cash and deposits -----		413 40	12,481 84
Notes receivable -----		277,306 31	
Accounts receivable -----		267,626 31	29,722 41
Material and supplies -----		18,299 82	1,602 51
Deferred debit items -----			
Miscellaneous -----		6,420 78	9,720 12
Deficit -----		169,938 64	
Totals -----	\$4,000 00	\$3,474,673 28	\$4,040,822 26
<i>Liabilities.</i>			
Capital stock -----		\$1,872,550 00	\$3,000,000 00
Installment on stock subscription -----			
Capital invested -----	\$4,000 00		
Bonds -----		1,345,500 00	690,000 00
Notes payable -----		24,250 00	
Accounts payable -----		13,872 08	11,993 65
Interest and taxes accrued -----		170,669 17	26,965 00
Deferred credit items -----			283,593 81
Miscellaneous -----		47,832 03	14,900 00
Surplus -----			43,169 80
Totals -----	\$4,000 00	\$3,474,673 28	\$4,040,822 26

<sup>1</sup>Credit item.



—Concluded.

COMPANIES OPERATING IN CALIFORNIA DURING YEAR ENDING  
31, 1913.

Upper Dry Creek Telephone Company	Volcano Telephone Company	Western Union Telegraph Company	Whittier Home Telephone and Telegraph Company	Willits Telephone and Telegraph Company	Total
					\$16,751.335 12
	\$2,500 00	\$140,893,761 14	\$142,329 40		218,588,021 24
\$3,270 00				\$6,868 33	20,353,913 36
			2,120 00		10,848 68
\$3,270 00	\$2,500 00	\$140,893,761 14	\$144,449 40	\$6,868 33	\$255,704,118 40
		10,830,876 44	4,200 00		12,856,549 89
		141,797 33			1,749,320 44
279 81		2,278,948 39	2,230 08	177 43	3,689,860 39
		9,300,748 77			11,457,954 18
		6,702,484 61	22 49		11,217,912 03
		1,960,174 01			3,687,637 45
1,088 00		12,915 17			8,224,884 60
		71,222 71	1,305 63		872,290 58
					291,569 14
\$4,637 81	\$2,500 00	\$172,192,928 57	\$152,207 60	\$7,045 76	\$309,752,097 10
\$3,840 00		\$103,665,733 96	\$60,000 00	\$4,500 00	\$170,409,985 96
					62 20
	\$2,500 00				122,277 56
		32,602,000 00	58,400 00		84,497,000 00
			3,200 00		1,910,974 45
		3,970,647 97	69 02	120 00	5,512,213 22
		736,983 12			1,267,824 26
		4,845,010 32			15,882,950 82
		16,666,761 35	3,365 99		19,263,135 29
797 81		9,705,791 85	27,172 59	2,425 76	10,885,673 34
\$4,637 81	\$2,500 00	\$172,192,928 57	\$152,207 60	\$7,045 76	\$309,752,097 10

TABLE

ABSTRACT OF INCOME ACCOUNT OF TELEPHONE AND TELEGRAPH  
DECEMBER

	Alpaugh Telephone and Telegraph Company	Antelope Valley Telephone Company
Operating revenues -----	\$1,724 08	\$1,135 00
Operating expenses -----	1,701 08	1,818 40
Net operating revenue -----	\$23 00	
Net operating loss -----		\$683 40
<i>Non-operating Revenue.</i>		
Rents from buildings, land, etc.-----		
Dividend on stock owned-----		
Interest on bonds owned-----		
Miscellaneous non-operating revenue -----		
Total non-operating revenue -----		
Gross corporate income -----	\$23 00	
Gross corporate loss -----		\$683 40
<i>Deductions from Gross Corporate Income.</i>		
Interest accrued on funded debt-----		
Other interest -----		
Sinking funds chargeable to income-----		
Other deductions -----		
Total deductions from gross corporate income-----		
Net corporate income for year-----	\$23 00	
Net corporate loss for year-----		\$683 40
Surplus on December 31, 1912-----	26 71	
Deficit on December 31, 1912-----		
Dividends -----		
Deductions from surplus -----		
Additions to surplus -----		683 40
Surplus on December 31, 1913-----	49 71	
Deficit on December 31, 1913-----		



TABLE NO. 2

ABSTRACT OF INCOME ACCOUNT OF TELEPHONE AND TELEGRAPH  
DECEMBER

	California Northern Tele- phone and Tele- graph Company	California Telephone and Light Company
Operating revenues .....	\$11,600 98	\$45,318 85
Operating expenses .....	9,169 90	26,798 56
Net operating revenue .....	\$2,431 08	\$18,520 29
Net operating loss .....		
<i>Non-operating Revenue.</i>		
Rents from buildings, land, etc.....		
Dividend on stock owned.....		
Interest on bonds owned.....		
Miscellaneous non-operating revenue .....		
Total non-operating revenue .....		
Gross corporate income .....	\$2,431 08	\$18,520 29
Gross corporate loss .....		
<i>Deductions from Gross Corporate Income.</i>		
Interest accrued on funded debt.....		\$4,323 51
Other interest .....	\$489 61	3,594 44
Sinking funds chargeable to income.....		
Other deductions .....		1,333 71
Total deductions from gross corporate income..	\$489 61	\$9,251 66
Net corporate income for year.....	\$1,941 47	\$9,268 63
Net corporate loss for year.....		
Surplus on December 31, 1912.....	2,186 29	
Deficit on December 31, 1912.....		
Dividends .....		
Deductions from surplus .....		
Additions to surplus .....		
Surplus on December 31, 1913.....	4,127 76	9,268 63
Deficit on December 31, 1913.....		

—Continued.

COMPANIES OPERATING IN CALIFORNIA DURING YEAR ENDING  
31, 1913.

Campbell Telephone Company	Capay Valley Telephone Company	Central Telephone Company	Chetco Southern Telephone Company	Chileno Valley Telephone Company	Chinese Camp, Jamestown and Sonora Tele- graph Company
\$1,182 90 184 37	\$450 00 324 80	\$3,627 62 2,015 20	\$1,734 31 1,337 23	\$405 55 378 23	\$36 55 41 70
\$998 53	\$125 20	\$1,612 42	\$397 08	\$27 32	\$5 15
				\$200 00	
				\$200 00	
\$998 53	\$125 20	\$1,612 42	\$397 08	\$227 32	\$5 15
				\$200 00	
				\$200 00	
\$998 53	\$125 20	\$1,612 42	\$397 08	\$27 32	\$5 15
			657 08	59 21	15 85
	125 20	1,612 42			
998 53			1,054 16	86 53	10 70



TABLE No. 2

ABSTRACT OF INCOME ACCOUNT OF TELEPHONE AND TELEGRAPH  
DECEMBER

	Coachella Valley Home Telephone and Telegraph Company	Consolidated Securities Company <sup>1</sup>
Operating revenues -----	\$3,386 63	\$4,816 61
Operating expenses -----	3,190 12	4,886 23
Net operating revenue -----	\$196 51	
Net operating loss -----		\$69 62
<i>Non-operating Revenue.</i>		
Rents from buildings, land, etc. -----		
Dividend on stock owned -----		
Interest on bonds owned -----		
Miscellaneous non-operating revenue -----		
Total non-operating revenue -----		
Gross corporate income -----	\$196 51	
Gross corporate loss -----		
<i>Deductions from Gross Corporate Income.</i>		
Interest accrued on funded debt -----		
Other interest -----		
Sinking funds chargeable to income -----		
Other deductions -----		
Total deductions from gross corporate income -----		
Net corporate income for year -----	\$196 51	
Net corporate loss for year -----		
Surplus on December 31, 1912 -----	12 53	
Deficit on December 31, 1912 -----		
Dividends -----		
Deductions from surplus -----		
Additions to surplus -----		
Surplus on December 31, 1913 -----	209 04	
Deficit on December 31, 1913 -----		

<sup>1</sup>See water company report.

—Continued.

COMPANIES OPERATING IN CALIFORNIA DURING YEAR ENDING  
31, 1913.

Colusa County Telephone Company	Coley-Craig Escalon Telephone Company	Corcoran Telephone and Telegraph Exchange	Corona Home Telephone and Telegraph Company	Corona Union Telephone and Telegraph Company	John C. Danner Company
\$34,447 53	\$2,192 10	\$1,603 76	-----	\$13,091 06	\$1,085 00
23,827 68	2,176 51	1,863 05	-----	7,874 31	1,085 00
\$10,619 85	\$15 59	-----	-----	\$5,216 75	-----
-----	-----	\$259 29	-----	-----	-----
-----	-----	-----	-----	-----	-----
-----	-----	-----	-----	-----	-----
\$13 19	-----	-----	\$5,231 75	\$15 00	-----
-----	-----	-----	-----	-----	-----
\$13 19	-----	-----	\$5,231 75	\$15 00	-----
\$10,633 04	\$15 59	-----	\$5,231 75	\$5,231 75	-----
-----	-----	\$259 29	-----	-----	-----
-----	-----	-----	-----	-----	-----
\$1,680 00	-----	-----	\$1,662 25	-----	-----
4,223 34	-----	-----	-----	-----	-----
-----	-----	-----	-----	-----	-----
1,871 31	-----	-----	20 00	\$5,231 75	-----
-----	-----	-----	-----	-----	-----
\$7,774 65	-----	-----	\$1,682 25	\$5,231 75	-----
-----	-----	-----	-----	-----	-----
\$2,858 39	\$15 59	-----	\$3,549 50	-----	-----
-----	-----	\$259 29	-----	-----	-----
2,624 95	-----	-----	-----	-----	-----
-----	-----	-----	642 57	-----	-----
4,499 69	-----	-----	2,982 40	-----	-----
-----	15 59	-----	-----	-----	-----
-----	-----	259 29	-----	-----	-----
983 65	-----	-----	-----	-----	-----
-----	-----	-----	75 47	-----	-----
-----	-----	-----	-----	-----	-----

TABLE No. 2

ABSTRACT OF INCOME ACCOUNT OF TELEPHONE AND TELEGRAPH  
DECEMBER

	Del Norte People's Telephone Company	Dos Palos Telephone Company
Operating revenues -----	\$4,528 95	\$2,638 91
Operating expenses -----	3,376 43	1,756 24
Net operating revenue -----	\$1,152 52	\$882 67
Net operating loss -----		
<i>Non-operating Revenue.</i>		
Rents from buildings, land, etc.-----		\$88 00
Dividend on stock owned -----		
Interest on bonds owned -----		
Miscellaneous non-operating revenue-----	\$33 82	
Total non-operating revenue -----	\$33 82	\$88 00
Gross corporate income -----	\$1,186 34	\$970 67
Gross corporate loss -----		
<i>Deductions from Gross Corporate Income.</i>		
Interest accrued on funded debt -----	\$106 25	
Other interest -----		
Sinking funds chargeable to income -----		\$200 00
Other deductions -----	459 65	
Total deductions from gross corporate income--	\$565 90	\$200 00
Net corporate income for year -----	\$620 44	\$770 67
Net corporate loss for year -----		
Surplus on December 31, 1912 -----	1,701 88	4,165 27
Deficit on December 31, 1912 -----		
Dividends -----		726 55
Deductions from surplus -----		2,421 62
Additions to surplus -----		
Surplus on December 31, 1913 -----	2,322 32	1,787 77
Deficit on December 31, 1913 -----		

—Continued.

COMPANIES OPERATING IN CALIFORNIA DURING YEAR ENDING  
31, 1913.

Downey Home Telephone and Telegraph Company	Ducor California Hot Springs Telephone and Telegraph Company	Fel River and Southern Telephone Company	Evans Telephone Company	Federal Telegraph Company	Forest Hill Telephone Exchange
\$10,519 20	\$1,346 03	\$7,271 01	\$2,549 11	\$75,925 26	\$929 56
1,442 91	1,006 00	5,367 64	3,132 15	94,414 09	755 17
\$6,076 29	\$340 03	\$1,903 37			\$174 39
			\$583 04	\$18,488 83	
\$7 05					
\$7 05					
\$6,083 34	\$340 03	\$1,903 37			\$174 39
			\$583 04	\$18,488 83	
\$750 00					
44 21					
109 57					
896 16		\$420 00			
\$1,799 94		\$420 00			
\$4,283 40	\$340 03	\$1,483 37			\$174 39
			\$583 04	\$18,488 83	
7,210 00	32 54	1,740 18		235,038 28	
		1,055 00			
2,252 44	221 76				174 39
			583 04		
9,240 96	150 81	2,168 55		216,549 45	

TABLE No. 2

ABSTRACT OF INCOME ACCOUNT OF TELEPHONE AND TELEGRAPH  
DECEMBER

	Fowler Independent Telephone Company	Gilroy Telephone Company
Operating revenues -----	\$5,540 76	\$6,979 34
Operating expenses -----	6,399 97	3,296 22
Net operating revenue -----		\$3,683 12
Net operating loss -----	\$859 21	
<i>Non-operating Revenue.</i>		
Rents from buildings, land, etc.-----		\$262 00
Dividend on stock owned-----		
Interest on bonds owned-----		
Miscellaneous non-operating revenue -----		238 55
Total non-operating revenue -----		\$500 55
Gross corporate income -----		\$4,183 67
Gross corporate loss -----	\$859 21	
<i>Deductions from Gross Corporate Income.</i>		
Interest accrued on funded debt-----		
Other interest -----		\$125 80
Sinking funds chargeable to income-----		
Other deductions -----		1,023 29
Total deductions from gross corporate income-----		\$1,149 09
Net corporate income for year-----		\$3,034 58
Net corporate loss for year-----	\$859 21	
Surplus on December 31, 1912-----	6,578 30	3,323 14
Deficit on December 31, 1912-----		
Dividends -----		1,032 00
Deductions from surplus -----		1,300 00
Additions to surplus -----		
Surplus on December 31, 1913-----	5,719 09	4,025 72
Deficit on December 31, 1913-----		



—Continued.

COMPANIES OPERATING IN CALIFORNIA DURING YEAR ENDING  
31, 1913.

Glenn County Telephone Company	Guglielmetti Rural Telephone Company	Home Telephone and Telegraph Company of Los Angeles	Home Telephone Company of Colusa	Home Telephone Company of Covina	Home Telephone and Telegraph Company of Pasadena
\$16,676 00	\$1,336 20	\$1,706,094 04	\$28 64	\$35,894 84	\$251,565 91
10,581 07	1,941 05	955,373 19	43 34	27,992 19	281,110 41
\$6,094 93		\$750,720 85		\$7,902 65	
	\$604 85		\$14 70		\$29,544 50
		\$14,405 00			\$575 00
					5 25
		\$14,405 00			\$580 25
\$6,094 93		\$765,125 85		\$7,902 65	
	\$604 85		\$14 70		\$28,964 25
		\$219,950 00			\$23,575 00
\$2,317 78		30,000 00			40,176 81
		88,006 67			
		427,169 18			23,897 52
\$2,317 78		\$765,125 85			\$87,649 33
\$3,777 15				\$7,902 65	
	\$604 85		\$14 70		\$116,613 53
5,020 72		\$5,021 51	615 37	5,697 47	147,220 59
				6,747 25	
233 00					12,000 00
	11 15				
8,564 87		5,021 51	600 67	6,852 87	18,607 01
	593 70				

TABLE No. 2

ABSTRACT OF INCOME ACCOUNT OF TELEPHONE AND TELEGRAPH  
DECEMBER

	Home Telephone and Telegraph Company of Santa Barbara	Home Telephone and Telegraph Company of Santa Barbara County
Operating revenues -----	\$104,442 37	-----
Operating expenses -----	73,593 36	-----
Net operating revenue -----	\$30,849 01	-----
Net operating loss -----		-----
<i>Non-operating Revenue.</i>		
Rents from buildings, land, etc. -----		-----
Dividend on stock owned -----		-----
Interest on bonds owned -----		-----
Miscellaneous non-operating revenue -----	\$576 53	\$131 29
Total non-operating revenue -----	\$576 53	\$131 29
Gross corporate income -----	\$31,425 54	\$131 29
Gross corporate loss -----		-----
<i>Deductions from Gross Corporate Income.</i>		
Interest accrued on funded debt -----	\$17,500 00	-----
Other interest -----	2,108 15	\$486 55
Sinking funds chargeable to income -----		-----
Other deductions -----	1,168 42	-----
Total deductions from gross corporate income ---	\$20,776 57	\$486 55
Net corporate income for year -----	\$10,648 97	-----
Net corporate loss for year -----		\$355 26
Surplus on December 31, 1912 -----	80,931 33	3,279 47
Deficit on December 31, 1912 -----		-----
Dividends -----		-----
Deductions from surplus -----		-----
Additions to surplus -----		-----
Surplus on December 31, 1913 -----	91,580 30	2,924 21
Deficit on December 31, 1913 -----		-----

—Continued.

COMPANIES OPERATING IN CALIFORNIA DURING YEAR ENDING  
31, 1913.

Honey Lake Valley Mutual Telephone Association	Hughson Telephone Company	Huntington Beach Company	Imperial Telephone Company	Interstate Telegraph Company	Kerman Telephone Company
\$2,626 12 2,494 20	\$2,471 75 2,118 64	\$4,606 80 6,206 20	\$40,643 92 37,847 28	\$35,920 48 33,727 71	\$2,464 52 3,219 24
\$131 92	\$353 11	\$1,599 40	\$2,796 64	\$2,192 77	\$754 72
			\$28 17	\$62 72	
			\$28 17	\$62 72	
\$131 92	\$353 11	\$1,599 40	\$2,824 81	\$2,255 49	\$754 72
\$699 97	\$336 00		\$600 00	\$15,000 00 35 73	\$140 00
\$699 97	\$336 00		\$600 00	\$15,035 73	\$140 00
	\$17 11		\$2,224 81		
\$568 05	51 77	\$1,599 40	38,355 33	\$12,780 24	\$894 72
495 51		190 31		16,522 00	493 28
		1,272 45			2,224 86
	68 88		40,580 14		
1,063 56		3,062 16		29,302 24	3,612 86

TABLE No. 2

ABSTRACT OF INCOME ACCOUNT OF TELEPHONE AND TELEGRAPH  
DECEMBER

	Klamath Telephone and Telegraph Company	Lindsay Home Telephone and Telegraph Company
Operating revenues .....	\$5,389 36	\$6,698 72
Operating expenses .....	3,436 13	3,405 42
Net operating revenue .....	\$1,953 23	\$3,293 30
Net operating loss .....		
<i>Non-operating Revenue.</i>		
Rents from buildings, land, etc. ....		
Dividends on stock owned .....		
Interest on bonds owned .....		
Miscellaneous non-operating revenue .....		\$106 60
Total non-operating revenue .....		\$106 60
Gross corporate income .....	\$1,953 23	\$3,399 90
Gross corporate loss .....		
<i>Deductions from Gross Corporate Income.</i>		
Interest accrued on funded debt .....		
Other interest .....		
Sinking funds chargeable to income .....		
Other deductions .....	\$528 12	\$920 41
Total deductions from gross corporate income ..	\$528 12	\$920 41
Net corporate income for year .....	\$1,425 11	\$2,479 49
Net corporate loss for year .....		
Surplus on December 31, 1912 .....	2,992 77	
Deficit on December 31, 1912 .....		
Dividends .....		
Deductions from surplus .....		
Additions to surplus .....		
Surplus on December 31, 1913 .....	4,417 88	2,479 49
Deficit on December 31, 1913 .....		

<sup>1</sup>See gas report.

—Continued.

COMPANIES OPERATING IN CALIFORNIA DURING YEAR ENDING  
31, 1913.

Los Gatos Telephone Company	Lost Hills Telephone and Telegraph Company	Monrovia Telephone and Telegraph Company	Morgan Hill Telephone Company	Needles Gas and Electric Company <sup>1</sup>	Nevada, Cali- fornia and Oregon Telephone and Telegraph Company
\$11,794 20	\$4,426 77	\$19,978 53	\$1,666 31	\$1,643 20	\$692 15
7,102 01	4,469 83	13,360 20	2,409 26	1,192 42	1,158 08
\$4,692 19		\$6,618 33		\$450 78	
	\$43 06		\$742 95		\$465 93
					\$13 18
\$59 72			\$46 02		
\$59 72			\$46 02		\$13 18
\$4,751 91		\$6,618 33			
	\$43 06		\$696 93		\$452 75
	\$1,500 00	\$1,500 00			
		132 30	\$200 00		\$210 00
\$1,661 28		20 05	202 34		
\$1,661 28	\$1,500 00	\$1,652 35	\$402 34		\$210 00
\$3,090 63		\$4,965 98			
	\$1,543 06		\$1,099 27		\$662 75
3,357 93					
	2,066 62	3,123 01			3,413 26
1,676 30		5,760 00			675 00
			1,099 27		4,917 90
4,772 26					166 89
	3,609 68	3,917 03			



TABLE NO. 2

ABSTRACT OF INCOME ACCOUNT OF TELEPHONE AND TELEGRAPH  
DECEMBER

	New Freeport Telephone and Telegraph Company	Northern Trinity Tele- phone and Telegraph Company
Operating revenues -----	\$19,836 71	\$476 50
Operating expenses -----	10,569 74	460 64
Net operating revenue -----	\$9,266 97	\$15 86
Net operating loss -----		
<i>Non-operating Revenue.</i>		
Rents from buildings, lands, etc.-----		
Dividends on stock owned-----		
Interest on bonds owned-----		
Miscellaneous non-operating revenue-----	\$109 43	\$56 65
Total non-operating revenue-----	\$109 43	\$56 65
Gross corporate income-----	\$9,376 40	\$72 51
Gross corporate loss -----		
<i>Deductions from Gross Corporate Income.</i>		
Interest accrued on funded debt -----		
Other interest -----	\$405 71	
Sinking funds chargeable to income-----		
Other deductions -----	1,360 00	\$61 35
Total deductions from gross corporate income--	\$1,765 71	\$61 35
Net corporate income for year-----	\$7,610 69	\$11 16
Net corporate loss for year-----		
Surplus on December 31, 1912-----	19,941 45	
Deficit on December 31, 1912-----		
Dividends -----		
Deductions from surplus -----		
Additions to surplus -----		
Surplus on December 31, 1913-----	27,552 14	11 16
Deficit on December 31, 1913-----		

—Continued.

COMPANIES OPERATING IN CALIFORNIA DURING YEAR ENDING  
31, 1913.

Ontario and Eupland Telephone Company	Oxnard Home Telephone Company	Pacific Telephone and Telegraph Company	Paso Robles and Shandon Telephone Company	Placerville Telephone Exchange	Pomona Valley Telephone and Telegraph Company
\$33,186 44 40,441 17	\$17,813 94 9,449 30	\$17,678,429 73 12,352,988 71	\$2,042 19 1,380 72	\$6,998 54 5,615 60	\$62,787 03 40,621 44
\$7,254 73	\$8,364 64	\$5,325,441 02	\$661 47	\$1,382 94	\$22,165 59
					\$180 00
		\$735,427 54			
		217,542 84			
		\$952,970 38			\$180 00
\$7,254 73	\$8,364 64	\$6,278,411 40	\$661 47	\$1,382 94	\$22,345 59
\$4,637 98	\$2,046 07 46 50	\$2,041,986 85 19,137 47			\$1,720 60 5,178 77
	3,460 68	1,963,391 55			9,446 22
\$4,637 98	\$5,553 25	\$1,024,515 87			\$16,345 59
	\$2,811 39	\$2,253,895 53	\$661 47	\$1,382 94	\$6,000 00
\$11,892 71	1,673 59	130,608 41			3,000 00
5,756 04		1,920,000 00			6,000 00
1,500 00		115,983 42		1,382 94	
	4,484 98	348,520 52	661 47		3,000 00
19,148 75					

TABLE No. 2

ABSTRACT OF INCOME ACCOUNT OF TELEPHONE AND TELEGRAPH  
DECEMBER

	Postal Telegraph Cable Company	Raymond Telephone Company
Operating revenues .....	\$426,942 86	\$4,125 32
Operating expenses .....	430,351 90	4,806 77
Net operating revenue .....		
Net operating loss .....	\$3,409 04	\$681 45
<i>Non-operating Revenue.</i>		
Rents from buildings, land, etc. ....		
Dividends on stock owned .....		
Interest on bonds owned .....		
Miscellaneous non-operating revenue .....	\$580 51	
Total non-operating revenue .....	\$580 51	
Gross corporate income .....		
Gross corporate loss .....	\$2,828 53	\$681 45
<i>Deductions from Gross Corporate Income.</i>		
Interest accrued on funded debt .....		
Other interest .....		
Sinking funds chargeable to income .....		
Other deductions .....	\$10,018 88	
Total deductions from gross corporate income .....	\$10,018 88	
Net corporate income for year .....		
Net corporate loss for year .....	\$12,847 41	\$681 45
Surplus on December 31, 1912 .....		
Deficit on December 31, 1912 .....	25,107 08	
Dividends .....		
Deductions from surplus .....		
Additions to surplus .....		681 45
Surplus on December 31, 1913 .....		
Deficit on December 31, 1913 .....	37,954 49	

—Continued.

COMPANIES OPERATING IN CALIFORNIA DURING YEAR ENDING  
31, 1913.

Redondo Home Telephone Company	Reedley Telephone Company	Rio Vista Telephone and Telegraph Company	Riverside Home Telephone and Telegraph Company	Roseville Home Telephone Company	San Diego Home Telephone Company
\$7,706 30 6,354 14	\$5,155 27 3,805 89	\$4,694 00 4,469 41	\$28,911 37 21,091 11	\$8,330 79 6,497 92	\$158,113 13 80,418 15
\$1,352 16	\$1,349 38	\$224 59	\$7,820 26	\$1,832 87	\$77,694 98
			\$400 00		
			2,483 14		
\$48 35	\$166 91				
\$48 35	\$166 91		\$2,883 14		
\$1,400 51	\$1,516 29	\$224 59	\$10,703 40	\$1,832 87	\$77,694 98
\$1,249 66			\$13,775 00 1,113 39		\$36,655 00 2,221 86
				\$26 20	
	\$653 99		1,722 29		
\$1,249 66	\$653 99		\$16,610 68	\$26 20	\$38,876 86
\$150 85	\$862 30	\$224 59	\$5,907 28	\$1,806 67	\$38,818 12
		640 77			133,976 03
		1,452 50	10,972 81		
			3,189 68		
		1,000 00			60,126 16
150 85	862 30	412 86		1,806 67	232,920 31
			20,069 77		

TABLE No. 2

ABSTRACT OF INCOME ACCOUNT OF TELEPHONE AND TELEGRAPH  
DECEMBER

	San Fernando Valley Home Telephone Company
Operating revenues .....	\$17,615 72
Operating expenses .....	14,220 01
Net operating revenue.....	\$3,395 71
Net operating loss.....	
<i>Non-operating Revenue.</i>	
Rents from buildings, land, etc.....	
Dividends on stock owned.....	
Interest on bonds owned.....	
Miscellaneous non-operating revenue.....	
Total non-operating revenue.....	
Gross corporate income.....	\$3,395 71
Gross corporate loss.....	
<i>Deductions from Gross Corporate Income.</i>	
Interest accrued on funded debt.....	\$2,295 83
Other interest .....	
Sinking funds chargeable to income.....	
Other deductions .....	4,235 06
Total deductions from gross corporate income.....	\$6,530 89
Net corporate income for year.....	
Net corporate loss for year.....	\$3,135 18
Surplus on December 31, 1912.....	2,388 82
Deficit on December 31, 1912.....	
Dividends .....	
Deductions from surplus.....	
Additions to surplus.....	
Surplus on December 31 1913.....	
Deficit on December 31, 1913.....	746 36



—Continued.

COMPANIES OPERATING IN CALIFORNIA DURING YEAR ENDING  
31, 1913.

The Sanger Telephone Company	Santa Monica Bay Home Telephone Company	Santa Paula Home Telephone Company	Sierra Madre Telephone and Telegraph Company	Sierra Telegraph Company	The Siskiyou Telephone Company
\$2,638 18 2,022 51	\$42,260 62 24,425 99	\$11,514 63 5,432 30	\$7,819 67 4,854 09	\$133 60	\$5,776 61 4,414 15
\$615 67	\$17,834 63	\$6,082 33	\$2,965 58	\$133 60	\$1,362 46
	\$2,954 38				
	\$2,954 38				
\$615 67	\$20,789 01	\$6,082 33	\$2,965 58	\$133 60	\$1,362 46
	\$9,276 00 1,440 00	\$1,650 00 140 80	\$560 00		
\$115 00	6,132 74	1,975 08			
\$115 00	\$16,848 74	\$3,765 88	\$560 00		
\$500 67	\$3,940 27	\$2,316 45	\$2,405 58	\$133 60	\$1,362 46
	6,597 51	641 21	6,521 00		6,604 17
			1,038 00	133 60	419 25
500 67	10,537 78	2,957 66	7,888 58		7,547 38

TABLE No. 2

ABSTRACT OF INCOME ACCOUNT OF TELEPHONE AND TELEGRAPH  
DECEMBER

	Smeltzer Home Telephone and Telegraph Company
Operating revenues .....	\$7,657 22
Operating expenses .....	3,722 23
Net operating revenue.....	\$3,934 99
Net operating loss.....	
<i>Non-operating Revenue.</i>	
Rents from buildings, land, etc.....	
Dividends on stock owned.....	
Interest on bonds owned.....	
Miscellaneous non-operating revenue.....	\$5 80
Total non-operating revenue.....	\$5 80
Gross corporate income.....	\$3,940 79
Gross corporate loss.....	
<i>Deductions from Gross Corporate Income.</i>	
Interest accrued on funded debt.....	
Other interest .....	\$236 25
Sinking funds chargeable to income.....	
Other deductions .....	941 61
Total deductions from gross corporate income.....	\$1,177 86
Net corporate income for year.....	\$2,762 93
Net corporate loss for year.....	
Surplus on December 31, 1912.....	17,010 48
Deficit on December 31, 1912.....	
Dividends .....	
Deductions from surplus.....	
Additions to surplus.....	
Surplus on December 31, 1913.....	19,773 41
Deficit on December 31, 1913.....	

—Continued.

COMPANIES OPERATING IN CALIFORNIA DURING YEAR ENDING  
31, 1913.

Southwestern Home Telephone Company	Tehama County Telephone Company	The Tulare Home Telephone and Telegraph Company	The Turlock Home Telephone and Telegraph Company	Tuolumne Telephone Exchange	Union Home Telephone and Telegraph Corporation
\$75,354 85	\$7,714 05	\$15,297 23	\$10,290 44	\$1,800 00	\$160,423 29
36,767 15	8,113 01	8,843 66	8,993 93	700 00	95,202 41
\$38,587 70		\$6,453 57	\$1,296 51	\$1,100 00	\$65,220 88
	\$398 96				
					\$6,026 90
\$175 00					375 00
329 53		\$153 25			
\$504 53		\$153 25			\$6,401 90
\$39,092 23		\$6,606 82	\$1,296 51	\$1,100 00	\$71,622 78
	\$398 96				
\$15,900 00					\$69,100 00
8,074 87					8,872 63
4,244 72		\$3,600 92		\$380 00	700 90
\$28,219 59		\$3,600 92		\$380 00	\$78,673 53
\$10,872 64		\$3,005 90	\$1,296 51	\$720 00	
	\$398 96				\$7,050 75
29,175 80		351 63	390 00		148,743 56
2,798 05		2,493 00			
37,250 39			1,686 51	720 00	14,144 33
		8 00			
		872 53			
	398 96				169,938 64

TABLE No. 2

ABSTRACT OF INCOME ACCOUNT OF TELEPHONE AND TELEGRAPH  
DECEMBER

	United States Long Distance Telephone and Telegraph Company
Operating revenues -----	\$281,889 11
Operating expenses -----	223,788 53
Net operating revenue -----	\$57,600 58
Net operating loss -----	
<i>Non-operating Revenue.</i>	
Rents from buildings, land, etc. -----	
Dividends on stock owned -----	
Interest on bonds owned -----	\$300 00
Miscellaneous non-operating revenue -----	
Total non-operating revenue -----	\$300 00
Gross corporate income -----	\$57,900 58
Gross corporate loss -----	
<i>Deductions from Gross Corporate Income.</i>	
Interest accrued on funded debt -----	\$30,050 00
Other interest -----	4,563 48
Sinking funds chargeable to income -----	12,340 00
Other deductions -----	7,464 20
Total deductions from gross corporate income -----	\$54,417 68
Net corporate income for year -----	\$3,482 90
Net corporate loss for year -----	
Surplus on December 31, 1912 -----	35,943 35
Deficit on December 31, 1912 -----	
Dividends -----	
Deductions from surplus -----	74 20
Additions to surplus -----	3,817 75
Surplus on December 31, 1913 -----	43,169 80
Deficit on December 31, 1913 -----	

<sup>1</sup>Consolidated Securities Company loss of \$69.62 and Needles Gas and Electric Company income of \$450.78 omitted, as same appears on water and electric reports.

—Continued.

COMPANIES OPERATING IN CALIFORNIA DURING YEAR ENDING  
IN 1906.

Upper Div. Company	Central Company	Western Company	North Coast and Southern Company	Waller Telephone and Telegraph Company	Total
\$402 00	\$2,017 79	\$45,789,512 58	\$26,730 26	\$1,228 46	\$47,462,786 67
143 00	1,196 74	17,277,880 71	14,314 95	1,801 48	\$2,459,371 92
\$245 00	\$814 59	\$8,511,131 37	\$21,310 71	\$627 98	\$15,009,415 65
		\$145,353 14	\$300 00		\$145,653 14
		1,692,506 46			1,692,506 46
		2,879 15			2,879 15
\$2 00		598,061 73			598,061 73
					766,767 04
\$4 00		\$4,345,300 48	\$300 00		\$5,336,016 75
\$245 00	\$814 59	\$12,357,432 55	\$25,110 31	\$627 98	\$20,339,051 44
		\$1,007,330 22	\$2,320 00		\$2,354,561 14
		\$10 46	198 90		142,978 15
			195 78		100,352 02
	\$204 00	3,384,475 10	1,448 78	\$40 00	10,774,001 36
	\$204 00	\$9,422,515 13	\$1,352 46	\$40 00	\$14,372,492 77
\$245 00	\$814 59	\$8,234,317 37	\$13,351 35	\$627 98	\$5,466,538 47
\$69 00		\$465,220 33	\$2,479 11	2,127 98	10,229,089 64
\$18 00		2,092,245 75	3,300 00	270 00	4,957,582 09
	\$10 46		\$398 97		211,527 62
70 00					73,428 37
\$97 51		\$4,705,791 85	\$7,173 59	1,425 76	10,600,310 67





# WAREHOUSEMEN AND WHARFINGERS

TABLE NO. 1.

TABLE

ABSTRACT OF BALANCE SHEETS OF WAREHOUSEMEN AND WHARFINGERS

	California Wharf and Warehouse Company	Corcoran Mill and Warehouse
<i>Assets.</i>		
Organization, franchises, patent rights-----		
Cost of plant, buildings, lands-----	\$251,900 00	\$5,000 00
Equipment -----		2,000 00
Miscellaneous -----		
Totals -----	\$251,900 00	\$7,000 00
Treasury securities -----		
Other investments -----		
Cash -----	77 30	937 27
Notes and bills receivable-----	99,360 56	8,686 41
Material and supplies-----		24,200 00
Miscellaneous -----	500 00	
Deferred debit items-----		
Deficit -----		
Totals -----	\$351,837 86	\$40,823 68
<i>Liabilities.</i>		
Capital stock -----	\$250,000 00	
Capital invested -----		\$20,100 67
Funded debt -----		
Loans and notes payable-----		20,285 78
Accounts payable -----		
Miscellaneous -----		
Accrued liabilities not due-----		437 23
Deferred credit items-----	90,000 00	
Surplus -----	11,837 86	
Totals -----	\$351,837 86	\$40,823 68

## No. 1.

## OPERATING IN CALIFORNIA FOR THE YEAR ENDING DECEMBER 31, 1913.

Crescent Wharf and Warehouse Company	Danville Warehouse and Lumber Company	DePue Warehouse Company	Etcheverry Warehouse Company	Farmers' Alliance Business Association	Farmers' Storage Company of Colusa
\$281,015 19 6,071 27 1,589 10	\$11,654 61 668 54	\$59,164 41 3,808 75	\$43,523 00 1,769 00	\$12,086 40 285 00	\$15,871 12
\$288,675 56 125,000 00	\$12,823 15	\$62,973 16	\$45,292 00	\$12,371 40 121 55 300 00	\$15,871 12
3,432 62 22,936 36 4,463 78 16,770 04	2,244 73 10,626 48 1,536 13	3,541 06 50,463 42	345 27 22,431 98 13,064 95	50 00 5,135 33 2,445 00	1,863 65 231 95
\$461,278 36	\$26,730 49	\$116,977 64	\$81,134 20	\$20,423 28	\$17,966 72
\$300,000 00	\$10,000 00	\$63,000 00	\$40,000 00	\$12,640 00	\$12,000 00
57,894 49 9,721 06 2,851 31	7,216 12 1,513 53	25,000 00 19,668 02 1,025 37 2,589 86	31,000 00 1,800 98	1,000 00 3,410 85 2,947 46	2,000 00
90,811 50	8,000 79	5,694 39	8,333 22	424 97	3,966 72
\$461,278 36	\$26,730 49	\$116,977 64	\$81,134 20	\$20,423 28	\$17,966 72

TABLE No. 1

ABSTRACT OF BALANCE SHEETS OF WAREHOUSEMEN AND WHARFINGERS

	Farmers' Warehouse Company of Grimes	Farmers' Warehouse Company of Los Angeles
<i>Assets.</i>		
Organization, franchises, patent rights.....		
Cost of plant, buildings, lands.....	\$10,700 00	\$134,491 13
Equipment .....		
Miscellaneous .....		550 12
Totals .....	\$10,700 00	\$135,041 25
Treasury securities .....		13,025 00
Other investments .....		
Cash .....		13,482 29
Notes and bills receivable.....		70,259 73
Material and supplies.....		73,292 92
Miscellaneous .....		
Deferred debit items.....		
Deficit .....		
Totals .....	\$10,700 00	\$305,101 19
<i>Liabilities.</i>		
Capital stock .....	\$10,700 00	\$150,000 00
Capital invested .....		
Funded debt .....		
Loans and notes payable.....		121,337 20
Accounts payable .....		9,135 65
Miscellaneous .....		
Accrued liabilities not due.....		
Deferred credit items.....		
Surplus .....		24,628 34
Totals .....	\$10,700 00	\$305,101 19



—Continued.

OPERATING IN CALIFORNIA FOR THE YEAR ENDING DECEMBER 31, 1913.

Faulkner, Looney, Zimmerman Warehouse Company	Finnell Warehouse Company	Fresno Warehouse Company	Globe Grain and Milling Company	Grand Island Warehouse	Grangers' Business Association
	\$15 00				
\$4,800 00		\$67,740 76	\$974,555 65	\$11,000 00	\$160,395 62
\$4,800 00	\$15 00	\$67,740 76	\$974,555 65	\$11,000 00	\$160,395 62
			1,048,255 00		
	235 52	233 34	119,313 42		689 36
	206 88	35,685 10	1,535,018 23		13,404 50
			463,920 96		
	185 71		27,837 36		3,346 38
	2,144 50				4,301 12
\$4,800 00	\$2,787 61	\$103,659 20	\$4,168,900 62	\$11,000 00	\$182,136 98
\$4,800 00	\$15 00	\$75,000 00	\$1,688,300 00		\$168,055 84
				\$11,000 00	
	1,750 00		1,304,500 00		12,000 00
	1,000 00		48,236 43		2,081 14
	22 61		2,909 15		
		2,125 91	81,622 82		
		26,533 29	1,043,332 22		
\$4,800 00	\$2,787 61	\$103,659 20	\$4,168,900 62	\$11,000 00	\$182,136 98

TABLE No. 1

ABSTRACT OF BALANCE SHEETS OF WAREHOUSEMEN AND WHARFINGERS

	The Grangers' Warehouse Company	Herdlyn Warehouse Company
<i>Assets.</i>		
Organization, franchises, patent rights.....		
Cost of plant, buildings, lands.....	\$22,500 00	\$4,400 00
Equipment .....	1,147 26	
Miscellaneous .....		
Totals .....	\$23,647 26	\$4,400 00
Treasury securities .....		
Other investments .....		
Cash .....	4,663 35	
Notes and bills payable.....	301 91	
Material and supplies.....		
Miscellaneous .....	2,486 64	
Deferred debit items.....		
Deficit .....		
Totals .....	\$31,099 16	\$4,400 00
<i>Liabilities.</i>		
Capital stock .....	\$30,550 00	\$4,400 00
Capital invested .....		
Funded debt .....		
Loans and notes payable.....		
Accounts payable .....	13 00	
Miscellaneous .....		
Accrued liabilities not due.....		
Deferred credit items.....	168 33	
Surplus .....	367 83	
Totals .....	\$31,099 16	\$4,400 00

—Continued.

OPERATING IN CALIFORNIA FOR THE YEAR ENDING DECEMBER 31, 1913.

Hollister Warehouse Company	Huntington Beach Warehouse Company	The Lathrop Hay Company	Lompoc Warehouse Company	Long Beach Milling Company	Los Angeles Warehouse Company
\$43,110 57	\$18,000 00	\$49,356 47	\$21,839 50	\$24,091 89	\$326,849 20
1,679 62			5,485 92	9,824 44	4,440 51
					4,950 00
\$44,790 19	\$18,000 00	\$49,356 47	\$27,325 42	\$33,916 33	\$336,239 71
		50,000 00			
69 23	1,058 64	383 27	1,037 47	492 25	7,816 09
21,525 36	3,521 96	27,262 54	29,739 60	20,589 90	46,772 14
14,843 03	2,060 18	6,194 00	10,138 00	26,151 47	4,460 00
				260 00	
		5,883 77			
\$81,227 81	\$24,640 78	\$139,080 05	\$68,240 49	\$81,409 95	\$395,287 94
\$25,000 00	\$18,000 00	\$100,000 00	\$38,700 00	\$25,000 00	\$135,000 00
50,000 00		15,250 00	22,000 00	24,000 00	150,000 00
5,526 97	5,977 58	252 97	425 31	23,659 93	17,000 00
					398 19
		23,577 08			68,243 85
700 84	663 20		7,115 18	8,750 02	24,645 90
\$81,227 81	\$24,640 78	\$139,080 05	\$68,240 49	\$81,409 95	\$395,287 94

TABLE No. 1

## ABSTRACT OF BALANCE SHEETS OF WAREHOUSEMEN AND WHARFINGERS

	Mission Warehouse Company	Oriental Warehouse Company
<i>Assets.</i>		
Organization, franchises, patent rights.....		
Cost of plant, buildings, lands.....	\$5,246 41	
Equipment .....		
Miscellaneous .....		
Totals .....	\$5,246 41	
Treasury securities .....		
Other investments .....		
Cash .....	394 71	\$21,348 26
Notes and bills receivable.....	1,162 37	3,692 00
Material and supplies.....		
Miscellaneous .....	104 86	35,887 59
Deferred debit items.....		<sup>1</sup> 475,000 00
Deficit .....	179 51	
Totals .....	\$7,087 86	\$535,927 85
<i>Liabilities.</i>		
Capital stock .....	\$4,300 00	\$500,000 00
Capital invested .....		
Funded debt .....		
Loans and notes payable.....	2,783 46	
Accounts payable .....	4 40	1,342 71
Miscellaneous .....		
Accrued liabilities not due.....		
Deferred credit items.....		
Surplus .....		34,585 14
Totals .....	\$7,087 86	\$535,927 85

<sup>1</sup>Subscriptions to capital stock.

—Continued.

OPERATING IN CALIFORNIA FOR THE YEAR ENDING DECEMBER 31, 1913.

Pacific Coast Steamship Company	Petaluma Bonded Warehouse Company	Port Costa Warehouse and Dock Company	San Bernardino Milling Company	Sawtelle Warehouse Company	Shattuck and Nimmo Warehouse Company
\$405,300 35 467,609 50 9,038 70	\$28,436 43	\$549,052 47	\$13,090 42 405 00	\$18,000 00	\$171,165 41 171,817 96
\$881,948 55	\$28,436 43	\$549,052 47	\$13,495 42	\$18,000 00	\$342,983 37
732,163 27 122,604 49 41,792 71 135,813 58	112 87 5,521 80	4,221 03 9,513 63 677 66	2,103 61 19,097 81 25,787 99 6,204 96	883 20 3,027 72 2,124 14	20,159 42 221,478 44 7,327 67
				323 41	
\$1,914,322 60	\$34,071 10	\$563,464 79	\$66,689 79	\$24,358 47	\$591,948 90
\$1,500,000 00	\$30,000 00	\$500,000 00	\$21,800 17	\$18,000 00	\$30,000 00
147,681 73 34,089 21		8,000 00 2,643 79	11,500 00 19,109 40 599 14	6,358 47	170,000 00 31,980 69
232,551 66	4,071 10	52,821 00	13,681 08		193 45 359,774 76
\$1,914,322 60	\$34,071 10	\$563,464 79	\$66,689 79	\$24,358 47	\$591,948 90



TABLE NO. 1

ABSTRACT OF BALANCE SHEETS OF WAREHOUSEMEN AND WHARFINGERS

	Southern Pacific Milling Company	Union Warehouse Company
<i>Assets.</i>		
Organization, franchises, patent rights-----	\$6,290 00	-----
Cost of plant, buildings, lands-----	682,008 12	\$89,443 95
Equipment-----		5,185 55
Miscellaneous-----		-----
Totals-----	\$688,298 12	\$94,629 50
Treasury securities-----		-----
Other investments-----	163,484 05	-----
Cash-----	18,351 46	50 00
Notes and bills receivable-----	214,060 48	9,195 82
Material and supplies-----		-----
Miscellaneous-----	30,267 27	800 08
Deferred debit items-----	5,252 37	-----
Deficit-----		-----
Totals-----	\$1,119,713 75	\$104,675 40
<i>Liabilities.</i>		
Capital stock-----	\$446,250 00	\$77,500 00
Capital invested-----		-----
Funded debt-----		-----
Loans and notes payable-----	300,341 00	-----
Accounts payable-----	85,264 36	435 38
Miscellaneous-----		4,771 37
Accrued liabilities not due-----		-----
Deferred credit items-----	38,906 00	1,044 33
Surplus-----	248,952 39	20,924 32
Totals-----	\$1,119,713 75	\$104,675 40

—Concluded.

OPERATING IN CALIFORNIA FOR THE YEAR ENDING DECEMBER 31, 1913.

Valley Grain and Warehouse Company	Willows Warehouse Association	Total
		\$6,305 00
\$36,350 90	\$50,000 00	4,430,974 57
		681,545 77
		187,945 88
\$36,350 90	\$50,000 00	\$5,306,771 22
		188,146 55
		1,212,039 05
27,204 18	3,807 66	992,765 80
	874 00	2,628,635 15
		723,802 93
		266,895 88
		480,252 37
4,115 54		16,947 85
\$67,670 62	\$54,681 66	\$11,816,256 80
\$50,000 00	\$50,000 00	\$6,389,011 01
		31,100 67
		150,000 00
		2,204,858 05
		427,642 59
	1,200 00	50,415 62
		3,200 54
17,670 62		555,910 60
	3,481 66	2,004,097 72
\$67,670 62	\$54,681 66	\$11,816,256 80



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# Sixth Biennial Report

OF THE

# State Board of Charities and Corrections

OF THE

## State of California

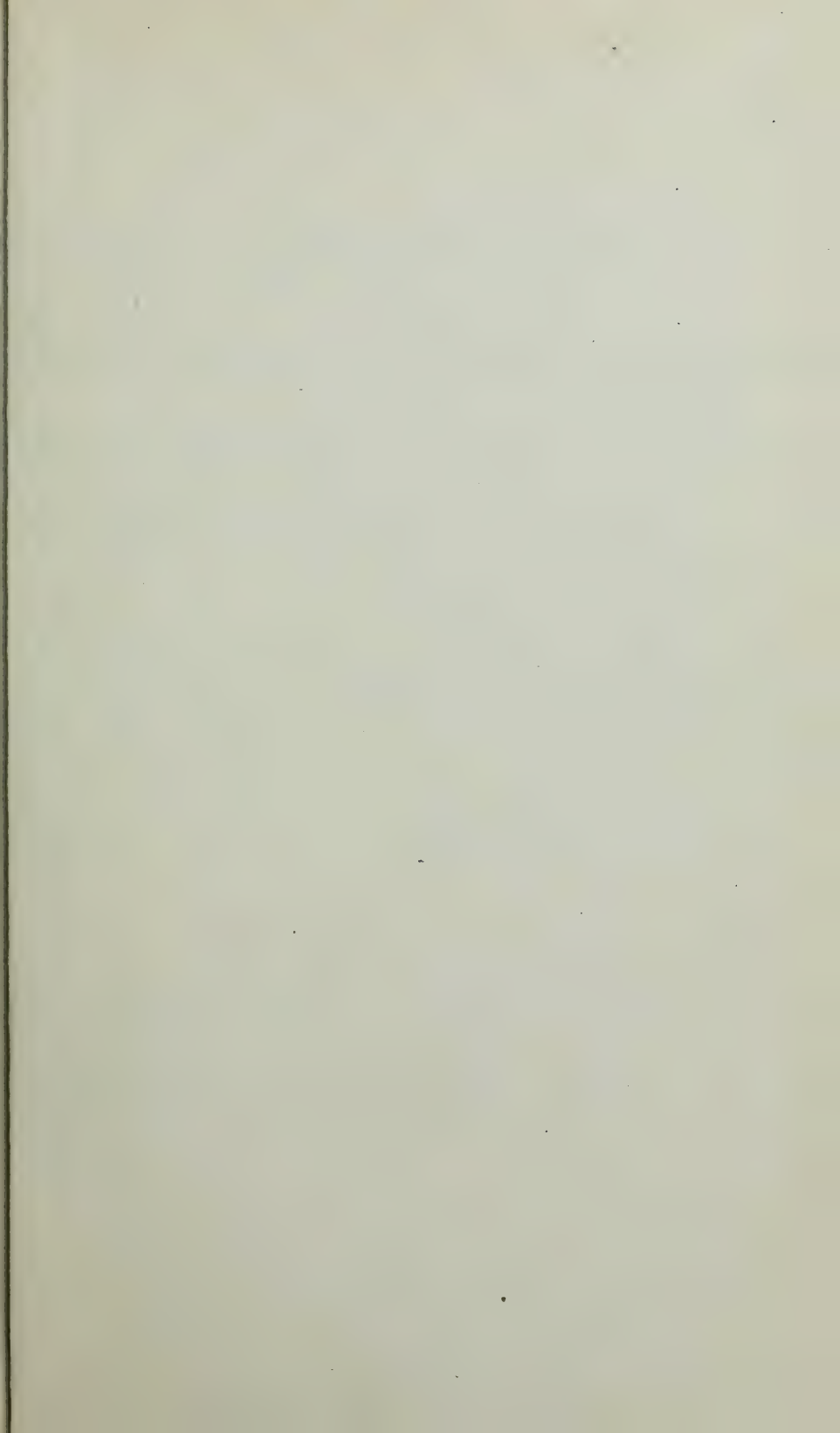
From July 1, 1912, to June 30, 1914



CALIFORNIA  
STATE PRINTING OFFICE  
1915

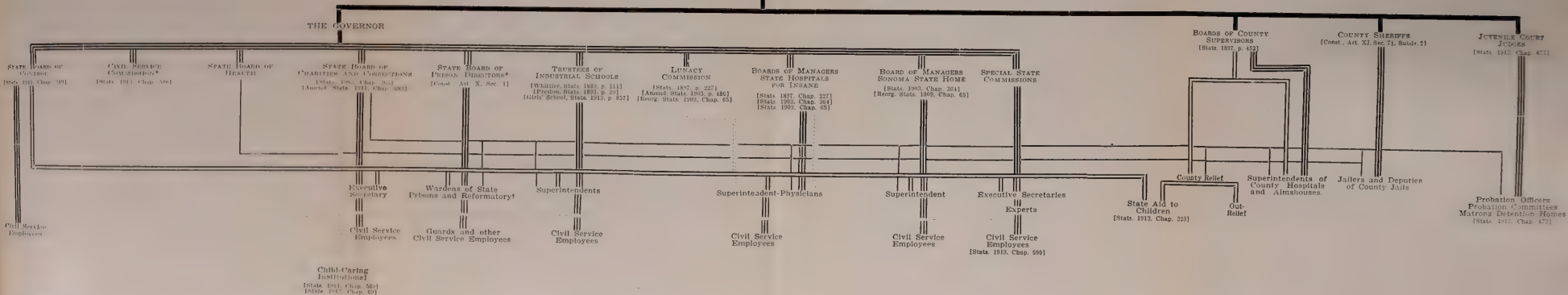






# ORGANIZATION OF CHARITABLE AND CORRECTIONAL WORK IN CALIFORNIA

## THE PEOPLE OF THE STATE OF CALIFORNIA



Key to Chart—showing powers of:

Election and Recall	_____
Examination and Nomination	_____
Appointment and Supervision	=====
Financial Control	=====
Inspection and Control	.....
Inspection	_____

\* Updated with the advice and consent of the Senate.

† School work at reformatories supervised by State Board of Education. [Stats. 1913, Chap. 362]

‡ State Reformatory not yet built.

# ROSTER OF STATE BOARD OF CHARITIES AND CORRECTIONS.

## EX OFFICIO.

	From—	To—
GOVERNOR GEORGE C. PARDEE-----	1903	1907
GOVERNOR JAMES N. GILLETT-----	1907	1911
GOVERNOR HIRAM W. JOHNSON-----	1911	—

## MEMBERS.

O. K. CUSHING, SAN FRANCISCO-----	June 30, 1903	Feb. 17, 1908
ANDREW M. DAVIS, SAN FRANCISCO-----	June 30, 1903	Feb. 17, 1908
W. C. PATTERSON, LOS ANGELES-----	June 30, 1903	Feb. 17, 1908
E. C. MOORE, LOS ANGELES-----	June 30, 1903	Aug. 1, 1910
J. K. MCLEAN, BERKELEY-----	June 30, 1903	Sept. 11, 1911
CHARLES A. RAMM, SAN FRANCISCO-----	June 30, 1903	—
R. S. TAYLOR, YREKA-----	Feb. 17, 1908	Feb. 1910
LOUIS ROSENTHAL, SAN FRANCISCO-----	Feb. 17, 1908	May 20, 1912
W. S. TINNING, MARTINEZ-----	Feb. 17, 1908	—
CLARA SHORTRIDGE FOLTZ, LOS ANGELES-----	Feb. 1910	Apr. 4, 1912
MARTIN A. MEYER, SAN FRANCISCO-----	Sept. 11, 1911	—
CARRIE PARSONS BRYANT, LOS ANGELES-----	Nov. 25, 1911	—
JOHN R. HAYNES, M.D., LOS ANGELES-----	Apr. 4, 1912	—
JESSICA B. PEIXOTTO, BERKELEY-----	May 20, 1912	—

## SECRETARY.

W. ALMONT GATES, BERKELEY-----	Sept. 19, 1903	Dec. 29, 1913
STUART A. QUEEN, SAN BERNARDINO-----	Dec. 30, 1913	—

## STATE BOARD OF CHARITIES AND CORRECTIONS.

June 30, 1914.

GOVERNOR HIRAM W. JOHNSON, <i>ex officio</i> .....	SACRAMENTO
MARTIN A. MEYER.....	SAN FRANCISCO
CARRIE PARSONS BRYANT.....	LOS ANGELES
JOHN R. HAYNES, M.D.....	LOS ANGELES
JESSICA B. PEIXOTTO.....	BERKELEY
CHARLES A. RAMM.....	SAN FRANCISCO
W. S. TINNING.....	MARTINEZ

### ORGANIZATION OF BOARD.

MARTIN A. MEYER, SAN FRANCISCO.....	<i>President</i>
CARRIE PARSONS BRYANT, LOS ANGELES.....	<i>Vice-President</i>
STUART A. QUEEN, BERKELEY.....	<i>Secretary</i>
ANITA ELDRIDGE, SAN FRANCISCO.....	<i>Chief Clerk</i>
ESTHER DE TURBEVILLE, SAN ANSELMO.....	<i>Clerk</i>

OFFICES OF BOARD  
1007 PHELAN BUILDING,  
SAN FRANCISCO.

### Standing Committees for the Current Year.

1. PENAL AND REFORMATORY INSTITUTIONS—Dr. Haynes, Mrs. Bryant, Messrs. Tinning and Meyer.
2. INSANE AND DEFECTIVES—Mrs. Bryant, Dr. Haynes, Messrs. Tinning, Meyer and Ramm.
3. CHILDREN'S INSTITUTIONS—Dr. Peixotto, Mrs. Bryant, Messrs. Ramm and Haynes.
4. COUNTY INSTITUTIONS—Rev. C. A. Ramm, Dr. Peixotto, Mrs. Bryant, Dr. Haynes and Dr. Meyer.
5. STATISTICS AND PUBLICATIONS—Dr. Meyer, Dr. Peixotto and Mrs. Bryant.
6. AUDITING—Messrs. Ramm and Meyer.



## LETTER OF TRANSMITTAL.

---

November 4, 1914.

*To his Excellency, HIRAM W. JOHNSON, Governor,  
State Capitol, Sacramento, California.*

DEAR SIR: We have the honor to transmit herewith our sixth biennial report, covering the two years ending June 30, 1914, showing in detail:

*First*—The condition of the institutions under our supervision, with such suggestions as we deem necessary for legislative and executive action;

*Second*—Such further suggestions as we deem necessary and pertinent for the best interests of the state in the general field of charities and corrections; and

*Third*—The transactions of the Board for the biennial period commencing July 1, 1912, and ending July 30, 1914.

Respectfully submitted.

MARTIN A. MEYER, President.  
CARRIE P. BRYANT, Vice-President,  
JOHN R. HAYNES,  
JESSICA B. PEIXOTTO,  
CHAS. A. RAMM,  
W. S. TINNING,

*State Board of Charities and Corrections.*

STUART A. QUEEN, Secretary.



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**An act to create a State Board of Charities and Corrections, prescribing its duties and powers, and appropriating money therefor, approved March 25, 1903, as amended by act approved May 1, 1911.**

*The people of the State of California, represented in senate and assembly,  
do enact as follows:*

SECTION 1. A state board of charities and corrections is hereby created of six members, to be appointed by the governor, with the advice and consent of the senate, not more than three of whom shall be of the same political party. Such members shall hold office for a period of four years and until their successors are appointed and qualified: *provided*, that the terms of the three members who were appointed February 17, 1908, shall expire February 17, 1912, and the other three terms shall expire February 17, 1914, and thereafter the terms of three members of said board shall expire on February 17 of each even numbered year. Women may be appointed members of said board or hold any position in the appointment of said board. No person shall be appointed a member, or continue to act as such, while he is a trustee, manager, director, or other administrative officer of an institution, subject to the provisions of this act. Appointments to fill vacancies before the expiration of such terms shall be for the residue of terms in the same manner as original appointments. The governor shall be *ex officio* a member of said board.

SEC. 2. The members of said board shall act without compensation, but shall be allowed their actual necessary expenses. The said board may appoint a secretary and such other employees as it may deem necessary to carry out the provisions of this act, and shall determine their salaries. All the expenses of said board, including salaries, shall not exceed the sum of ten thousand dollars in any one year: *provided*, that any unexpended part of an appropriation for any year may be carried over and made available for the succeeding year, and the said sum of ten thousand dollars is hereby appropriated annually out of any moneys in the state treasury not otherwise appropriated, for the use of said board under this act. The secretary of said board shall execute a bond in the sum of five thousand (\$5,000) dollars, and take the oath of office prescribed by the Political Code for the executive officers of this state. The board shall provide itself with an office in the city and county of San Francisco. Meetings of the board may be held at such times and in such places in the State of California as said board may deem fit. It may make such rules and orders for the regulation of its own proceedings as it may deem necessary, and may fix the number of members necessary to constitute a quorum. The failure of a member to attend three consecutive meetings of said board during any calendar year, unless excused by formal vote of the board, may be construed by the governor as a resignation of said non-attending member.

SEC. 3. The board is hereby empowered and authorized, and it shall be its duty as a whole, or by committee, or by its secretary, or other agent whom it may authorize, to investigate, examine, and make reports upon the charitable, correctional, and penal institutions of the state, including the state hospitals for the insane, of the counties, cities and counties, cities, and towns of the state, and such public officers as are in any way responsible for the administration of public funds used for the relief or maintenance of the poor. All the persons or officers in charge of or connected with such public institutions, or with the administration of said funds, are hereby required to furnish to the board or its committee or secretary such information and statistics as they may request or require, and allow said board, committee, or secretary free access to all departments of such institutions and to all of their records. In order to secure accuracy, uniformity, and completeness in such statistics and information, the board may prescribe such forms of report and records by the state commission in lunacy regarding the state hospitals for the insane and by such other officers, boards, or institutions as it may deem necessary, and also such forms of registration at all public institutions referred to in this section as it may require. The state commission in lunacy, on behalf of the institutions under its charge, and the officers of all other institutions, and all officers in



any way responsible for public funds used for the relief of the poor or the maintenance of any inmates of said public institutions, are hereby required to follow such forms, records, and registration so prescribed; *provided*, that the intent of this law is that, so far as possible, the board shall make use of the forms of report, record, and registration now obtaining in the state commission of lunacy and other state boards and institutions. All plans of new buildings, or parts of buildings for any of the public institutions coming under the provisions of this section, or any additions or alterations in such buildings, shall, before their adoption by the proper officials, be submitted to the board for suggestions and criticism.

SEC. 4. The board shall have power to issue compulsory process to compel the attendance of any witness before said board or any member thereof, and to require the production of such books or papers relating to any public institution mentioned in section three of this act as they may deem necessary; *provided*, that no witness shall be required to attend before said board out of the county in which he resides. Any member of said board shall have power, and he is hereby authorized to administer an oath to any and all witnesses coming before said board, or any member thereof, for examination, and to examine such witness or witnesses in reference to any matter relating to public institutions mentioned in section three of this act appertaining to the inquiry before the board, or said member. Disobedience of a subpoena issued by said board, or refusal to be sworn, or to answer, shall subject such person disobeying or refusing to a forfeiture of one hundred dollars, to be recovered in a civil action brought in a court of competent jurisdiction by said board in its name as plaintiff, the money recovered to be appropriated to the use of said board.

SEC. 5. The board is hereby empowered and authorized, and it shall be its duty as a whole, or by committee, or by its secretary, to investigate, examine, and make reports upon all institutions or persons receiving any state aid for the care of orphan, half-orphan, abandoned or dependent children, and may prescribe forms of record thereof to be kept, and require reports thereof.

SEC. 6. Any public officer, superintendent, manager or person in charge of any said public institution, or with the administration of said funds, who refuses or neglects to furnish said board, its committee or secretary, the information and statistics which they may request or require shall be subject to a forfeiture of fifty dollars, to be recovered as provided in section 4 of this act for disobedience of a subpoena.

SEC. 7. No provision in this act contained shall in any way be construed as preventing the governor of this state from making a plenary investigation in reference to the conduct of any public institutions under the terms of any act of the legislature of this state. Furthermore, the governor may at any time order an investigation by the board, or by a committee of its members, of the management of the above-named institutions, or any thereof.

SEC. 8. Two months prior to each regular session of the legislature, the board shall make a full and complete report to the governor of all its transactions during the preceding two years, showing fully and in detail all expenses incurred and moneys paid out by it, and giving a list of all officers and agents employed, and the actual condition of all institutions under its supervision, with such suggestions as it may deem necessary and pertinent, and with recommendations for legislative and executive action.

SEC. 9. The provisions of this act shall not apply to the Veterans' Home of California, located at Yountville, Napa County, nor to the Woman's Relief Corps Home at Evergreen, Santa Clara County.

SEC. 10. All acts and parts of acts in conflict with the provisions of this act are hereby repealed.

## BY-LAWS.

### OFFICERS.

The Board shall elect a president, whose duty it shall be to preside at all meetings and perform such other duties as usually pertain to the office of president, and who shall hold office for one year from and after the fourth Thursday in April of each year.

The Board shall elect a vice-president, who shall hold office for the same time, and who shall perform the duties of the president in case of the absence of the latter or his inability to act.

The Board shall elect a secretary, who shall hold office during the pleasure of the Board, and who shall receive such salary as the Board may determine, and whose duty it shall be to keep a record of the proceedings of the Board, to have charge of its office as executive officer, and to perform such other duties as are contemplated by the law creating the Board, and as the Board may from time to time direct.

### MEETINGS.

The Board shall hold regular bi-monthly meetings on the fourth Thursday of February, April, June, August, October and December of each year, at ten o'clock a. m. at its offices in San Francisco.

Special meetings may be held at the call of the president or of three members at such times and places as may be fixed. Notices of special meetings shall be mailed to the address of each member at least five days before the date of meeting.

The Board may meet at any time and place without notice, if six of the members are present or give their written consent thereto.

The nature of the business to be transacted shall be stated in the notice of special meetings, and no other business shall be transacted at such meeting without the consent of five members of the Board.

The president, vice-president, and secretary shall be elected or appointed only at a regular meeting or an adjourned regular meeting.

### EXPENDITURES.

The secretary shall keep an itemized account of the expenditures of the Board, and of each member or officer thereof.

An auditing committee of two shall be appointed, whose duty it shall be to audit all expenditures of the Board, or any of its members or officers.

### QUORUM.

Four members shall constitute a quorum, and a less number can not transact any business except to adjourn from day to day.

### AMENDMENTS.

These by-laws may be amended by the vote of four members at any regular meeting without notice, or at a special meeting, provided notice in writing of the proposed amendment is mailed to each member five days before the date of meeting. The by-laws may be amended or suspended at any time by the unanimous vote of six members.

SUMMARY OF PERSONS AND EXPENDITURES UNDER THE SUPERVISION OF  
THE STATE BOARD OF CHARITIES AND CORRECTIONS.

Institutions	In institutions June 30, 1914 (includes paroles)		Total cared for dur- ing year ending June 30, 1914		Total employees, 1911		Cost of maintenance year ending June 30, 1914
	No.	Per cent	No.	Per cent	No.	Per cent	
State prisons	2	4.244	5,314		221		\$598,274.93
State reform schools	3	1.245	2,023		176		263,204.63
State hospitals	5	9.474	13,882		1,083		1,523,107.64
State Home for Feeble-Minded	1	1.058	1,177		161		*210,000.00
State Home for Adult Blind	1	1.14	139		31		30,773.22
Total, state institutions	12	16.135	22,485	20.6	1,572	40.9	\$2,525,366.42
							36.8
County jails	58	1.833	32,063		*100		\$508,651.69
County hospitals	62	6.862	38,250		1,117		1,811,085.00
County detention homes	20	*150	*700		*25		*150,000.00
County out-relief							533,627.56
Total, county institutions	140	8.045	71,013	65.3	1,242	32.3	\$2,883,365.25
							41.9
Orphanages	39	4.524	7,977		*300		*\$1,250,000.00
Non-state-aid children's institutions	15	*1,000	*2,000		*75		
Family homes for children	*300	*1,000	*2,000		*500		
Maternity hospitals	*200	*200	*1,000		*300		
Child-placing societies	9	*2,000	*2,300		*50		*\$200,000.00
Total, children's institutions	563	8.724	15,277	14.1	1,225	26.8	*\$1,450,000.00
							21.3
Incomplete totals	715	32,904	108,775	100	4,039	100	\$6,838,731.67
							100

\*Estimate.

N. B.—The amount expended by the state for supervision of the above institutions, as represented by the present appropriation made to this Board, is about one tenth of one per cent of the cost of administration.

## INSTITUTIONS UNDER THE SUPERVISION OF THE STATE BOARD OF CHARITIES AND CORRECTIONS

---

1. State Prison at San Quentin.
2. State Prison at Folsom.
3. Preston School of Industry.
4. Whittier State School.
5. California School for Girls.
6. Stockton State Hospital.
7. Napa State Hospital.
8. Agnews State Hospital.
9. Mendocino State Hospital.
10. Southern California State Hospital.
11. Sonoma State Home.
12. Industrial Home for Adult Blind.
13. County hospitals and almshouses (62 in number).
14. Public charities (out relief in 58 counties).
15. County jails (58 in number).
16. City and town jails (about 200 in number).
17. Child-placing agencies (8 licensed).
18. State-aid institutions or orphanages (39 licensed).
19. Non-state-aid institutions or children's homes (11 licensed, 4 cases pending).
20. Family homes for children (28 licensed, 74 cases pending).
21. Maternity hospitals, maternity departments and maternity homes (116 licensed, 57 cases pending).



# THE FOLLOWING STATUTES OF 1913 SPECIALLY RELATE TO THE CARE OF DEPENDENTS, DEFECTIVES AND DELINQUENTS IN CALIFORNIA.

Chapter.	Subject.
338.	Requiring all jails and county hospitals to keep uniform records prescribed by the State Board of Charities and Corrections.
329.	Prohibiting the letting of the care of indigents by contract to any person, also permitting the employment of misdemeanant prisoners on public works.
69.	Requiring license to conduct maternity hospitals and boarding homes for children.
92.	Guarding the adoption of abandoned and deserted children.
132.	Laying the support of an illegitimate child upon the father as well as the mother.
323.	Providing state aid for dependent children of citizens or aliens, three years resident in California.
325.	Regulating the Society for Prevention of Cruelty to Children.
556.	Repealing the act creating a trade school for orphans.
681.	Creating a commission to investigate mothers' pensions.
673.	Revising the juvenile court law.
137.	Amending the act relating to probation.
165.	Providing for indemnity for erroneous conviction of felony.
230.	Creating a board of parole commissioners for each county.
583.	Prohibiting cruel and unusual punishments in prisons or reformatories.
584.	Forbidding the exposure of paroled prisoners.
585.	Regulating the sale of jute (a prison product).
591.	Displacing the parole law of 1893.
593.	Setting forth the duties of wardens.
588.	Repealing the act to operate a rock-crushing plant at Folsom.
589.	Establishing parole headquarters in connection with state schools and reformatories, and permitting the advancing of money to any boy or girl on furlough, parole or discharge.
22.	Permitting transfer of boys between Whittier and Preston.
401.	Establishing the Girls' Training School (removing delinquent girls from Whittier).
363.	Permitting the asexualization of certain inmates of hospitals for the insane and of the Sonoma State Home, recidivists committed to state prisons for sexual crimes, and idiots.
253.	Providing for the parole of psychopathic patients.
455.	Establishing a new state hospital for the insane to be located near the sea in southern California.
153.	Making the School of Deaf and Blind a part of the educational system of the state.



## RECOMMENDATIONS FOR LEGISLATIVE AND EXECUTIVE ACTION.

---

### 1. Revision of the Act Creating a State Board of Charities and Corrections.

(1) *More adequate control of jails and hospitals.* It is recommended that the State Board of Charities and Corrections be given power to enforce its suggestions concerning plans for new jails and hospitals, and power to require certain repairs or to order a jail or hospital closed upon due notice.

The reasons for this recommendation are, briefly, these:

(a) Contracts for jails and hospitals are at present let without plans having been submitted to the State Board of Charities and Corrections, and thus in direct violation of this and other state laws.

(b) When local officials refuse to act some outside power should be authorized to compel the correction of unsanitary or otherwise unsatisfactory conditions obtaining in jails and hospitals.

(c) Such powers have been delegated and are now exercised without excess or hardship, in several other states, whereby the desired results are accomplished. (This recommendation is more fully discussed on page 142.)

(2) *Power to summon witnesses from any part of the state.* It is recommended that the following provision be stricken from the act to create a State Board of Charities and Corrections: "provided that no witness shall be required to attend before said board out of the county in which he resides," and the following provision substituted: "provided that if a witness be summoned by said Board out of the county in which he resides, his necessary expenses shall be paid from the appropriation for the State Board of Charities and Corrections in the same manner as other claims against this appropriation."

This provision would rarely be taken advantage of to summon witnesses from a distance, but would be a great advantage in cases where witnesses reside in neighboring counties, *e. g.*, San Francisco and Alameda, or Los Angeles and San Bernardino.

(3) *Transfer of criminal statistics.* It is recommended that the law requiring certain criminal statistics to be compiled by the Bureau of Labor Statistics be so amended as to require this work to be done by the State Board of Charities and Corrections, provided that the appropriation of this Board be correspondingly increased.

The reasons for this recommendation are briefly these:

(a) Criminal statistics have only an indirect bearing on labor conditions and hence lie outside the special field of the Bureau of Labor Statistics.

(b) These particular statistics deal directly with county jails and hence lie in the province of the State Board of Charities and Corrections.

It is recommended by the Bureau of Labor Statistics in its Fifteenth Biennial Report (page 17) that this change be made, on the ground that this work properly belongs in the office of the State Board of Charities and Corrections.

(4) *Increased appropriation for the State Board of Charities and Corrections.* It is recommended that the annual appropriation to the State Board of Charities and Corrections be increased from \$10,000 to \$30,000. The reasons for this recommendation are these:

(a) Recent legislation has laid upon this Board the regulation of home-finding societies, boarding homes for children, and maternity hospitals, but there has been no increase in the appropriation such as would make possible the proper performance of this duty. Not only must there be preliminary inspection and investigation of each of these societies or homes but there must be follow-up work if these laws are to be of real benefit to the dependent children of California. There are three children's agents to visit and supervise children receiving state aid and the state's work is fairly well protected at this point. There remain, however, eight societies which are placing children into homes, about 200 maternity hospitals and homes which receive maternity cases and a very large number of children's boarding homes which are sorely in need of standardization and which are solely the charge of this Board. Persons whose principal duties lie in other fields must do this work incidentally and hurriedly. As a result, no one is satisfied; neither the managers of the institutions, the general public nor the investigator. The proper handling of this work requires the full time of at least three agents specially trained in the care of dependent children. The juvenile courts and probation officers, as a phase of county charities and corrections, are subject to the supervision of this Board and are really in need of some one to unify and harmonize their work and records. If we had one agent who could devote his entire time to the juvenile courts and probation offices, a degree of cooperation could be developed which would be of great assistance in raising the standard of this work.

(b) County jails and hospitals which have in the past been paid a flying visit once in two years should be thoroughly inspected at least once a year; twice a year would be better. Time should be allowed for sufficient study of local conditions, including the county's finances, so that the Board could make recommendations more practical and pertinent than is at present always possible. There should be one agent whose work should have to do with the county jails, hospitals and almshouses.

(c) Investigation of public outdoor relief is one of the duties of this Board; yet never before this year has it been examined in any detail. During the last few months the systems of administering out relief have been studied in a dozen counties and the Board feels fairly well acquainted with this work in two or three counties but as to the rest of the state, it merely knows that there is a waste which is equal to many times the cost of a more efficient direction. There is need of one agent to investigate public out relief in the various counties and to bring this work up to modern standards of efficiency.

(d) The duties and responsibilities of the secretary of this Board are manifold, as is implied in the organic act which requires him to execute a bond in the considerable sum of \$5,000. He must be well informed concerning the wide field of charities and corrections and must be an able executive and administrative officer. If the right man is to be found for this position an adequate salary must be offered, a salary such as it is not possible to pay out of the present appropriation.

(e) The volume of work to be done in the southern part of the state is so great as to require a branch office in Los Angeles. This would be headquarters for agents working in southern California. It would effect a considerable saving in traveling expenses and would contribute materially to the effectiveness of our supervision.

(f) The difficulties of securing correct statistical reports have forced us to the conclusion that it is necessary to have an agent from this office make them up from the original records in the various local offices. At the same time, he might as well collect the criminal statistics now handled by the Bureau of Labor Statistics.

Thus the volume of work already laid upon this Board by law cannot possibly be done with the limited working force which the present appropriation permits. The work is of very great importance and should be adequately supported in order that it may be done thoroughly. An increase of the appropriation for the State Board of Charities and Corrections will effect an immediate economy in the administration of charitable and correctional work in the State of California.

The following is a very conservative estimate of the annual appropriation necessary for this office:

Secretary .....	\$4,300
Assistant secretary or chief clerk .....	1,800
County agent .....	2,400
Juvenile court agent .....	2,400
Four investigators .....	6,600
Statistician .....	1,800
Two stenographers .....	1,800
Salaries .....	\$20,800 00
Rent .....	\$1,700
Office expenses .....	1,500
Traveling expenses .....	4,500
Publications .....	1,500
Office and traveling expenses .....	9,200 00
Total .....	\$30,000 00

## 2. Revision of Certain Child-Caring Laws.

It is recommended that the act providing for the control of the placing of dependent children into homes and the act to provide for the regulation of maternity hospitals and boarding homes for children be amended so as to express more clearly the original purposes. The reasons for this recommendation are, briefly, these:

(a) There is doubt as to the status of homes into which children are placed by a licensed home-finding society.

(b) It is not clear whether the child-placing act covers the boarding out of children or merely the placing in free homes for adoption.

(c) It is desirable that each home-finding society be held responsible for the homes into which it places children and that these homes be not required to hold license direct from the State Board of Charities and Corrections.

(d) It is important that the boarding out of children as well as the placing for adoption be regulated and supervised.

## 3. Outdoor Work for Misdemeanants.

It is recommended that steps be taken as early as possible to acquire and establish state farms for misdemeanants.

The reasons for this recommendation are, briefly, these:

(a) Most county jails are unfit for lengthy detention of men, being dark, without provision for physical or mental occupation, and failing to segregate prisoners.

(b) Idleness is mentally, morally and physically injurious.

(c) Maintenance in idleness is a source of expense to the public.

(d) Such farms are in successful operation elsewhere, where prisoners are benefited mentally, morally and physically, while they contribute something toward their maintenance.

(e) Misdemeanants are violators of state laws.



#### 4. Conveyance of the Insane by Hospital Attendants.

It is recommended that persons found insane and ordered committed to a state hospital be conveyed thereto by attendants sent out from the hospital for that purpose.

The reasons for this recommendation are, briefly, these:

(a) Insanity is a disease, not a crime.

(b) Sheriffs and their deputies are untrained in the handling of insane.

(c) Proper handling during the trip is an aid to successful treatment of the patient.

#### 5. Revision of the Juvenile Court Law.

It is recommended that the juvenile court law be so modified that it will be more workable from an administrative standpoint and better adapted to the needs of the children of this state. There is quite general dissatisfaction with the present act on the part of judges, probation officers and all people concerned in juvenile court work. However, the recommendations for its modification or replacement have not yet been crystallized. Various interested parties are devoting themselves to a revision of this law and within a short time a conference will be called by the State Board of Charities and Corrections with a view to threshing out the problems involved and bringing about mutual understanding and cooperation among juvenile court workers. At that time, it is hoped, recommendations may be definitely formulated which will represent the concensus of opinion and best judgment of those persons who are actively and vitally interested in the welfare of California's unfortunate children.

#### 6. Additional Provision for Care of Defectives.

It is recommended that the present facilities for caring for defectives be increased so as to meet the most pressing needs of this state. The reasons for this recommendation are briefly these:

(a) There is a very large number of feeble-minded and epileptics in the state for whom there is no room at the Sonoma State Home.

(b) Many of these are girls and women of child-bearing age who constitute a serious menace to the future.

(c) Proper care of these defectives requires greater segregation than is possible in the single institution now maintained by the state.

Efforts are being made at the present time to secure reliable data giving some indication of the numbers in need of this special care. One conference has been held and another will shortly be called to formulate definite recommendations on which the people of the state can safely unite.



**7. Correlation of State Aid and Child Labor Laws.**

It is recommended that state aid to children be extended to fifteen years to harmonize with the child labor law.

The reasons for this recommendation are briefly these:

(a) State aid at present stops when a child reaches the age of fourteen.

(b) At present a child may not go to work until he is fifteen.

(c) This leaves a gap of one year at a crucial point in the life of the dependent child.

(d) It would be unwise to reduce the minimum age limit established in the child labor law.

# GENERAL REPORT.

## ACTIVITIES OF THE BOARD.

Since the last report was made there have been no changes in the personnel of the Board. However, there have been a number of changes in the administrative officers. Mr. W. Almont Gates felt impelled by ill health to relinquish the arduous duties of the secretaryship. His resignation was regretfully accepted and took effect on December 29, 1913. Since that time Mr. Stuart A. Queen has been acting secretary pending a decision as to what should constitute the permanent working force of the Board. Upon the resignation of Mr. F. T. Herrick, chief clerk, Miss Anita Eldridge was promoted to that position and Miss Esther De Turbeville was employed as stenographer and librarian. On October 30, 1913, it was decided to add to the staff an assistant secretary, and civil service examinations were held to provide a list of eligibles, but on account of the limited appropriation it was decided to make no appointment to this position nor to that of permanent secretary.

Three special investigators have been temporarily employed to assist in handling the added work of inspecting and licensing maternity hospitals and boarding homes for children. They have served two months, four months and two months, respectively. In September, 1914, Miss De Turbeville was made inspector and stenographer and Mrs. Rosalie Westerfeld was employed as stenographer.

*Recommendations enacted into law.* Of the recommendations for legislative action, made by this Board in its last report, five were enacted into law, as follows:

1. Provision was made for continuing the work of construction under way at the state prisons.
2. A state training school for girls was established.
3. Provision was made for the construction of new buildings at the several state hospitals and for the establishment of a new state hospital to be located in southern California near the sea coast.
4. All maternity hospitals and boarding homes for children were required to obtain licenses from the State Board of Charities and Corrections.
5. The support of illegitimate children was laid upon the fathers as well as the mothers.

*Meetings of the Board.* Since the last report the Board has held twelve regular and adjourned meetings. The regular order of business is:

1. Roll call.
2. Correcting minutes of previous meeting.
3. Report of secretary.
4. Reports of standing committees:
  - (a) Committee on state penal and reform institutions.
  - (b) Committee on the insane and defective.
  - (c) Committee on children's institutions.
  - (d) Committee on county institutions.
  - (e) Committee on statistics and publications.
  - (f) Committee on auditing.
5. Report of inspections made by board members.
6. Consideration of applications for license to conduct maternity hospitals, boarding homes for children, child-placing societies.
7. Consideration of proposed plans for new buildings.
8. Miscellaneous business.

*Inspection and licensing of institutions.* Unannounced visits to all the state institutions, subject to the supervision of this Board, have been made at irregular intervals by members of the Board and its staff. Every county jail and county hospital has been inspected at least once since the last report. Inspections have also been made of 150 hospitals or homes receiving maternity cases and 175 homes and institutions boarding children under twelve years of age. These inspections are made in order to determine the facts of their condition and administration so that the public may have this information, that timely suggestions may be made for their improvement, that a consistent policy of supervision and control may be developed and that, in case of private institutions, the Board may know whether to issue license or order them closed. On account of the limited appropriation and consequently small working force it has been impossible to make these investigations as thorough as they should be. So much ground must be covered by one person that errors and omissions are bound to occur. Following such inspections, licenses have been issued to 116 maternity homes, hospitals and departments, to 39 private and institutional homes for children and to 39 orphanages.

*Hearings.* This Board has conducted the following public hearings: (1) to investigate charges against the management of the Industrial Home for Adult Blind; (2) permitting Mrs. E. M. Zwicker, Oakland, and (3) Dr. E. D. Curtis, Oakland, to show cause why their applications for license to conduct maternity hospitals should not be denied; (4) summoning the officers and directors of the Peter Pan Home, Los Angeles, and (5) those of the Belle White Home, Los Angeles, to show

cause why they should not be denied license to conduct children's homes.

*Plans submitted to the Board.* Since the last report, this Board has considered plans and specifications for new buildings or improvements to the following institutions: Sonoma, Kern, Imperial and Modoc county jails, branch county jails at Julian and Oceanside, San Diego County, and Davenport, Santa Cruz County; city jails of Riverside, Upland, Turlock, Watsonville, Willits, South Pasadena and Oakland; county hospitals in San Diego, Orange, Marin, Alameda, Contra Costa, Riverside, Ventura, Del Norte and Inyo counties; Pajaro Valley and Regina Coeli orphanages. In several cases the architects have met with the Board to discuss the plans and in other instances the secretary has conferred with the local officials.

*Visits outside the state.* It has been the custom of the Board to send at least one member and the secretary to the National Conference of Charities and Corrections in order to keep in touch with the work of other states. This is very important, for many problems arise which can be met in no other way than by conference with those engaged in similar work in various parts of the country. In 1913 Mrs. Bryant, Dr. Peixotto and Secretary Gates attended the conference at Seattle. In 1914, Mrs. Bryant and Mr. Queen represented the Board at Memphis. On the same trip, Mr. Queen visited the State Board of Charities and Corrections at Denver, Colorado, the Kansas City Board of Public Welfare, and the municipal farm for misdemeanor prisoners at Kansas City. Mrs. Bryant visited the Illinois State Hospital for Insane at Kankakee, Indiana State Prison at Michigan City, St. Charles School for Boys, Illinois, State School for Girls at Geneva, Illinois, Cook County Hospital, Chicago Juvenile Court and Psychopathic Bureau, Boys' Court, Chicago Psychopathic Laboratory and Psychopathic Hospital, Chicago House of Correction, and Wisconsin Girls' Training School at Milwaukee.

*Conferences.* Eight conferences of persons engaged in public or semi-public care of children have been held under the auspices of the Children's Committee of the State Board of Charities and Corrections. Two of these were held in Los Angeles, one in Pasadena, one at Huntington Park, and four in San Francisco. In January, 1913, representatives of four *child-placing* agencies met with the members of this Board to discuss the problems of home-finding, examination, supervision and adoption. A fuller account of these conferences may be found in the report of the Children's Committee.

In January, 1914, there gathered for a conference on *juvenile delinquency* a number of probation officers and the superintendents of two of the state industrial schools. Questions of segregation in institutions, parole and records were discussed. The sense of the meeting was ex-



pressed in a series of motions. The first recognized as the needs of the situation: (1) an institution for the less difficult forms of waywardness in boys, such as Whittier; (2) one for the more difficult forms of delinquency, such as Preston; and (3) an institution that shall be practically an adult reformatory. The second held that the terms of parole for the state schools shall be such as to insure a boy's being able to live by his own effort a thoroughly honest life at a suitable standard. The third urged all juvenile court judges, probation officers and district attorneys to visit the state schools at Whittier and Preston. The last resolution was to the effect that it is desirable, in regard to the state schools, that in addition to the \$11 per month which is required as the actual cost to the institution, that each county be required to pay, during the first six months of parole \$---- per month per boy and \$---- per month per girl, this order to be renewed each six months by the juvenile court from which the child is committed. At the request of those present at this conference a list of private institutions which receive children from juvenile courts was later compiled by the State Board of Charities and Corrections and distributed to the various juvenile court judges and probation officers.

A conference on the care of *mental defectives* was held in March, 1914, at which members of the State Commission in Lunacy, of the board of directors and staff of the Sonoma State Home and several medical experts were present. Questions of segregation of different types of defectives, sterilization, possibility of training feeble-minded, and examination and classification of inmates of institutions were discussed. The opinion was expressed that most of the mental defectives never get into an institution. The desirability of separate institutions for epileptics and for feeble-minded women of child-bearing age was made apparent. The conference closed with a discussion of the particular needs of the Sonoma State Home. Dr. Lucas of the University of California Hospital has since instituted a survey of the Home to determine the mental types represented.

A second conference was held October 7, 1914, at which fifty social workers gathered for a preliminary discussion of proposed legislation. The inadequacy of present provisions for the care of mental defectives in California was presented from the standpoint of the public schools, juvenile courts, reform schools and the Sonoma State Home. It was clear to all that this problem is very serious, the number of defectives being estimated at 7,000 to 11,000. The importance of more exact information was keenly felt. Some of the desired data will be made available for the legislature, and another conference will be called to make definite recommendations based on the best judgment and information which the state affords.



*Municipal supervision of charities* was considered at a conference with representatives of the Los Angeles Municipal Charities Commission, Berkeley Charities Commission and the Oakland and San Francisco Charity Endorsement Committees. The importance of stopping "fake" charities and of raising the standard of legitimate charities was recognized from the start. The question was as to the best way of bringing this about. In Berkeley and Los Angeles the municipal charities commissions have very large police powers. In Berkeley the three municipal charities are supported, so far as overhead expenses are concerned, by taxation. Oakland has had an extra-legal endorsement committee. In San Francisco the chamber of commerce has recently absorbed a voluntary charities endorsement committee that had previously existed. It was agreed by all that the type of supervision must depend in every case upon local conditions.

The last of these conferences brought together fifteen *county hospital superintendents*. The discussion centered about the following topics: the importance of investigating applicants for admission to county hospitals; methods of investigation; personal relations between staff and inmates; pay patients; how the inmates spend the day; and various sanitary problems. The results of these discussions agree in the main and are covered by the report on county hospitals.

*Cooperation with other social agencies.* During the past two years this Board and its employees have been increasingly called upon for information and various other types of cooperation. An investigation of the out-relief of Los Angeles County was participated in at the request of the county efficiency bureau and the charities office. The Board cooperated with Mr. Charles Wesley Reed of the State Civil Service Commission in holding an investigation of the Sonoma State Home. Questionnaires circulated by Charles R. Henderson, Homer Folks, and the Russell Sage Foundation have received special attention. In addition a vast number of inquiries from citizens and officials of this and other states have been answered. So many requests for advice concerning institution dietaries have been received that this office has published a "Standard Dietary for an Orphanage" written at the Board's request by Dr. Adele Jaffa of the University of California, to meet this need.

*Time devoted by board members to this work.* The time which an unpaid board can devote to the service of the state is necessarily limited. The members of the State Board of Charities and Corrections receive no per diem, but only their actual necessary expenses. In spite of this, each member gives an average of two days a week. More specifically, they have held twelve meetings consisting of forty sessions, lasting on the average two and a half hours, and have made 160 inspections during

the two years just closed. In addition they have attended a large number of committee meetings, hearings and conferences.

### REPORT OF THE PRESIDENT OF THE BOARD.

For the biennial period just passed the State Board of Charities and Corrections has pursued to the best of its ability a constructive policy. We appreciate the criticism often expressed in the past of our work, that it was purely negative. In one sense this was no fault of the Board but was due largely to the limitations which the organic law under which it operated placed upon it. On the other hand, something might be said of the too literal interpretation of that law which made the Board's only duties supervision and criticism. Feeling that criticism would be more effective when conjoined with a constructive point of view and program, during the past two years the Board has endeavored, chiefly through conferences with the various institutions and kinds of work which come within its purview, to build up.

In this way standards have been created or are being created which the Board feels will become increasingly helpful to the various departments of the social work of the state. We have organized The Child Welfare Conference, which holds an annual statewide meeting, besides local conferences in the North and South every third month. We have also been in conference with the heads of the reformatory institutions and the probation officers of the state. On another occasion we brought together representatives of those municipalities and civic groups which are doing something for municipal control of social agencies. Again a conference was held of county hospital superintendents, and lastly, a conference of interested workers with a view to determine the desirability as well as plan and scope of a psychopathic survey of the state. At each of these conferences it has been our aim—

*First*—To put the State Board of Charities and Corrections in more intimate connection with these various lines of activity.

*Second*—To bring together those in the state who are interested in particular fields of social effort.

*Third*—To inform ourselves of the needs of the various situations, and

*Fourth*—To evolve some positive plan to meet the various and numerous problems which each one of these fields suggests.

It is yet too early to assert that anything of lasting value has been accomplished. Nevertheless we feel that we are headed the right way and that the further pursuit of such a policy will bear rich fruit for the various kinds of work, enabling those interested to minister to the wards of the state with greater efficiency.

At every turn the Board has felt itself handicapped by its lack of an adequate staff. Our secretary, clerk and stenographer, with an occa-

sional special assistant, as well as all of the members of the Board, have been exceedingly industrious, even overworked, in the effort to cover all of the numerous lines of activity which various laws have imposed upon us. We feel the ineffectiveness of the work at many points but can only plead our lack of proper equipment to do them all the justice that their importance demands. Much as we attempted to accomplish we realize so much ahead of us that demands more intimate attention and more active cooperation on our part.

The work of the Board grew apace by reason of many of the enactments of the last legislature. In addition to these, the Board has found itself called upon on many occasions by municipal and private agencies, as well as by other state boards and commissions, to cooperate in their work. This is certainly flattering to the Board, but each time entails considerable work and a consequent diversion of our efforts. So much of the work of the Board is new that the Board feels it necessary to proceed slowly in opening these new fields and planning on new work.

In particular do we feel the growing need of establishing another office in the city of Los Angeles so as the better to serve institutions in the southern part of the state. We feel that this would be a great saving in traveling expenses, as well as in time, and would markedly increase the efficiency of our work.

There has been such an increase in the work of the Board that we find it necessary to meet bi-monthly instead of quarterly as in the past, besides a weekly meeting of the members in and about San Francisco. These bi-monthly meetings last from two to three days with morning, afternoon and evening sessions. Every problem is at that time carefully considered and we believe that we are then in a position to give adequate advice on the various problems.

The tendency of more recent legislation for our work is along the line of administrative activity. We feel inherent weakness along certain lines where no "police power" is placed in our hands. For example, although the law requires that building plans of institutions be submitted to us for inspection and suggestion, we have no way of enforcing such corrections as we may deem fit and proper. Again, the carrying out of recommendations arrived at as a result of our investigations can not be compelled by this Board. Our duty is purely advisory. The executive power is in other hands. The same may be said of a number of other lines of work and we trust that at the coming legislative session that proper laws or modifications of existing laws may be introduced to give us the required power.

The work of the Board is done through so-called committees. Due to the small number of members of the Board this merely means that each member of the Board in turn presides as chairman of some committee,



such as "Children's Work," "County Institutions," etc. This enables the chairman to specialize on that particular line of work and at the same time he has the cooperation and assistance of all the other members of the Board for that particular object. We have found this to be particularly efficient and we believe results commensurate with the large problems suggested by each line of work are being obtained.

As chairman of the Board for the last biennial period I wish to take this opportunity to express my appreciation of the splendid cooperation of the office force and of my colleagues of the Board, all of whom have spared themselves no pains to secure the success of the efforts of the Commission.

It may be of interest to the citizens of the state, as well as his Excellency, the Governor, to know that the utmost unanimity prevails in the councils of this Board. There have never been maneuvers for personal advantage and never an attempt to circumvent other members of the Board, but at every opportunity, though various and sometimes antagonistic points of view are held, we have always come to some satisfactory conclusion as the result of our deliberations.

I should like at this time to point out that this is one of the few boards of the state to serve without compensation, save traveling expenses, and it prides itself on giving to the state unselfish service, animated solely by the desire to help every institution of whatever type to a better and more efficient administration.

### PENAL AND REFORMATORY INSTITUTIONS.

The tendency of modern penology is all along the lines of reform of the prisoner and his rehabilitation so that when he returns to society from his period of incarceration, he may again be a useful economic factor as well as socially and morally normal. This ideal of reconstruction necessitates the complete change of policy on the part of such institutions as have existed in the past and further requires new ones to carry out the plan fully.

First of all, it makes very definite demands upon the state to provide a *physical* equipment which will in no manner impair the vitality or health of the prisoner or inmate and, on the other hand, which will help to correct such defects as may be found after medical examination. To this end, cell houses must be constructed which will not only assure to the prisoner a degree of privacy so as to encourage his sense of personal decency, but will also assure to him a sufficiency of light and air and protection from the elements. Individual cells become a necessity except where the dormitory system may be feasible. There is no doubt a number of men who would be benefited by living on the congregate plan and there are others who, for their own protection, as well as that of their fellows, still need the single room.

Further, the model penal institution must be equipped on the *medical* side so that it may not only cure those who become sick during the period of their incarceration, but also assure to each incoming man a careful physical examination. The defects which such an examination would indicate must be first corrected. To this end there must be adequate hospital equipment with arrangements for operations when necessary and a receiving ward in which each new comer should be isolated for a period of days for inspection. Hospitals must also be equipped to meet the needs of a number of tubercular men who find their way into these institutions as well as the needs of a number of drug and alcohol habitues. In addition to a receiving ward, there ought to be provision for the men who have infectious or contagious diseases or contract them. In this way, the general health of the population would be protected from the presence and constant menace of such individuals.

Besides the sleeping quarters, proper *food* arrangements are more than a necessity in the reformatory institution. A man who is ill fed or improperly fed can not be expected to readjust his view toward society. A bright, friendly dining-room, a properly varied dietary, well cooked and decently served, will assure him a degree of well being and comfort even though he had previously been a stranger to such a standard of living.

A *psychopathic department* would seem to be a necessity for such institutions so that the exact mental history and condition of the inmate might be known. Such examination is helpful in determining the kind of work at which he should be placed as well as the education he should receive.

Closely allied to the physical care of the inmate is his *educational* readjustment. A large number of inmates are illiterate or under-educated. The fact that they find their way into our prisons and reformatories indicates that at some point our social machinery has failed to do its full duty toward these unfortunates. There should be no narrow and medieval attitude towards the educational question. It should be, as far as possible, modified so as to meet the physical and mental needs of the individual with the thought uppermost in mind that he is to be prepared, during the period of his detention, for the resumption of a normal activity on the outside. A mere pedagogue will not suffice. A teacher with the social point of view, who understands the problems of penology and reform, ought to be at the head of such a department. No residual appointee would seem to suffice for this important feature of the reformatory scheme.

Closely connected with the question of education or re-education would be the matter of *industrial training* for those who would need such training during this period. It is not sufficient that a man should be kept busy; he must be kept busy at some trade or vocation which has



educational value to himself as well as financial value to the institution. In altogether too many of our institutions, large numbers of men are put at tasks in which the values are determined in the reverse order. Furthermore, during this period a man ought to be taught to do a *full day's work* so that on his return to the outside he may be ready to take up his tasks together with his fellows. Since the principle of state use of prison products has been introduced in our own state, as well as in many sister states, there seems to be no limit to the possibilities of such activities. For example, the practice of having part of the state printing done in the prisons would extend the principle of self-support, and at the same time teach some of the prisoners a trade which they could follow to advantage after their release. Nothing that any state institution uses should be neglected in the industrial department of these institutions. Either the principle is valid or invalid. If the prisoner is to be helped and the state is to be relieved of a part of the burden of his support, this principle can not be pushed too far. In fact, the economic question of the support of the prisoner is bound to come in for a larger consideration on the part of the public. There are already many who do not object to the program of reform on any other line save that of increased expense to the state. Unfortunately, this seems to have some merit. If the indeterminate sentence is to prevail so that men will only be released when the prison board feels they are fully competent to resume their stations in society, the question of expense will certainly play a large part in the decision of the legislators and the public upon this most important matter in view of the longer jail terms which will then be served. It would seem, however, that these objections can be met only by a further development of industrial activities within the prison walls. The prisoner must, more and more, be made to give back to society, as far as possible, the amount spent upon his care.

That this plan does not seem to be utopian can be demonstrated by the experience of many counties and states who use their prisoners in such manner. In no wise ought the prisoner to be exploited for the benefit of any individual or corporation, that is, the custom of farming out prison labor by contract to outside manufacturers, profitable though it may be to the state and the manufacturer, can not be tolerated.

If, in the selection of prison sites, more care would be exercised so that better land, suitable for cultivation, could be obtained, and if the industries were developed to the highest point of efficiency, it would seem possible to approximate the ideal of prisoners supporting themselves. In many quarters there is the thought that the prisoner ought to be paid for his labor so that his family on the outside, or those dependent upon him will not be thrown upon private or public charity, or that the fund so earned might be credited to the prisoner for the

purchase of small luxuries for himself and to constitute a sum against his discharge.

More and more attention should be given to the question of *recreation* in prison life. Many inmates suffer from bad standards of amusement. If, during the period of their incarceration, these men could be induced to form habits of recreation which will not center in the saloon or the cheap dance hall, if good tastes could be inculcated, it would seem that we will have gone a long way towards helping these men to a proper viewpoint. At the present time there is no provision made for the prisoners in their free time in case of inclement weather. It would seem desirable to provide a gathering place, a social hall, for such occasions where the prisoners could freely mingle with each other and with prison officials, and where games and other amusements might be indulged in at such times.

An increasing amount of emphasis is being laid upon the *proper segregation of prisoners*. It seems unjust to associate youthful prisoners with older ones, first offenders with recidivists. In a small way, the two industrial schools of the state meet the needs of segregation of the more youthful offenders, yet they are far from perfect in this respect, but despite the existence of these two excellent institutions, large numbers of very young men are found in our state prisons. California owes it to itself to develop its penal and reform system in such a manner that segregation, at least along these lines, if not along others, would be observed.

The act of the last legislature prohibiting excessive or unusual punishments in the state prisons is directly in line with the best thought on the subject. Without the use of such means better discipline is now being maintained than ever before. It is accomplished by a more humane and sympathetic attitude on the part of the wardens and their cooperating officials.

Significant was the establishment of the California Girls' Training School for the proper care of the youthful woman offender. We are inclined to the belief that more adequate provision ought to be made for the adult female offender. A separate institution might be developed so that under the guidance of a group of women similar to those in charge of the Girls' Training School, the adult female offender might receive that more intimate and understanding care of women for women.

The details of the actual conduct of the five institutions of our state which care for the offender will be found elsewhere in this report under their headings.

### CARE OF INSANE AND DEFECTIVES.

*Defectives.* Probably no line of work is attracting more attention among those interested in charitable and correctional procedure than the study of the mentally defective. Revolutionary ideas are being employed in court methods. The degree of responsibility for crime is being questioned. An alarming menace to society is being caused by the free circulation of these "defectives." The unjustness to the so afflicted individual by the lack of state care and protection, the tremendous expense incurred to the state through its neglect to primarily care for those, who later bring, through their mental deficiency greatly increased financial responsibilities on the state, is evidenced in criminal and reformatory annals.

A comprehensive glance at the world-wide field tells us that a new and live issue commands us to the necessity of facing the problem with serious consideration, careful study, conservative judgment, and finally, if need be, wise legislation. In previous time we recognized the epileptic and feeble-minded as needing special care; today our differentiation is much finer.

Defective, formerly was applied to the child with any kind of defect, physical or mental. Today we accept the term to mean feeble-minded. All defectives may not be treated, employed or schooled by any one wide sweeping method. Therefore, for greater convenience, defectives or feeble-minded persons having a mental age far below their physical age, are segregated into three classifications: (1) Idiots, persons having a mental age up to and including two years; (2) Imbeciles, persons having a mental age from three to seven years, inclusive; (3) Morons, persons having a mental age from seven to twelve years. Persons in a class mentally between the morons and normal persons are termed borderland cases.

The Binet-Simon measuring scale, the testimony test, visual and auditory, the Kent-Rosanoff or association test are among the various intelligence tests much employed by expert psychologists to determine the mental status of the examined patients. Altogether special apparatus and supplies for as many as twenty-two different tests is obtainable for making practical mental classifications. The psychological tests for intelligence would define idiot to be a person so deeply defective in mind from birth or from an early age that he is unable to guard himself against common physical danger. The imbecile is defined as one who, by reason of mental defects, existing from birth or from an early age, is incapable of earning his own living, but is capable of guarding himself against common physical danger. The highest type of feeble-minded or moron is one who is capable of earning his living under favorable circumstances, but is incapable, from mental defect existing from birth, or from an early age (1) of competing on equal terms with



his normal fellows, or (2) managing himself and his affairs with ordinary prudence. The lowest group is generally composed of helpless children in custodial institutions. The middle group is composed of those perhaps less dangerous to society as their mentality is not sufficient to enable them to do damage, or become party to criminal enterprises. Experienced court workers declare that "to this class belong a large number of vagrant tramps, the repeaters in the houses of correction, the petit thieves, the alcoholics, and many murderers. Many of this class, not being able to compete with their normal fellows become objects of charity, or adopt criminal careers. They become beggars and paupers. They are generally unemployed because unemployable. The women in this class form a large percentage of the women in the slums of the underworld. It is now generally believed by competent investigators that more than 75 per cent of the inmates, male and female, of jails and reformatories and penitentiaries belong to this class. The money that society lays out upon them at the present time in the matter of police and court expenditures, their maintenance in workhouses, reformatories, jails and penitentiaries, should be used before they become inmates in a preventative way."

A psychological study of inmates at four of the largest industrial and reformatory institutions for girls and women in the United States shows a percentage of mental defectives ranging from 33 per cent to 75 per cent. While Dr. Olga Bridgman, who it is believed "has made one of the most careful studies on record," has found 89 per cent of the girls at Geneva, Illinois, to be mentally defective, Dr. Katherine Davis, of New York, estimates that the number of sub-normal women who belong to the criminal classes, particularly those who are engaged in prostitution, amounts to 50 per cent. Miss Maud Miner, a probation officer of New York, stated one year ago: "It is true that it is the exceptional girl who is declared normal, and not the exceptional one who is declared mentally deficient. We are having every girl who comes to us now mentally examined by experts. We find that the majority of girls from sixteen to twenty years of age have a mentality of not more than from nine to ten years, and that many of them are not responsible for their acts. I believe that mental deficiency is more responsible for bringing a large number of girls into prostitution than any other factor." Since authorities place 50 per cent of the women engaged in public prostitution as feeble-minded it is well remarked that the stigma of social disgrace to womanhood is removed and must be transferred to those males of the race, who commercialize the helplessness of these women. While it is believed that definite standards have not been established, we have sufficient evidence on the subject to point the way to a new method of combating the social evil.

The Municipal Court of Chicago has done some of the pioneer work in mentally testing criminal cases and affords us the following data: In six weeks time 245 boys in the Boys' Court were examined, only 18 were found to test normally on the Binet-Simon scale, and only  $7\frac{3}{4}$  per cent of this group had a normal intellectual development. Of the 245 boys, 20 or 8.16 per cent were borderland cases. Of the 245 boys, 207 or 89.49 per cent were found to be morons. Their chronological age was 19 years, their basal age 9 years, their mental age, 12 years.

Turning from the statistics furnished us as results of psychological work in connection with court cases, let us consider briefly the situation as presented by school authorities. The British Board of Education, in a recent report of its chief medical officer, says: "Of 2,009,000 children examined in London, more than half were found to be defective mentally or physically; about 0.5 per cent were feeble-minded. The last annual report of the superintendent of schools of Boston shows 1,500 to 2,000 defective children in a probable school population of 130,000. One district shows 3.7 per cent feeble-minded. In Milwaukee where a progressive school board caused a survey of elementary schools to be made, 1,003 children out of the elementary school population of 40,799, or  $2\frac{1}{2}$  per cent, were found to be mentally defective. In one of our California cities where no survey had been made, but where special schools had been established, it was estimated that out of a population of 175,000 elementary school children, 250 were mentally defective. This is nearly 1.5 per cent. Here no survey had been made, but an estimate given on a situation which presented only such defectives as had forced themselves into notice by their inability to compete with any grade of normal child. It is commonly accepted that a conservative school estimate of 2 per cent is low.

It has been well said, "that the notorious failure of both the past and the present in dealing with the deficient, clearly demonstrates, both the non-existence of any applied science and also the need for its development."

Mental deficiency may be caused in various ways; may be inborn, hereditary, may be acquired through accident or injury to the brain of a child in early life, or may occur through injury of the child at birth. It is claimed that the general public would be startled if it knew of the injuries inflicted by careless physicians.

Science is offering goodly numbers of methods for employment in determining the mental status of the child: but this science is a developing science. "It seeks to learn facts, to deal with facts, and from facts to deduce conclusions for individual care." If these results are to receive serious considerations, the methods must be reasonable and of safe conclusions. The too rapid pigeon-holing of human beings would be a very real danger.



The Binet-Simon test is believed, if correctly applied by an experienced and standardized examiner to give a more enlightened estimate of the trials and intelligence after one hour's work than could be rendered by a teacher, or physician after several months observation. Its value in criminology is set forth by Dr. Healy in his statement that "The development of mental tests alone has done more to awaken real understanding of the basis of criminalism than whole volumes of philosophic generalizations."

Legislation on this subject is fraught with opposition because (*a*) of the attitude of the average mind towards the problem and (*b*) because of the enormous expense to the state. This last reason assists our minds in comprehending the necessity of preventive as well as paliative or arrestive measures. The following legislative suggestions are worthy of consideration (*a*) more definite and stringent laws for the commitment of feeble-minded persons, (*b*) establishment of farm colonies for feeble-minded, (*c*) segregation of the sexes, (*d*) sterilization when necessary, (*e*) laws preventing the marriage of feeble-minded, (*f*) immigration laws to exclude the defective classes, (*g*) special schools for the backward child.

California stands in the vanguard; special schools are everywhere dotted over the state. Psychologists are at work in her juvenile courts; the Industrial School for Boys at Ione, and the State School for Boys at Whittier, as well as the California School for Girls, have undergone surveys during the past year by efficient experts to ascertain the proportion of feeble-minded inmates (these figures will be found in the separate reports of the institutions). As rapidly as possible all over the state, feeble-minded children are being committed through the courts to Sonoma State Home for the feeble-minded. A special survey has also been made of this institution. No juvenile court, orphanage nor state school exists which has not applicants awaiting entrance to the Sonoma State Home. Here are housed 1,040 inmates, making an overcrowded condition. It is seriously recommended that the coming legislature appropriate a sufficient sum for the establishment of an additional institution for the feeble-minded. This institution should be located in the southern part of the state as Sonoma is already established in the northern part of the state. The great distance and the added expense work a particular hardship on those parents living in the southern part of the state, who are obliged to send their children to the Sonoma State Home. In fact, it sometimes entirely precludes the possibility of the parents visiting the child, thus making the commitment a complete separation of the child from the parent.

For this new institution plain roomy structures with equipment for up-to-date training, an acreage for agricultural purposes are desired. Farm colonies are needed. The necessity for the establishment of a

moron colony is imperative. The new institution will be filled almost immediately by waiting patients. When we have in the new institution thus taken care of those already segregated a careful survey of the state should be made. This survey should include prisons, county jails, juvenile courts, women of the street, and most important of all elementary schools. The survey when completed would furnish definite facts as to the number and status of the feeble-minded in the state, the sources of supply of this mental deficiency and the proper means as far as possible for dealing with such sources, and lastly, suggest proper care for that class, shown to need state supervision, construction and protection.

All feeble-minded are creatures of habit and repetition fixes the habit, and punishment will not correct the conditions once established in their minds. They have no pride of character and no sense of shame. To do evil is paramount by inheritance and increased by environment. They follow the path of least resistance and are powerless to prevent the thing upon which their minds are bent. It seems characteristic of the mind to grow weaker and passions to grow stronger and thus they become a prey to all of the unmentionable evils of lust that can be enumerated.

We can not require of a deficient boy of twenty years of chronological age but only a mental age of ten years and perhaps a basic age of eight years, the same standard we set for the mentally normal child. He must not be asked to endure or meet the same temptations as safely surround the normal individual. This means the creation of a new world for him—a colony where he will be largely or entirely self-supporting under proper supervision. Here work, study and recreation will secure for him a happy and profitable life and relieve a larger community of one of the greatest menaces that now confronts it. We can not determine the number of recidivists, no means are at hand, but we do know that these recidivists are largely feeble-minded. A comparative table showing the cost of maintaining this defective recidivist in the jail, reformatory and prison against the cost of protecting society and protecting the boy by placing him in a farm colony before he becomes delinquent would point to the economy for the state.

A close study of relationships between epilepsy and crime would bring some alarming facts to light. The epileptic is not wanted in the schoolroom, he can not be tolerated in business positions, he can not take care of himself, he is out of place in the reformatory, and neither is he wished in a school or home for the feeble-minded. Hence it becomes evident that a separate colony for the epileptic should be considered. California is now caring for this class of dependent and delinquent, for, while he is not responsible, he is still often our reckless criminal and degenerate offender at Sonoma. The epileptic's presence at Sonoma is derogatory to the proper care of the feeble-minded housed with him and the room is needed for those for whom the institution was established.

With the desire for best methods ever present, the time has come when a change should be made and the establishment in California of an epileptic colony decided upon.

*Insane.* With reference to the care of the insane, we have the following recommendations to present:

1. The Board recommends the more general adoption of the practice of sterilization. While insanity, itself, is not transmitted, the offspring of insane persons are very likely to be cursed with some nervous or mental defect.

2. Regular and appropriate occupation and amusement should be provided. This means primarily an extension of what is already being done.

3. Patients should be kept in the open air as much as possible. In none of the institutions are the patients outdoors as much as they should be with the exception of a few occupied in agriculture and the care of the ground. This open air life can be secured by means of tasteful wire enclosures in which a certain portion of the patients can spend almost all of their time except when eating or sleeping. The management of the Southern California State Hospital is contemplating the erection of such enclosures with the thought that they will result not only in the improved health of the patients, but also effect great saving in the cost of attendants. If a large truck garden were so enclosed, the criminal insane to the number of 100 might work there with a single guard on horseback.

4. The system of "open cottages," wherein patients may come and go at will within certain limits of time and distance, should be extended. This is especially important for convalescent patients as a means of preparing them for life outside of the institution.

5. Cottages erected in the future for the housing of insane should be inexpensive. At one of the state hospitals, the cost per patient housed is \$700 in a reinforced concrete cottage, \$350 and \$500 in brick buildings, but only \$60 in a frame cottage. Some of the new cottages at Patton cost about \$120 per patient housed and the Dozier cottages at Napa are similarly inexpensive. These cheaper buildings are comfortable and convenient, and they leave the way more open for future improvements than is the case in more permanent structures. Furthermore, all the institutions for the insane are crowded and it is imperative that increased housing facilities be provided.

## RESULTS OF INTELLIGENCE TESTS.

	Feeble-minded	Borderline	"Dull normal"	Average or superior
Preston School of Industry.....	37 per cent	18 per cent	17 per cent	28 per cent
Whittier State School.....	28 per cent	25 per cent	22 per cent	25 per cent
California School for Girls.....	13 per cent	5 per cent	20 per cent	62 per cent

## Sonoma State Home.

(825 out of 1,046 inmates studied.)

Idiots—	
Low grade .....	30
Middle grade .....	105
High grade .....	126
Total .....	261
Imbeciles—	
Low grade .....	137
Middle grade .....	72
High grade .....	180
Total .....	389
Morons—	
Low grade .....	106
Middle grade .....	30
High grade .....	19
Total .....	155

## PSYCHOPATHIC HOSPITALS.

The question of keeping mentally sick patients under observation for some definite period of time before their commitment to a state hospital has been successfully tried out in two centers in California, Los Angeles and San Francisco.

The Los Angeles County Psychopathic Hospital recently erected at a cost of \$148,000 (exclusive of furnishing) was built and is maintained by Los Angeles County and is under the management of the superintendent of the county hospital.

A substantial brick building of two stories offers accommodation for 125 patients. Wide corridors are flanked on either side by long rows of single rooms, each with an outside exposure. Large windows admit ample sunlight and air. Every effort has been made, both in the physical construction of the building and the psychological effect of colorings, to minister to the peculiar needs of the patient for whom the hospital was erected. Soft warm gray tones, with cream and white tints added, have produced a peculiarly restful and quieting atmosphere. Separate outside recreation grounds are provided for the male and female patients.

Beside the 125 beds for patients, the hospital has accommodation for doctors, nurses, sheriffs and attendants to the number of twenty. Large airy apartments are equipped as court rooms where the supe-



rior judge sits in the lunacy court. At least two physicians from the lunacy commission are present. The social service worker, having carefully studied each case, is also in attendance to assist with her information in the final decision.

The object of this hospital is: *First*—To serve as a place for the detention of persons against whom an insanity complaint is made, until their cases can be investigated by the lunacy court, and provision made for them elsewhere or an order of the court issued for their detention for further observation and treatment.

*Second*—To provide a court room where the lunacy commission may try all cases of alleged insanity.

*Third*—To provide scientific care and treatment for persons mentally sick and who require a certain amount of observation before a final diagnosis should be made or the pending action of the superior court takes place.

*Fourth*—To encourage the scientific study of the problems connected with insanity.

*Fifth*—To serve as a station of field work where through the cooperation of psychopathic parole officers and social service workers, an investigation of home conditions is made and an attempt to change such conditions, if found to be responsible in any way for the illness of the patient. Also to arrange for the care in families or elsewhere of as many as possible of the milder cases of mental unsoundness. Often thus by efficient, thoughtful, careful and kindly treatment are patients returned to their homes without having been committed to a state hospital.

*Sixth*—To provide for the admission and care, upon voluntary requests, of persons suffering from some mental disturbances and who require treatment in a psychopathic hospital.

The San Francisco Detention Hospital is small but efficient, and while lacking in equipment for the most approved methods of care for the mentally sick, is still doing good work.

The Lunacy Commission investigates every case very carefully and communicates its decision to the superior judge. Court is then held in a special room in the hospital and the final disposition decided upon. During this entire process, it is not necessary for the patient to leave his room.

The hospital has a capacity for 17 patients and is too small to meet the needs. Each patient is kept in a private room which is furnished with all modern hospital conveniences. When the new City and County Hospital is completed, all milder cases will be removed to this institution and every effort will be made to cure them there without committing them to a state hospital.



Aside from the psychopathic hospitals in Los Angeles and San Francisco, the remaining part of the problem would belong to the various county seats. Wherever county hospitals exist each hospital should be properly equipped to take care of mental cases pending the action of the superior court. Thus a state-wide system of early-care of the insane would be established. A factor of progression in the efficiency of the work would be the cooperation of the county hospitals and the state hospital service.

With the aid of an after care physician in San Francisco, much is being accomplished in the oversight of cases leaving a state hospital; but this work should be supplemented by the addition of such a physician stationed in southern California.

The general establishment of wards in the county hospitals for the care of the mental sick, prior to their commitment to state hospitals, and the appointment of additional physicians for the after-care of persons leaving the state hospitals, would secure a reasonably effective service in the two greatly desired systems of (1) early care of insane persons, and (2) after-care of patients leaving a state hospital.

#### CHILD WELFARE WORK.

The past three or four years have practically seen the beginning of the movement to standardize and develop the work for the care of the dependent children of the State of California. Long ago this state provided aid for certain classes of children. Its counties have always, in their grants of out-relief, made children a special object of care. But up to the last two or three years there has been no state plan for developing common and progressive standards. Until 1911, authority chiefly contented itself with empowering a board of examiners to exercise a certain fiscal supervision over this work along with supervision of all other expenditures of the state. In consideration of the embarrassment of duties involving very much larger expenditures which devolved upon this board of examiners, it is not to be wondered at that the supervision of the children's institutions was carried on somewhat perfunctorily.

Since 1911, this situation has changed. In that year and in 1913 a series of laws was enacted definitely altering the whole situation, and children's institutions of all kinds in the State of California, which, up to this time, had had an existence nearly separate and self-controlled, which had been virtually private societies deciding their own policies, raising their own funds for plant and equipment, making their own decisions as to the reception, dismissal and daily environment of the 6,000 to 8,000 children who annually become their wards, found themselves in 1914 subject by law to several inspections. These institutions are in fact now liable to at least five formal examinations. Institutions receiving state aid must be inspected by this Board (Stats.

1911, chap. 683, sec. 5), by the children's agents of the State Board of Control (Stats. 1913, chap. 323, sec. 3), by the superintendent of public instruction (Stats. 1913, chap. 362, sec. 8), by the chief probation officer or the members of the juvenile court committee of each county (Stats. 1913, chap. 673, sec. 11), by local commissions of supervision where these exist, and by the local health authorities. Other agencies caring for children, child-placing societies, family groups offering to board children, and smaller boarding homes are chiefly in charge of this Board and local authorities. In all cases the power to grant or refuse a permit lies with this Board.

Thus during the past four years, it has become the duty of several state agencies and particularly of this Board to go over the state, to gather the facts heretofore relatively unknown concerning conditions and methods surrounding the care of needy and dependent children of this state.

The laws which define the duties of the State Board of Charities and Corrections in its relations to children are:

(1) Law to license all societies placing children in private homes. (Stats. 1911, chap. 569.)

(2) Law requiring reports from all institutions receiving state aid for the care of children. (Stats. 1911, chap. 683, sec. 5.)

(3) Law to license all homes where children are boarded. (Stats. 1913, chap. 69.)

(4) Law requiring report on condition of all the detention homes of the state. (Stats. 1911, chap. 683, sec. 3.)

(5) Law requiring them to collect semiannual reports from all probation officers of the state. (Stats. 1913, chap. 673, sec. 17.)

These laws virtually vest in this Board the final responsibility for the character of the work for children done in the State of California.

When, after publishing the biennial report of 1912, this Board gathered to outline its work for the ensuing two years, it was agreed that the field of children's work represented the heaviest of the responsibilities we faced. It was further clear that the wide range of our duties and the limitation of our staff forced a choice as to where the stress in our work should fall and so it was decided that at whatever risk of neglect to other duties awaiting our attention, the Board as a whole would give the better part of its effort to the problems of child-caring until such time as these were more fully understood and the work of supervising and coordinating them well under way.

As a consequence of this agreement, all the members of the board and two members of the administrative staff have given the major part of their time to the duties implied by the laws cited above. In spite of weekly meetings, many hours spent in visits and conferences and many circulars of inquiry, we all feel that we have but brushed the surface of an important work.

No fixed rules for children's work have as yet been adopted. We publish elsewhere in this volume the standards by which we have agreed to work. In a field so new it seemed advisable to proceed experimentally rather than to adopt any final rules and regulations.

We have, during the past two years, worked by way of (1) conferences, (2) investigations and (3) studies and bulletins.

Concerning what has actually been done, we feel only the satisfaction that comes to those who have honestly tried to be of service to a cause well worth working for. It is only, however, through furthering the work that we see ahead that we can hope to make what lies behind count permanently and for this work of the future an increased staff is imperatively necessary if the policies we here present are to be carried out and serviceable follow-up work is to be kept up.

*Conferences.* Realizing the tradition of undisputed self-control under which most boards of managers and superintendents have heretofore worked, this Board decided that it might perhaps be of greatest service and best avoid the friction arising from undesired inspection if we tried to make it clear at the outset that the newly created supervisors did not intend arbitrarily to criticise and insist upon unreasonable standards—that, on the contrary, the first and most important object was to secure a state-wide cooperation among those working for children and to establish a common understanding of the aims and difficulties the work implied. To this end, a plan of conferences was adopted. Called quarterly since February, 1913, these meetings have in the two sections of the state in which they have been held, been attended by from thirty to fifty persons. They have gradually brought together not only the boards of managers and superintendents connected with the institutions customarily spoken of as orphanages, that is, the larger and chiefly state-aid children's homes, but also the superintendents and board members of children's homes not receiving state aid, the directors of child-placing societies and some few of the humane societies, the members of juvenile court committees, many of the probation officers of the state and the officials in charge of homes for delinquent boys and girls.

At these conferences, discussion has ranged from the humble but vital problems of health, housing, dietary, clothing, education and recreation to the more technical questions of admission, dismissal and record-keeping. What discipline to use, what schooling, what work, what recreation to supply, when and how to find good family groups in which to place the child, by what machinery to discover the propriety of admitting the child to public care, when and in what way to modify the laws regulating all this work—these are some of the questions that have been discussed at these meetings, of which the following is an exact program :

## CHILD WELFARE CONFERENCES.

Date	Place	Subjects	Speakers
Feb. 26, 1913	San Francisco, Phelan Building	Admission. Boarding-out infants. Inspection of homes. (Cottage vs. Congregate system. Dormitories. Dismissal and after care. State Trade School. Dietary. Feeding of children. Discipline. Dietary. Exercises by children of the orphanage. State Trade Schools. Vocational training. Discipline. Vocational education. Manual training in schools. True and false economy in the use of public funds for children. Recreation in institutions. Diet. Institution accounting. The child in the institution. Administration. Agricultural education. Agricultural opportunities. Agricultural education. Agricultural opportunities.	Dr. Adele Jaffa. Informal discussion. Dr. Victor Stork.  Discussion. Mr. Geo. Merrill. Discussion. Mrs. Barnum. Mr. Robert Teal.  Miss Katharine Felton. Mr. Jas. E. Rogers. Informal discussion. Informal discussion. Informal discussion. Dean Hunt of Univ. of California. Mr. Albert Paul of Sacramento. Dean Hunt of Univ. of California. Mr. W. A. Spalding of Los Angeles.
March 8, 1913	Los Angeles, Hotel Alexandria		
June 4, 1913	San Francisco, Roman Catholic Orphan Asylum		
June 12, 1913	Los Angeles, Los Angeles Orphan Asylum		
Sept. 25, 1913	San Francisco, Pacific Hebrew Orphan Asylum		
Dec. 4, 1913	Pasadena, Children's Training Society		
Jan. 5, 1914	San Francisco, San Francisco Protestant Orphan Asylum		
March 19, 1914	Huntington Park, Jewish Orphans' Home First annual joint meeting		
Oct. 15, 1914	San Francisco, Youth's Directory		
Oct. 22, 1914	Pasadena, Boys' and Girls' Aid Society		



It seems fair to believe that there has been a net result from these conferences. Those who have attended have generally united in praise of the gatherings, saying that they have made the way forward clearer and have given a long-desired acquaintance with the facts of the work in this state and with those doing it. If it be true that these workers see more clearly the unfulfilled possibilities of their task, this Board may feel that it has cause for satisfaction. Mere routine work disappears before a well-established habit of ideal construction. In an atmosphere shaped by people persistently trying for better than they have achieved, no child suffers. If these conferences have done away with a certain smug satisfaction in work accomplished, a satisfaction which at the beginning was disagreeably evident in some quarters, if they have filled the laggards with the honest doubts and earnest hopes of the leaders, these meetings every three months are well justified.

Such a friendly acquaintance among the many classes working for the children and such clearer appreciation of the wide range, the difficulty and the interdependence of the problems that they have undertaken, as these conferences promise, seems imperative. Each year there is a rise in the standards of child protection. Each year brings more exact analysis of the elements of the program for securing the welfare of the child. The question of what spiritual instruction and what code of ethics are to be used as guides for mature life needs more discussion and revision than it gets and especially the question of what discipline will best root deep in the child's nature the principles which are to guide him safely in later life. Equally important for successful maturity are the decisions concerning routine physical care. The room and the bed a child sleeps in and the food it eats determine in a formidable way what surplus energy it carries later into the service of the community. The clothing it wears has not only a physical but a psychic reaction whose importance it is hard to overestimate.

A deepened sense of the national menace from unprotected or exploited childhood has developed a corps of people ready and eager to try to save for the nation the child in danger by reason of poverty, friendlessness, bad companions or wretched surroundings. This state has many warm-hearted men and women who are generously resolved that finally in the State of California no child shall suffer.

Those undertaking the problems of child welfare fondly imagine they will specialize. One plans to concentrate on wholesome recreation; another on saving the child from wage work; another on juvenile delinquency, its causes and remedies; another elects the institutional care of the child; a fifth, child-placing; a sixth, prevention of mortality and so on. It is not long, however, before each discovers that all are working in one field, a field where what they have to deal with is childhood under disadvantage and that each must have the whole



program of protecting and developing childhood clearly in mind if results equally the aim of all are to be accomplished, if undue mortality and defect are to be checked, if body and brain are to be developed by a schooling that gives general and special training for a life of self-support, while it also teaches joy in recreation and the wide range of choice the field of amusement presents to the educated man or woman.

*Investigation.* In addition to conferences held, inspection visits have been made to 8 child-placing societies, having in their charge some 2,000 children in separate homes; to 58 organizations caring for children, 11 of these not receiving state aid; and to 125 family homes taking children to board. Our object in these visits has been twofold: (1) to decide whether an existing situation allowed the grant of a permit to continue work, and (2) to pave the way for gathering the facts that should enable us to inform all desiring to know how this state is actually equipped to care for the needy child and what are the next steps in a constructive program.

*Recommendations.* On the whole, what we have learned leads us to believe that, relative to the situation in other states, California is not unfortunate. Meantly conducted county orphanages, the evils of badly-run state schools, uncontrolled anarchy in the private placement of children—these things are not among our problems. There are still examples, though fortunately but few, of a hidebound conservatism which differentiates the orphan from other children, which excuses poor surroundings as “at least better than those they came from” and forgets that the program for protecting childhood forbids that any difference be made between dependent and other children. The major part of the work, however, is carried on in a generous and energetic way. Most of the workers are doing their best to provide good food, pleasant surroundings, opportunity for attendance at public schools, expedients to teach self-direction—in a word, to give their wards the best chance possible.

On the other hand, these people, through their very open-mindedness and honesty of purpose, are ready for a leadership which this Board should give them. To perform the duties such leadership implies, a number of important tasks present themselves for which money and officers are required. Our program for the next two years should, in addition to continuing the conferences and the investigations of the past two years, include the following next steps:

1. Collection of needed facts about children's institutions.
2. A more intensive knowledge of the child-placing societies.
3. A closer relation to the juvenile court.

*Facts needed concerning children's institutions.* In regard to the children's institutions, there is need to know many facts not at present available, through lack of proper record keeping. We can feel no sense

of security about the data concerning children's institutions published with this report. For example, facts about the per capita cost of food can rarely be collected and never compared. A uniform method of bookkeeping, which we are informed the State Board of Control is soon to provide, will greatly help this situation. There are, however, other facts that should and could be made readily available. The parental relations of the children, their length of residence in the institutions, the facts of their after life and many other facts need transfer from the memories of the kindly people caring for them to records which will make revision of and deduction from such facts possible.

More knowledge concerning the parents of the children now in orphanages is needed—not merely a study of the number, sex, age, marital condition, etc., of these parents, which might also be of great value in determining the sources of dependency, but more especially the facts showing the real relations between the parent and child. There seems to be good ground for believing that those in control of the children in orphanages suffer from exploitation by certain classes of parents and knowledge of the facts here called for would do much to remedy this evil. At present we are led to suspect that irresponsible parents shift upon the institution the care and responsibility for their children until these children have reached an age where they become a source of income and then, against their judgment, these careful guardians who have done their best to bring the child to self-sufficiency and self-support must stand aside and see parents of whom they disapprove take the children away.

More exact knowledge is needed as to the methods of admission to children's homes of all classes; it is necessary that the state know the grounds on which all children are received. At present this knowledge can be obtained only with regard to the children receiving state aid, which children often constitute, even in state aid orphanages, a small percentage of all the children in these orphanages. Equally important is it to know how and in what manner the children are dismissed. In no other way than by such an intensive study of admission and dismissal can it be determined whether, on the one hand, the institutions are respecting the principle of parental responsibility and whether, on the other hand, they do all they can to see that their wards are safely started in life. It might be added that in no better way than by displaying the facts brought out by such an investigation can the institutions prove their efficiency.

A study, kindred to the above, would be of much value—a study to show the policy of the courts in severing the relations between the parent and the child. There is reason to believe that hesitancy in this matter is hampering the work of the child-caring institutions. While

such hesitancy has a wholesome and wholly comprehensible basis, it is none the less only too frequently dictated by mere unthinking conformity to tradition. The attempt this hesitancy represents to redeem the parent through the child, to plant a sense of parental responsibility in wholly infertile soil, too often ends only in permanent damage to the child.

Some machinery for knowing better the time that children remain in the institutions seems required. A careful list of the "ins" and "outs" should be kept and an attempt made to classify the children according to (a) permanent residents, (b) certainly transients, (c) possibly transients, etc., all of this in the hope of determining whether it might not be possible and desirable at some future time to persuade the orphanages so to systematize their work that certain institutions should house chiefly permanent residents, others certainly transients, etc.

There should be careful examination of the machinery by which the work of guarding the dependent children of the state is being done and if this proves inadequate as to governing bodies, administrative officers or equipment, it should be made plainer than it is now whose responsibility it is to discharge inefficient people and to supply in their place the social workers who shall make more satisfactory work possible.

A few of the institutions of this state seem to be run close to a poverty basis. It is exceedingly important, perhaps of first importance, that steps be taken to discover what is the minimum per capita cost at which the orphanages of the state can be run without risk to the health and capacities of the children living in them. That minimum cost determined, it should be insisted that institutions unable to pay that cost lose their permits.

*Next steps in child-placing work.* The advisability of urging the placement in foster homes of all children between the ages of two and six is often suggested to us by those who believe in the vital connection between the customary disciplines of the separate family groups and the successful raising of children. A closer acquaintance with the child-placing societies of this state is required to test this theory. It is legally our duty to know the work of the societies so as to guarantee that the homes in which they place children are all that they should be and that the men and women who do their work have ability and reliability. Such a guarantee ought only to be given after intensive and persistent watching of the work these societies carry on. This work, however, extends over an area so wide that in some cases it passes even the limits of the state and a supervision of it therefore involves a heavy expenditure of both time and money. There is likewise imperative need for a continued inspection of family homes. We have already



175 of these homes on our records and these we must supervise. We shall discover many more as the work goes on.

The worst risks to the child arise from these "family homes." Here too often the object in taking the child is commercial profit; the object of the parent in relinquishing it is to get rid of an undesired responsibility. While in a certain percentage of these cases, the children are getting decent care, this class of home is, on the whole, of doubtful benefit and should be discouraged as an independent unit. Boarding homes for small groups of from two to six children, run in connection with or under the supervision and careful guidance of a wise and informed superintendent of a child-placing society, are a blessing to the state, giving the child the desired opportunity for normal "home" experiences. Countless small homes run by whosoever wills to "take a child" are, on the contrary, at best a source of anxiety; at worst, they offer gruesome grounds for strong protest. It is the belief of this Board that such "family homes" should either eventually in each locality be brought together under some local control, preferably a well-organized society for placing children, or that this Board should greatly increase its staff. In a state as large as this, any supervision worthy the name would be costly if carried on by a centralized board. The central board might carefully inspect and then license societies for placing children in free and boarding homes and then make these societies, in their turn, responsible for maintaining the standard of the family home by frequent visits and constant reunions of the foster-parents. The only safe alternative would be the direct supervision by this Board and this would imply a number of officers sufficient to meet our own rules—about one officer to every 50 children in ward.

The need of constant supervision of such homes adds again to our tasks.

The work of controlling maternity hospitals, especially where these are small and doubtful institutions, is proving to be so closely connected with work for children that it must be done by agents primarily trained in the problems of child-placing.

The perspective of work here implied makes it clear that to guarantee that the children "placed out" or adopted are neither exploited nor abused would require, as a minimum, all the time of two trained officers plus all the cooperation the Board members could give. Only when thus equipped, can any statement be made with confidence about the standards of home-finding work in this state.

*Closer relations with the juvenile court.* The feeling that the care of the delinquent child is only a special form of the care of the dependent child steadily gains strength. The tendency of legislation in the past few years has been to smooth away the distinction between the

child who commits an overt act against the law and the child of bad habits and demoralizing environment. Any intensive interest in the question of the care of needy children whether in institutions, boarding homes, family homes or with their own mothers, connects, in most instances, sooner or later, with the juvenile court. During the past two years this Board has frequently been called upon for advice by those dealing in the problems of the juvenile court, an institution as full of problems as it is important, an institution which we have good reason to think will welcome close and continual collaboration.

There is a growing doubt among those who work for the well-being of children as to the serviceability of the juvenile court in its present form, a doubt which in its least positive expression asks that the machinery of this delicate and expensive experiment be subject to constant revision and standardization as to methods and especially as to results in really preventing children from falling into anti-social ways. We find that many besides ourselves share the opinion that such revision of the social aspects of the juvenile court work logically falls within the duties of this Board. The law of 1913 orders a semiannual report to be sent to this Board from each juvenile court of the state. In the larger counties where active and constructive endeavor is the aim of those carrying on this work, the probation officers have taken it for granted that this Board, to whom they are by law required to report, is likewise the Board to which they may turn for expert advice. Such expert advice we shall only be able to give by establishing relations more intimate and persistent than any our over-busy Board and staff have as yet been able to give. Every argument seems to favor this closer relation. The work done by the court touches all sides of the work for children; the money expended by the court is drawn from county relief, concerning the expenditure of which this Board must report to the Governor. It is likewise by law our business to provide the reporting forms recording the work of the court and to vouch for the character of the places in which probation officers detain children.

For all these reasons it seems desirable that in the next appropriation for the work of this Board, provision be made for the salary of one trained officer whose special province it shall be to deal with the problems of the juvenile courts of the state. In a few of the states such work is carried on through probation committees. It is believed that an officer acting through this Board, kept by his relations to this Board in close acquaintance with all facts and persons doing children's work for the state, would probably accomplish more than the separate commissions have as yet done elsewhere and would save all the overhead charges necessary for a separate commission. There can be no doubt



also that coordination and standardization of the social work of these courts will likewise bring a saving to state and county in money, in time and in labor lost through lack of knowledge of the best methods of work.

It would seem that in the interests of the best cooperation, we might, having settled on standards agreeable to all parties, safely leave the state-aid orphanages to the children's agents of the State Board of Control. It will, however, be plain from the foregoing that, even if we should make such an arrangement, important and time-engrossing duties remain which call for the whole time of at least three agents attached to this office to "oversee" the children's work of the State of California.

## COUNTY INSTITUTIONS.

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A study of the chart at the beginning of this report will make it clear that in the wide field of charities and corrections it is the county and childrens' institutions for which this Board is specially responsible. The significance of this is emphasized by the fact that the number of persons who pass through our state institutions each year is less than 18,000, while the corresponding number for the county jails and hospitals is well over 60,000. County charities and corrections cost each year \$300,000 more than the maintenance of the state prisons, hospitals, reform schools, and homes for feeble-minded and the blind. This should be recognized without, however, minimizing the importance of our work with reference to the state institutions.

The relation of the State Board of Charities and Corrections to county jails, detention homes, hospitals, almshouses and outdoor relief is that of a supervisory body, and should be clearly distinguished from an administrative relationship. This arrangement is by no means accidental nor is it due to the opposition of local officials. It is felt by many of the most careful students of the care of dependents and delinquents that there should always be in addition to the administrative bodies, whether central or local, a separate board or commission which should investigate, make recommendations and keep the public in touch with its institutions. It is believed that sheriffs, hospital superintendents and others welcome the suggestions of an advisory board which is fairly distinct from the executive, and, as a matter of fact, we have usually found this to be true. It is the policy of the board to cooperate with local officials in bringing their institutions to a standard of efficiency by stimulating general interest in their purpose and needs. After all, the intelligent and sympathetic support of the community is the only sure foundation on which to build an institution. Hence, even though our criticisms may be rather severe at times, our purpose is not to find fault, but to help the sheriffs, superintendents, and supervisors meet the problems of poverty and crime in the various counties of the state. Another phase of our work lies in making the various superintendents, sheriffs and other local officials acquainted with what is being done in other communities. This is sought to be accomplished by the visits of our representatives and by occasional meetings for conference.

To make more clear the powers and duties of the State Board of Charities and Corrections, let us consider in brief outline the executive and legislative control of jails, hospitals, and out-relief. The county government act (section 4041, Political Code) gives the several boards of supervisors power to establish and maintain jails, hospitals, alms-

houses, and poor-farms, to care for indigent sick and dependent poor and to provide for the working of prisoners confined in the county jail under judgment of conviction of misdemeanor. The further regulation of jails is contained in sections 1597-1615 of the Penal Code, and in the more recent legislation fixing the salaries of sheriffs and their deputies and the number of deputies that may be employed. Section 27 of the juvenile court law (chap. 673, stats. 1913) requires the legislative body of each county to provide and maintain a detention home for dependent and delinquent minors. The supervisors are also required by the lunacy law (section 2167, Political Code) to maintain a suitable place for the detention of persons charged with insanity. Inasmuch as the sheriffs are elective officers, they are coordinate with the boards of supervisors, except that the latter control the financial end of the jail, making the appropriations for construction, alterations and repairs of the building and for the feeding and general maintenance of prisoners. The county physicians, superintendent and other employees are appointees directly or indirectly of the supervisors and are responsible to them. The out-relief, when not handled directly by the supervisors, is in the hands of their appointee, and appropriations for the work are granted directly by the supervisors.

The duty of the State Board of Charities and Corrections is "to investigate, examine and make reports upon the charitable, correctional and penal institutions . . . of the counties . . . and such public officers as are in any way responsible for the administration of public funds used for the relief or maintenance of the poor." In order that the people of each county may have the benefit of such knowledge and experience as comes from familiarity with many jails, hospitals and detention homes, the following provision was included in our organic act: "All plans of new buildings, or parts of buildings for any of the public institutions coming under the provisions of this section, or any additions or alterations in such buildings, shall, before their adoption by the proper officials, be submitted to the board for suggestions and criticism." It is implied in this sentence that such plans can not be legally adopted by a board of supervisors without having been previously submitted to the State Board of Charities and Corrections, and that a contract for construction work in accordance with such plans would not be valid and binding. However, the local officials have usually been ready to advise with this Board whenever the above provision has been brought to their attention. One reason for this provision is that the local authorities may be advised of the legal requirements for a jail or hospital, as the case may be. For example, it frequently occurs that plans for jails are submitted, which do not provide for the segregation of prisoners as required by section 1598 of the Penal Code. The other reason is that the people of each locality

may have the benefit of the wide experience of this Board in the erection of a new building. As a result of visiting many jails and hospitals, we are frequently able to make very helpful suggestions, and it is in this spirit that we endeavor to carry out the purpose of the law. Although we have no power to enforce our recommendations, we are very happy to say that they have in many cases been accepted. As a result the standards for the jail and hospital buildings in this state have been definitely raised during the eleven years that this Board has been in existence.

An important part of our work with reference to county institutions is the collection of statistical and other information. Some statistical reports are also made to the Bureau of Labor Statistics and to the State Controller, but the great bulk of these data is left to the State Board of Charities and Corrections to compile and present to the people. Section 6 of our organic act fixes a forfeiture of \$50 for failure or refusal to furnish such information, but this work is still so new that it has been thought unwise up to the present to enforce this provision.

During the past year it has been discovered that eight counties, Glenn, Lake, Mariposa, Modoc, Mono, San Benito, Sutter, and Ventura, are financing their hospitals in violation of subdivision 7 of section 4041 of the Political Code. This provides "that the board (of supervisors) shall not let the care, maintenance or attendance of such indigent sick or dependent poor by contract to any person." Ventura is building a new hospital and will make the necessary fiscal changes as soon as the new structure is completed. The supervisors of Glenn County have asked this Board to send some one to consult with them at their November meeting, and are showing commendable readiness to unite with us in placing the maintenance of their hospital on a proper basis. Letters have been sent to the other six counties offering our cooperation in reorganizing their financial systems, and we have no doubt the desired changes will be effected within a reasonable time.

It might be well to point out at this time the social reasons in favor of this legal requirement. It has sometimes happened that in order to secure a contract, a man will bid so low that he can not possibly give the indigents proper care. There is always danger of friction in the matter of admissions and dismissals. If the superintendent or steward attempts to dismiss indigents who appear not to belong in the hospital, he may be charged with endeavoring to keep the population as low as possible in order to make all the money he can. The contractor has no assurance of remaining from one year to the next and consequently tends to lose interest in the institution toward the end of the year. In a word, the contract system offers too great a tempta-



tion to the superintendent to give his patients insufficient care, or else, if he be the right sort of man, it imposes an unfair burden upon him.

In conclusion, we state our belief that had nothing else been accomplished by this Board during the period of its existence than the improvements which have been brought about in county institutions, the establishment and support of the State Board of Charities and Corrections would have been well worth while to the State of California. But we also wish to make it clear that certain modifications in the law creating this Board would make possible a much more valuable service to the several counties. These changes are (1) increased appropriation, (2) more efficient handling of plans, and (3) power to compel improvement in extreme cases. In the general work of investigating and making recommendations, however, the only change to be desired is that our relations with county officials may be more intimate. This will be possible if the appropriation of the State Board of Charities and Corrections be so increased that one agent may devote his entire time to cooperation with sheriffs, jailers, county physicians, hospital superintendents, probation officers, and boards of supervisors.

### STATISTICS AND PUBLICATIONS.

*Statistics.* It will be noted by all who have followed the reports of this Board in the past that certain statistical tables have been omitted from the present publication. Detailed statistics concerning each of the state institutions may be found in the reports of the State Commission in Lunacy, the State Board of Prison Directors, and the local boards of managers of the Industrial Home for Adult Blind, California School for Girls, Whittier State School, and Preston School of Industry. Full accounts of building operations at the various state institutions may be found in the report of the State Department of Engineering. We have endeavored in the main to avoid duplication of their work and to provide information which may not be found in these other publications.

With reference to the statistical tables which appear at the end of this report, some explanations will doubtless be of value. The list of appropriations for state institutions is made up from the statutes and amendments to the codes, 1913. Cost of maintenance is the sum of expenditures for salaries, support and ordinary repairs, as reported by the heads of the several institutions. In the county jails we count the salaries only of such persons as are employed exclusively in the jail. In the county hospitals we count the salaries of the county physicians, although they also perform some services outside. These are arbitrary divisions and are based on convenience rather than any abstract principle. The tables on cost of maintenance of county jails, hospitals and out-relief are new departures in this report and their defects are perhaps pardonable. These data are furnished by sheriffs, hospital superin-



tendents and auditors. Our study of these reports has convinced us that they are not made up on the same basis in all cases and hence can not be fairly subjected to comparison and contrast. Similar reports are made each year to the State Controller and the following comparisons of the reports made to him with those returned to this office should guard the reader against blind acceptance of these statistics.

**Cost of Maintenance, 1912-1913.**

Institution	Reported to State Board of Charities and Corrections	Reported to State Controller
Mendocino County Jail.....	\$6,197 43	\$2,304 71
Del Norte County Jail.....	1,318 37	915 30
Placer County Jail.....	3,500 00	5,349 57
Fresno County Jail.....	15,194 49	8,084 12
Alameda County Hospital.....	111,397 03	155,394 22
Amador County Hospital.....	7,499 00	14,954 17
Humboldt County Hospital.....	17,131 86	23,632 33
Orange County Hospital.....	5,597 74	11,355 16
Santa Clara County Out-relief.....	22,859 25	18,198 00
Contra Costa County Out-relief.....	17,512 80	11,770 35

The above is not intended as a complete list of the variations in these reports, nor as a criticism of the particular institutions mentioned. It simply is "Exhibit A" in an effort to portray the *dangers of unintelligent use of statistics*. Uniform systems of accounting are, we understand, to be prepared by the State Board of Control, and when this work is completed, much more accurate and complete information will be available. Until that time any general comparison of per capita costs of charitable and correctional work in the various counties can not fail to be misleading and unjust. Even in the state institutions per capitas are at present computed under such varied conditions that they are apt to lead us astray. Worse yet, these figures are used by misguided critics of the institutions without any reference to the bases on which the computations are made. For these reasons per capitas have been purposely omitted from our statistical tables this year.

Referring to table 5, by contingent fund is meant the money received from pay patients or from the sale of institution products. Referring to tables 23-26, the semiannual population report of each county hospital includes a statement of the number of defectives among the patients. These figures are only approximate, for there are no formal tests to determine mental ability, and there is no agreement as to just what patients should be considered as crippled.

An effort was made to tabulate the statistical reports made by the eight licensed child-placing agencies, but for the following reasons the attempt had to be abandoned. Some of the societies close their fiscal years March 31st, others June 30th. Moreover, the work of the

various societies is quite different, as is shown in the section describing the relations between them and this Board. For example, one maintains receiving homes, some do both boarding-out and home-finding work. A further difficulty appears in the difference in the nature of records kept by the several agencies. Hence a separate report of each one is published.

It has been found impossible to secure correct population reports from all the orphanages. Reports which failed to check have been returned for correction, but even so it has been necessary to publish some figures which are inaccurate and incomplete. The errors are indicated by notes.

The heads of many institutions do not seem to appreciate the importance of promptness in making up and returning their reports. The easiest time for this work is immediately at the close of the period to be covered by the report. But in spite of that, we have frequently to wait four months for the statistics from certain state institutions, and some county officials have failed to send in any report at all. This delays our statistical work and requires the writing of a great many letters urging superintendents and others to attend to the blanks which we furnish. In the future it may be necessary to have recourse to the provisions of our organic act (chap. 683, Stats. 1911), which set a forfeiture of \$50 for failure to furnish information or statistics required by the State Board of Charities and Corrections. This would be a very distasteful thing to do, but will be inevitable if officials persistently neglect and refuse to make these reports.

The Board is keenly aware of the defects of its statistical work, and instead of concealing errors and omissions, is definitely calling attention to them with the hope of clearing the way for more adequate and more accurate studies in the future. Handicapped by an insufficient number of workers and by the absence of uniform systems of records and accounting, we have found it well nigh impossible to compile statistical tables whose accuracy we are willing to guarantee.

According to the juvenile court law (chap. 673, Stats. 1913), every chief probation officer is required to file with the State Board of Charities and Corrections a copy of his semiannual report to the judge, and each probation committee is required to file a copy of its annual report. It seems that both the officers and the committees have found this an onerous duty, partly because it was not altogether clear what should be included in the reports and partly because the pressure of other work made the compiling of such reports very difficult. At the request of a number of probation officers, the State Board of Charities and Corrections prepared blanks on which these reports might be made in a uniform manner. But apparently the blanks were not a very real

help. Twenty-five probation officers reported for the six months ending June 30, 1914, but their statistics are so lacking in uniformity that our efforts to tabulate them have had to be abandoned. The remedying of this defect can come about only by conference with every probation officer in the state and an examination of each set of records by some one agency. The establishment of some uniform method of keeping these records would be welcomed by the officers and would make possible a statistical comparison of the work in the several counties.

*Publications.* The limited funds available have made it impossible to continue the Quarterly Bulletin, which was started three years ago. However, the Board does issue a Monthly Census Bulletin, showing the number of inmates of each of the state institutions and the increase or decrease. This is printed on a neostyle in the office and 250 copies are distributed each month. The only other publication since the latest biennial report has been a pamphlet, "A Standard Dietary for an Orphanage," written by Dr. Adele Jaffa, lecturer on nutrition at the University of California, at the request of this Board.

#### AUDITING.

Since the establishment of the State Board of Control the work of the auditing committee of the State Board of Charities and Corrections has been materially lightened. Under the present system there is sent to the Board of Control for its approval about the fifteenth of each month an estimate of expenses for the succeeding month. Between the twentieth and twenty-fifth a schedule of the expenses is made up with proper vouchers and sent to the State Board of Control. After the warrants are drawn the California National Bank of Sacramento, with our power of attorney, collects and forwards the amount allowed to the First National Bank of Berkeley. When notice of deposit is received the secretary draws checks in favor of the parties whose claims were included in the schedule and allowed by the Board of Control.

A statement of the expenditures of the State Board of Charities and Corrections for the sixty-fourth and sixty-fifth fiscal years appears at the end of this report as statistical tables 44 and 45.

## STATE INSTITUTIONS.

### THE STATE PRISONS.

#### STATE BOARD OF PRISON DIRECTORS.

DENNIS M. DUFFY, <i>President</i> -----	San Francisco
TIREY L. FORD-----	San Francisco
WARREN R. PORTER-----	San Francisco
CHARLES SONNTAG-----	San Francisco
CHARLES L. NEUMILLER-----	Stockton

#### SAN QUENTIN STATE PRISON.

JAMES A. JOHNSTON, Warden.

Under the administration of Warden J. A. Johnston things have taken on a new complexion in San Quentin. On November 15th last, Warden Johnston was selected by the Board of Prison Directors to succeed Warden Hoyle. Of course Warden Johnston has not had an opportunity to put into practice all possible improvements in the conduct of the prison; nevertheless in his brief incumbency he has taken so firm a hold on the situation as to instill a new spirit in the prisoners and in his officials in their administration of the prison.

*New uniforms.* Probably the most significant thing in the biennial period just past has been the replacement of the stripes by a neat blue gray uniform and cap. The only men now wearing stripes are parole breakers and a few incorrigibles who have been degraded. Occasionally a prisoner on his own initiative wears them when doing some particularly hard or dirty work. The introduction of the uniform has had a most marked effect upon the morals of the inmates. They go about apparently with freer minds, less like animals, more like men, and seem to appreciate the fact that such an intelligent and humane uniform makes for a better manhood.

*New cell house.* No less in importance has been the opening of the new dining-room and kitchen and the new block of cells. While we regret that more window space was not provided for in the encircling wall of the cell house, nevertheless the new cells are so vast an improvement on what the prisoner has known as to command the warmest commendation and at the same time to urge that other cells be provided with all possible haste so that the old cell blocks may be abandoned as soon as possible. Some measures should be taken to increase the window space in the outer wall. The increasing prison population has made it imperative for the health of the men. The fact that there are but 1,500 cells necessitates putting two men in a cell. In the new cell house each cell is to be provided with a combination book shelf, clothes hanger, and a writing desk, and bed sheets are to be added in the near future. Each prisoner has two and one half pairs of blankets, so there is sufficient protection from the weather



furnished by such covering. The blankets are washed and aired frequently. Though it might be a trifle early to pass judgment, the new cell house has been opened but a short time, but even now so good is the ventilation and so excellent are the sanitary arrangements there that there is no trace of the characteristic prison odor. It is interesting to note that all the noise in the cells has been stopped by the men themselves, due to their desire for quiet during the time in which they are doing their work for the various courses in the correspondence school and in the preparation of their lessons, of which more below.

*New dining-room.* The new dining-room seats some 2,100 men at one time and is all that could be desired from the point of view of light, air and cleanliness. The food is served by inmates in waiters' coats and aprons and in such a manner that the old scandal of the lack of serving spoons has been obviated, as the food is served by waiters direct to each prisoner. Special dining-room privileges have been withdrawn and all the men eat the same food since its quality is good and wholesome.

*Dietary.* The dietary has been greatly improved, the prison doctor, the chief cook, and warden consulting on this point. It is varied so that it is impossible for a prisoner to say what will be served on any particular day and in addition to the regular rations, beans can always be had by any one who asks for them. There is no limit put upon the amount of bread served, and while this entails considerable waste, as many of the men are careless in the handling of it, nevertheless the increased expense is more than justified by the contentment induced by it. Meat is served three times a week for breakfast and at one other meal every day except Friday, when the prisoners have fish. Three times a week fruit is served and occasionally soup. The inmates are provided with a sweet every night so that the natural craving for such food is satisfied.

*Dining-room discipline.* Quiet conversation is permitted at the tables, though there is no rule to that effect, but so long as conversation does not become boisterous or there is no attempt to talk from table to table, the attendants are supposed to take no notice of it. The different races, such as the whites, the yellows, the browns and the blacks, have been segregated at the tables in the interest of good order. Previous to this the warden informs us there was occasional friction between the different races, but the segregation has eliminated this. The guards at meal time carry no weapons. A most interesting and suggestive touch is a board containing the daily baseball scores posted conspicuously in the dining-room.

*Kitchen and stores.* The kitchen, bakeshop, and storerooms are in excellent condition, the equipment being new and up to date. The old



dining-room has been partly turned into shops and partly into an assembly hall.

*Resident dentist.* Significant for the prisoners' health has been the institution of a resident dentist, who, with six assistants, is kept busy each day. In one month, as many as seven hundred and fifty treatments were given. Efficient as is the work of this department, it is to be regretted that there is no state fund available for such work as bridges and gold caps. This is not a luxury and those unfortunates who have no means of their own and no friends to provide for them are compelled to go without.

*Hospital.* There are now two resident physicians who devote all their time to the prisoners. Numerous improvements are being made in the hospital and a special open-air tuberculosis ward is being established with accommodations for sixty or seventy patients. In view of the new order of medical examination of prisoners on being received at the prison, it would seem more than necessary to add to the hospital a receiving ward in which the men might be isolated for observation before being admitted to the prison public.

*Free commissary.* On entrance to the prison in addition to the old kit, each man is now provided with a tooth brush, tooth powder, soap and comb, handkerchiefs, a bath towel and two face towels, which are renewed as needed. Tobacco is furnished weekly, either in the form of pipe, chewing or cigarette tobacco. The old clothes taken from the incoming prisoners are fumigated and whatever is serviceable is sent to the tailor to be repaired and renovated. This fumigation saves many dozens of suits from the garbage pile. On dismissal, the short-term prisoners are furnished with their original suits of clothes; the others generally have a suit made to order from cloth of their own choosing. Occasionally men ask that they be given used clothes, rather than new suits. The institution of the free commissary, as this extra kit is known, is one of the salutary innovations for which the new regime must receive fullest credit. Baths must be taken at least once a week and oftener if needed or desired.

*Medical examination.* On entrance, in addition to the other routine of the prison, each man is given a careful medical and dental examination. When there are any physical or organic defects the man is given hospital treatment before being put to work. An official who is chaplain and educational director interviews the newcomer as to his social and family and educational history and endeavors in every case to put the man in touch with those agencies which will make for his best interests.

*Educational activities.* After the work of the physician and dentist, the man is taken to the Chaplain and Director of Education. He examines the man carefully as to his mental measurement and degree

of moral training. If the man is illiterate he is assigned to school. Young men in need of rudimentary training are assigned to half day at work and half day at school. Men of more mature years are placed in night schools. Those who have already had the benefit of grammar grades or high school training, etc., are encouraged to enroll with the extension division of the University of California for courses in any of the various subjects taught by correspondence. In the short time that this opportunity for education has been available to the inmates of San Quentin, more than 578 have enrolled—about equally divided between agricultural and academic courses and 123 have completed their courses. In the agricultural division the most popular courses, and those in which the men seem to do best are alfalfa, dairying, poultry, and swine husbandry. The largest enrollments under the academic division are for courses in Spanish, English, commercial arithmetic and shop arithmetic—a special course to meet the needs of mechanics. In order to assist those taking correspondence courses, special classes have been formed and each day from 5 p. m. to 6 p. m. one of the groups meets in the library and spends an hour going over the lessons with the help of an instructor. Every third Saturday one of the professors from the University of California supplements the correspondence and class work with a lecture. The results are very gratifying. The men are responsive and the progress of many has been excellent. In addition to the hundreds who do their full days' work and are ambitious and energetic enough to spend their evenings on correspondence lessons, there are 99 young men in the day school and 81 middle-aged men in the night schools.

The library is also under the management of the educational director. Meeting and talking with the newcomer gives him an opportunity to estimate his educational needs and degree of moral training and meeting the man as he does in the library gives him a good chance to direct his reading. We now have over seven thousand books in the library, very well circulated. Romance and fiction lead in popularity and history and biography, travel and education and works on the useful trades and agricultural topics are also popular and there is considerable call for works of reference and books printed in foreign languages. The right of drawing books is accorded to all prisoners and the records show that the number who avail themselves of this privilege is constantly increasing. At the present time 70 per cent of the men draw books. Current magazines are bound quarterly, as are also the reports from the Department of Agriculture. The library is still badly housed and inadequate in its equipment. The avidity with which the men read books should be an incentive to the state to provide more adequate facilities along these lines. Religious services are held regularly by various denominations and churches.

*Recreation.* Recreation is provided in various forms, such as shows and entertainments, by the inmates and outside talent, baseball games and the like. Better accommodations in the recreation hall are being provided and this department will no doubt be improved as time and means permit.

*Lock-up.* It is to be regretted that the prisoners spend so much time in their cells, thirteen hours on week days and sixteen hours on Sundays and holidays. To say the least, this is detrimental to men accustomed to active lives, is bad for their health and has little to be said for its moral and regenerative effect.

*Industries.* The prison industries are being developed rapidly with the hope that more men will be engaged in the constructive work. More than eight hundred are still employed in the jute mill to our great regret. Although this has been a profitable industry to the state, from the point of view of penology, it is of little or no use in the regeneration or reformation of the prisoner. As, in this present year, the mill is a losing proposition from the financial point of view, it would seem a good opportunity to change to some more helpful form of activity. We would suggest that provision be made for doing part of the state printing in the prisons. The policy of state use is already in vogue in our penal institutions in this and in other states, where in some places we are reliably informed printing is also carried on. The value of the printing trade is certainly far superior to the jute mill. The farm is an almost negligible factor, which is due no doubt to the character of the land about San Quentin, but even at that, we should like to see these outdoor activities developed. They are valuable from every point of view. Safety devices are being installed in many of the industrial departments so that the lives and limbs of the inmates are better protected.

*Discipline.* The solitary cells in the old sash and blinds have been abandoned and the dungeons are only used in extreme cases of persistent insubordination and refusal to work. The men have easy access to the warden for referring and discussing their grievances. The general improvement of conditions has made the problem of discipline decidedly less.

*Women's department.* The women's department has a new matron, Miss Jessie Whalen. The physical condition of this department is only fair, but the same good spirit that pervades the other departments of the prison can be noted here. New mattresses and pillows of good quality have been provided for all women, and commodes, instead of the smelly buckets of another day, but on the whole there is an insistent need for an entirely new department. It would be a great opportunity for the state to lead in such an institution for women offenders. We should like to suggest that at the earliest opportunity better means be



furnished the women for industrial training and occupation than are available at the present time.

*Dormitories.* We should like to suggest that the dormitory system be introduced in both departments of the prison as soon as feasible. While we believe that the dormitory is not good for all, yet we feel that there are a number of men who would be improved by congregate living. We understand that the morale of the band is probably better than that of any other part of the prison, not only because they are picked men, but because of their more nearly normal life by reason of their living together.

*Visitors.* The administration has eliminated the entertainment at meals of casual visitors as an improper expense to the state. We should like to see the visitors to the prison, barring those Commissioners who are interested and properly accredited students of penology and sociology, barred from visiting our prisons inasmuch as it seems to be an inhumane proceeding to permit these unfortunate men to be looked over like cattle in a pen by casual visitors who are only sensation seekers.

While we appreciate the force of the argument brought to bear by prison authorities in excluding women from the prison, we believe that it would be better for the men if proper women visitors were occasionally allowed. In view of the fact that these men are to be prepared for normal useful conduct on their return to the world in which women play no small part, it would seem desirable that they should not be excluded from the prison. In a word, there should be discrimination in the admission of visitors, but it should not be along the lines of sex.

*Toilets.* We believe that the present open-air toilets should be eliminated or modified, as they do not make for the better sense of decency on the part of the men.

*Youthful prisoners.* We regret to note a number of young boys under the age of twenty-one in the prison population. While every effort is made to segregate them and to protect them we believe it would be for the best interests of such offenders to be in another institution, as their constant association with older and more hardened criminals can have no good results. This fact only emphasizes the need for a reformatory for first offenders.

In conclusion, we wish to compliment the San Quentin authorities on the general trend of affairs in the prison at the present time. What has been accomplished is significant, but most significant is the fact that the present administration knows what it wishes to accomplish in the future along the lines of helpful activities for the men entrusted by the state to its care. Again, we wish to assert our strong conviction that a reformatory for first offenders from the age of sixteen to thirty years is one of the imperative needs of the state.

## FOLSOM STATE PRISON.

J. J. SMITH, Warden.

Folsom Prison is situated in the rolling hills of Sacramento County on a tract of land consisting of some four hundred acres. The location of this prison in the open country makes possible a great deal of agricultural activity and development along this line represents one of the most hopeful features of this institution.

The present warden, Mr. J. J. Smith, took charge of the prison in November, 1913, taking the place left vacant by Mr. James A. Johnston. Mr. Smith has been in the prison service for a great many years and is well acquainted with all the different phases of the work. He possesses the confidence of both prisoners and officials and he is constantly striving to better the conditions of the institution. Before his advancement to his present position, Mr. Smith was captain of the guard.

*Discipline.* The use of the strait-jacket has been entirely done away with, and practically the only form of discipline now being used is confinement in the cells of "Back Alley" and a reduction in food allowance. The cells in this alley are about the same size as those used for two prisoners and the ventilation is practically the same.

There have been two serious outbreaks during the past year. One occurred last spring when several incorrigibles who were confined in the unfinished insane hospital attempted to make a break. The result was that four of the prisoners were killed. This group had been removed to this out-of-the-way place because of the terrific noise they had been making in the disciplinary cells of "Back Alley." The second outbreak occurred just as this report was going to print. Two guards and two prisoners were killed, while one prisoner escaped. Aside from these incidents the discipline has been fairly good. The "dead line" in front of the captain's office is still maintained, but the former strict emphasis is not laid upon it.

The rule against guards holding conversation with the prisoners except in the discharge of duties does not seem to be strictly enforced and it is probably just as well that it is not.

The outward display of firearms is rather noticeable and it would appear to be desirable that this be changed. The steady advance of the "Honor System" with those men who work on the farm ought to make it entirely feasible and safe to make this change in this department at any rate. At the present time there are about forty men of the eleven hundred working under the honor system; a state officer goes with them, but his duties are to supervise their work and not to act as a guard. If the entire farm could be worked by men under this system, a great improvement would result in the constructive work of the institution. According to the opinion of Warden Smith 25 per



cent of all the prisoners could be worked on the honor basis. The growth of this system has been gradual under the former warden and the present warden and there is no doubt but that the next year will see the plan developed very materially.

*Housing, ventilation.* All the prisoners are housed in the one large cell house which contains three blocks of cells, two tiers high. There are no single cells; each cell contains from two to six men. The cells containing two men are about 6 x 9 x 8 feet; the other cells are about the same width, but much deeper. The doors are solid steel, with holes bored through for ventilating purposes. No sunlight ever enters any of the cells and the corridors are lighted by skylights and small windows. There is one room 25 x 40 x 14 feet which is used for a dormitory; sixty to seventy men sleep in this room every night. The room is equipped with three tiers of beds and a table. Figuring on sixty men, the per capita air space of this room is 233 cubic feet, which is much below par. The light and air comes from four windows located at one end, and one door.

The ventilation of the cells is doubtless a great deal better than it used to be, but it is still very poor. Each cell is connected with the artificial ventilating system which draws part of the bad air from the cells, but this system does not succeed in drawing in a sufficient quantity of fresh air, especially in those cells which house from four to six men.

The new cell houses will greatly relieve the present overcrowding. When completed—and it is hoped that this construction will be pushed to a rapid completion—there will be 512 single cells, each fitted with toilet and wash bowl. This cell block will be surrounded by a wall which will extend about 20 feet above the cells. These cells are practically identical with the new ones at San Quentin.

The prisoners are each provided with two and one-half blankets, but no sheets nor pillow slips. The blankets seem to be in fairly good condition. Those who have sheets are allowed to keep them, but none are distributed.

*Lock-up.* On week days the prisoners are locked up at 5:30 p. m. and they remain in their cells until 6:30 a. m. On Sunday they are locked up at 3:30 p. m. This makes a total of thirteen hours that they spend in their cells on week days and fifteen hours on Sundays and holidays. To be required to stay in the poorly ventilated cells for that length of time is very bad for the prisoners in every respect, and there never can be a great deal of real constructive work done so long as they are forced to remain locked up for this length of time.

*Dining-room and dietary.* The dining-room is rather dark and must be artificially lighted at every meal. The tables are bare and all the utensils are tin. The table service is fair, but could be greatly improved by increasing the number of individual dishes and allowing one waiter for each table.

The men at Folsom are fairly well fed and there is very little to complain about on this point. The breakfast consists of mush and syrup, bread, beans and coffee; on Wednesday and Sunday mornings, hamburger steak and potatoes are added to this. The noon meal usually consists of stew or meat in some other form, beans, bread, tea, and occasionally soup. The evening meal usually consists of beans, coffee, bread, and some sort of pudding or cake. Twenty-five minutes are allowed for all meals and no one has to hurry to get through in the allotted time. The men are allowed to converse in the ordinary way with those who are near, and so long as they do not get boisterous no objections are made by the guards.

The kitchen is well equipped with steam kettles, range, and coffee urns, but the room in which the kitchen is situated is poorly adapted for this kind of work. The room is dark and the walls and ceilings are wood, which gives one the impression that the place is unclean. The room is large enough and probably some time in the future, when some of the more pressing needs are cared for, this room will be thoroughly overhauled.

The bake shop is in immediate need of reconstruction. The old oven which was installed twenty-five years ago, must still do all the baking for over 1,200 people and in order to get the work done, it must be kept going eighteen hours out of twenty-four. This constant use has practically burnt the oven out and soon the thing will be practically useless.

*Industries.* Probably the Folsom Prison is more backward in this field than in any other. The major part of the population is still engaged in the rock quarry and new construction work. There are some fifty men working on the farm; about the same number are employed in both the blacksmith shop and machine shop. There is a considerable number of cement workers, a few carpenters, painters, clerks, barbers, cooks, etc. Probably there are about 300 men engaged in work that might be termed useful. The equipment in many of these useful industries is woefully inadequate; the carpenter shop is squeezed into a little room about 20 x 20 feet and the paint shop is about the same size. The power house was built and equipped twenty-five years ago and most of the machines are sadly antiquated; the blacksmith shop is practically in no building at all, owing to a recent fire. The industries at Folsom are still in an embryonic condition and there does

not appear to be any immediate hope of relief. The present situation demands that all efforts be centered on the new construction work because of the large amount of it which must be done as soon as possible. The new cell house must be completed, the laundry must be built and there is an appropriation available for a new trades building.

The quarry men are very inefficient, and practically all the men working in this department do a minimum of work. According to the engineer, the slow progress on the wall surrounding the new cells is due to the fact that the quarries are unable to supply enough stone.

Practically all the industries are carried on with a minimum of supervision. The man in charge of the quarry maps out the day's work for the prisoners and then leaves them to do that work the best way they can. This same thing is true in several of the other occupations.

The farm consists of some 200 acres under cultivation. The new cow barn was recently finished and is now being used. This barn is a model in almost every respect and contains stalls for fifty cows, a milk room, a large silo and separator. This barn is made entirely of reinforced concrete. At the present time they are only milking sixteen cows. When the herd is increased, the separator and butter churn, which are now run by hand, ought to be replaced by power-propelled machines. When this is done Folsom will have one of the best equipped dairies in the state.

Four cement piggeries are in the course of construction, and when they are completed, the 75 or 80 pigs will have A1 living quarters. In the past, the pigs have been turned loose and allowed to exist any way they could, and this method proved to be very extravagant and wasteful. The plan of these piggeries is a very novel one, and credit for them is due to the head farmer.

The chickens, numbering about one thousand, are still housed in the old coops, but these will be torn down and replaced by modern houses.

Last year the experiment of raising tobacco was tried and it proved so successful that this year they expect to harvest close to 2000 pounds, and eventually Warden Smith hopes to produce enough to supply both San Quentin and Folsom. As the annual expenditure for tobacco in the two prisons is about \$7,500, it would mean a considerable saving to the state.

The farm presents one of the most hopeful features of the work at Folsom. It offers healthy outdoor occupation for about 75 prisoners, and most of these men are more or less trusted. The nature of the farm-work makes it essential that the honor system be used in this department, and probably the next two years will see a big development in this system, which otherwise would have been much slower.

*Education.* The most important forward step taken by this institution in the last two years is in the establishment of the Prison School.



This school had a very small beginning in October, 1913. Since its establishment it has grown steadily both in interest and size. During the month of September, there were 350 prisoners enrolled in twenty-six classes. At the present time each prisoner is allowed to enroll in any two classes, which means that he gets hours of instruction each week. All of the classes, except three, are taught by inmate instructors and their efforts are supervised by Mr. Jacobs, an instructor in the Berkeley High School, who goes up every Saturday and teaches three classes personally. At the present time the following subjects are being taught: Spanish, English, elementary and advanced, French, bookkeeping, elementary and advanced, stenography, arithmetic, penmanship, grammar, English for foreigners, mechanical and freehand drawing, elementary and advanced algebra and shop mathematics.

The greatest need of the school is a proper place to conduct the work. At the present time all the classes are held in the old chapel, which is very poorly adapted for this kind of work. There are no separate rooms, and it is necessary to conduct three classes in this one room at the same time. The tables are very unhandy, and there are other inconveniences and annoyances which tend to make the school less efficient; but in spite of these hindrances, the inmate instructors have maintained a very deep interest in the work and it is largely through their efforts that the school and the work has progressed as far as it has.

Beginning with October 1, 1914, a regular teacher will be employed who will have supervision over the entire work. This change will mean a great deal to this department and a great deal of progress can be expected during the next two years.

*Bathing.* The facilities for bathing at Folsom are excellent. The concrete bathhouse contains a swimming pool which is surrounded by numerous showers. Every man has to bathe at least once a week and many men bathe oftener. A shower is required of every man before he goes into the swimming pool. A separate bathroom is reserved for all prisoners afflicted with venereal diseases.

In the cellhouse there is a space partitioned off where men do their ordinary washing. The troughs are concrete and a good flow of running water is supplied by numerous faucets. The space is thoroughly cleaned three and four times a day. A similar partition directly across is used for the urinals and toilets, and is kept in very good condition. The partitions are of cement and can be cleaned easily. There are numerous outdoor toilets which are kept in fairly good condition.

The general sanitary condition of Folsom is good. The cells are thoroughly cleaned every day and the corridors of the cellhouse are washed at least three times a day.

*Recreation.* The prison yard is well adapted for recreational purposes. Every Sunday the entire population of the prison is allowed

about five hours for baseball and other outdoor sports. Sunday is the only day that all the prisoners have this outdoor recreation, but certain prisoners who work in the dining-room and cellhouse have time during the day which they spend on the grounds. On holidays vaudeville and moving picture shows are provided in the dining-room.

The prisoners are allowed considerable freedom in regard to the things they may keep in their cells. A great many own phonographs and various kinds of musical instruments, which they can play twice a week. The members of the band are also allowed to practice in their cells twice a week.

*Library.* There are about 3,000 volumes in the prison library, which is entirely inadequate for the needs of the institution. Each man is allowed to draw books once a week, and he can draw as many as he thinks he can read during the week. An annual appropriation for new books should be made to build up this department.

*Hospital and medical.* Each new prisoner is subjected to a thorough medical and physical examination as soon as he is admitted. This examination is very complete and is given by a thoroughly competent physician. A resident dentist gives the teeth a thorough examination, and any work that is needed is done free of charge with the exception of gold work. If a prisoner has any gold work done he must pay for the material used. It is unfortunate that the state makes no appropriation for this necessary work.

All the men are allowed free access to the physician, and where treatment is given a thorough clinical record is kept. This enables the resident physician to keep a very close tab on all the prisoners.

The clinic is located in very crowded quarters and this hinders the efficiency of this department to no small degree. The room is too small for the medical work alone and to make matters worse the dentist must do his work in there also.

The hospital is divided into two departments; one for general hospital patients and the other for tubercular patients. The general hospital ward contains thirteen beds and is altogether too small to meet the needs. The room is ventilated by windows at one end, which provide only a fair circulation of air.

The tubercular ward is about the same size as the other ward and is very poorly adapted to this class of patients. The room is poorly ventilated and is only large enough to care for the most advanced cases; all others are allowed to mingle with the rank and file. There is great need for more room and better equipped quarters for these patients, and until these are provided and more cases segregated the health of the entire prison population will remain in danger.



*Insane.* There has been no work done on the insane hospital for some time. All cases of insanity are immediately sent to one of the state hospitals and are not returned until they are cured.

*Special needs.* There are a great many things needed at Folsom and the following list is arranged in order of importance:

1. New laundry. The present laundry is a disgrace to the state. It is located in an old building and every bit of work is done by hand. The new laundry will be the next piece of new construction started.

2. Equipment for new bakery.

3. New quarters for hospital with new equipment. If the entire hospital can not be removed, new quarters should be provided for the tubercular patients.

4. New trades building. The appropriation made by the last legislature should be used just as soon as possible in order to place the industries on a more constructive basis. This would include new equipment for the power house and make it possible to have electricity all day long.

5. Stock for the farm. The present herd of 16 cows should be greatly increased.

6. New horse barn outside the wall.

7. Consolidation of the two heating plants and conversion of the coal burning boilers into oil burners. This last would cost \$1,500 and would mean a saving of \$500 a month in fuel.

8. Refurnish the officers' and guards' quarters.

9. Line the water reservoir with cement. Money for this work is available and it will probably be done during the next year.

These are some of the most pressing needs. All possible speed should be made on the new cell house in order that the present overcrowding can be done away with.

Stripes are still being worn, but regular uniforms, such as are now being worn at San Quentin, will be used after January 1, 1915.

### PRESTON SCHOOL OF INDUSTRY.

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CALVIN DERRICK, Superintendent.

The Preston School of Industry lies in the foothill country on a 650-acre tract of land, most of it less arable than it should be. That part of it which is cultivated is given to truck gardening, a cultivation of the vine, the plant and foodstuffs which serves the double purpose of supplying the raw produce for the use of the institution and the opportunity

for an agricultural education to some of the students. The work here is carried on at a fair standard; further plans imply employment of directors, of agricultural work versed in new theories, as well as traditional practices of farming.

*The plant and equipment.* The plant and equipment is on the way to satisfy the most exacting standards. The three great central buildings, excellent samples of "monumental" building so regrettably frequent in all parts of the United States, must of course still be used. Under the intelligent direction of the board of managers and the superintendent now controlling the policies of Preston, these old-style buildings are slowly but surely being supplemented by a number of smaller cottages and separate structures. Plans for new buildings, which will permit the much-needed segregation of the students according to mental condition, age, previous social contacts, etc., have been made and the money for them allowed by the legislature. The new buildings which have been completed during the past two years have, like the farmwork, served two purposes. On the one hand they represent the beginning of the segregation policy whose high reformatory value is now so generally conceded and are therefore to be cottages, slightly, yet on the whole inexpensive structures, which are to provide shelter and opportunity for the boys sent to Preston. On the other hand, planning and constructing these has given a valuable practical experience in the building trades to a large group of boys.

The Honor Cottage, which has been in successful operation since July, 1913, is a fine example of the student labor. It was built entirely by them and its furnishings were largely made by them. To every student who shared in its construction, as well as for the superintendent and board of managers, it is a just source of pride and keen and continued interest. The cottage is so planned as to give to the 25 students it can house a life wholly separate from other groups. In the basement is a dining-room, locker-room, showers and storeroom; on the first floor a large living-room with simple yet very tasteful furniture, and a wide open fireplace in which the boys take especial satisfaction, both because they built it and because of the warm blaze, "and no smoke" which it offers them as they gather about it in the evenings. The third floor contains a spacious and well ventilated dormitory.

The work on the buildings goes slowly. Since, however, the cause of this delay is the fact that the work is being done by the students who thus get instruction for future breadwinning, impatience to see segregation begun must yield to the necessities of the situation.

The better organization for securing cleanliness and proper household management for removal of garbage, control of the fly pest, proper protection of the food supply, in general the more nearly perfect arrangement for good sanitation which the careful observer can not fail

to note all over the institution, is another among the many proofs of the real executive ability and intelligent leadership of the present superintendent.

*Diet and dietary.* In the past, complaints of the food, a common institution difficulty, were continuous. To meet this difficulty a trained dietician has been put in charge of the kitchens and dining-rooms. A consequent rapid improvement is reported equally in the food and in the temper and health of those partaking. The same person has also laid plans for a better service of the food and has organized a group of the boys less likely to succeed in more technical trades with the thought of drilling them in the art of waiting on table. A vast dining-room which looked so cruelly institutional with its bleak white walls and its long tables has received a coat of paint of more attractive color and small tables enable the boys to group in a fashion that changes the appearance of the room from that of a place where paupers are herding to at least a semblance of a fairly pleasant hotel dining-room. Even in its present form, the room is by no means what the management would like, but they will probably do nothing more because their idea, which the next two years will probably see carried out, is to have each group of boys dine in their own cottage, as the boys of the Honor Cottage and those of Company E are now doing.

*Hospital and medical service.* The plans and appropriations of 1913 call for a new hospital building. The present hospital of two wards on the third floor of the main building is about large enough to meet ordinary needs, but is too small for an institution so isolated and with so many persons in residence. A resident nurse is in charge; her work should be supplemented by that of a resident physician who could also take up a much needed campaign of preventive medicine among boys, fifty per cent of whom are rarely sick but are in poor physical condition and wholly without any notion of personal hygiene.

*Official force.* The new policy, in relation to the administrative staff, has had as chief object to get and to keep a higher grade of officials than those usually found in industrial schools. To carry out this policy, the management is gradually providing for a general raise of salaries. Likewise it has arranged for social and intellectual stimulus which it is hoped will offset the tendency to drop into a dulled and routine existence so often consequent to the isolation of institutional life. Salaries have been slightly raised, a thorough turnover of the personnel of the staff has come about, not by arbitrary dismissals, but as a result of a tactful policy which has gradually made those officials who did not fit into the new regime own their incapacity for the work as planned. This method has avoided all the fret and stir ensuant upon so-called "clean-ups" and has had the further advantage of preventing that unfortunate reaction upon the inmates which usually follows a sudden and wholesale shift among the officers who have them in charge.



In accordance with the plan to give the ninety or more officers an incentive to remain and to develop, social teas and evening gatherings have been devised and led by Mr. Derrick and "Mother" Green. Lastly, perhaps, for the first time in the history of the state institutions, a course of University Extension lectures was given last winter especially for the benefit of the staff, although the townspeople of Ione were admitted to be part of the audience.

As result of all this, there has undoubtedly been a steady improvement in the personnel of the official force and more is planned.

The board of management with the consent of the State Board of Control has, at the suggestion of Mr. Derrick, offered to the president of the University of California a plan for three fellowships whereby there will be in residence at Preston each year, as members of the staff, serving at least half time, three graduate students from the departments of law, medicine, agriculture, economics, psychology or education, who are at once to be of service to the institution as guides in special subjects and investigators of special problems. This plan should give to Preston a connection with the University sufficiently close to promise that direction and protection of institutions primarily educational which the University is expected to give. It should likewise bring to Preston a steady stream of thinking young men or women—men or women who should give to the boys there the inspiration and development that the collegian is supposed to bring and to the state an interpretation and guarantee of what Preston is doing which will permit a new feeling of security that the money expended and the efforts made there are free both from the imputation of "graft" and of mere time-serving policies which have too often been attributed to it in the past.

*Self-government.* The change of greatest importance, during the two years under discussion, has been the installation of a system of self-government. As this is, we believe, the first time that such a system has been tried in a state reform school, the experiment will be watched everywhere with great interest. Thus far everything indicates success. Before Mr. Derrick took the leadership at Preston, the methods of discipline were but little different from those used in the most ordinary institution of like character. The officers in charge of the companies into which the inmates were divided were each in absolute command and there was little check upon the way each exercised his authority. Discipline was administered by the demerit system, a system whereby any company officer could take a certain number of credits away from a boy for anything the officer chose to consider infraction of rules. This system of demeriting was a source of a great many abuses on the part of the officers and furnished naturally an excellent breeding place for the germ of discontent. In fact, when Mr. Derrick came to Preston, there was a spirit of almost open rebellion among the boys, and all agree

that the chief cause of it was a more or less justified sense of unfairness due to this pernicious demeriting system.

All this has largely disappeared. One of Mr. Derrick's first official acts was to do away with this system. Then came the more important and far-reaching change of substituting for this old autocratic if not arbitrary control, a system of self-government. The difficulties in the way of making this change were many. Practically the entire official force knew nothing of the workings of the new plan and most of its members were openly hostile to it. Alone, then, in the delicate task of developing an interest in and an understanding of this movement among students and staff, Mr. Derrick has quietly ignored this open opposition and with faith and determination has carried the movement through a time of hesitation to a successful installation. The boys have drawn up their own constitution, three times elected their own officers, have occupied many hours, heretofore spent in inert relaxation, preparing for themselves a penal code and have regularly held court where all the disciplinary cases are solemnly and on the whole fairly dealt with.

A wise selection of Mr. Montgomery as special guide for the boys has helped to get the machinery of this important work oiled and running smoothly. Gradually the other officers have become sympathetic and helpful.

Up to the present time, the chief thing accomplished by this system has been the regulation of behavior. Until recently corporal punishment has been used with great frequency and a reduction of this form of punishment is made very hard by a general belief, on the part of the officials, in the "paddle." There is a definite feeling among a great many of the officers that there has been no punishment until the strap has been used. This feeling is the result of long years of institutional training and formerly it found concrete expression in the attitude of the preceding assistant superintendent. During the last ten months, however, this feeling has gradually abated, under the regime of a better and more broadminded disciplinary officer. There is a definite need for a limited amount of corporal punishment among certain boys who are not amenable to the new theories of discipline, but the uplifting influence of self-government will probably have the effect of reducing this need to a minimum.

Plans are also well afoot for introducing a system of payment for work, a system which would allow a maximum of credits for good work and pay the lazy more in accordance with their effort or lack of it. As a substitute for the existing regulations by which each boy gets 10 credits per day irrespective of the quality or quantity of work he performs, this ought to improve any boy's capacity for interest in his work.

*Honor system.* Hand in hand with the development of the self-government plan has grown the honor system. A large percentage of



the boys in the school are even yet never away from the watchful eye of the state officer. Very gradually, however, an increasing number of the boys have been allowed more freedom during their working hours. At present, many of the boys working on the farm and in the dairy are without this constant supervision. Though the plan receives serious reverses now and again when the boys make a "getaway," yet the escapes diminish rather than increase as the honor system stays.

The Honor Cottage, already described, is the final point of this system of self-government and the crown of the honor system. Boys who are about to leave the institution are those chiefly eligible to residence at the cottage. When a boy enters this cottage he is placed entirely upon honor, he goes to and from his work without supervision and is only subject to the rules of the institution for beginning and ending the work day. He spends his evenings on the playground or in the living-room where games of all sorts are provided and where refreshments of some kind are often served by him in hospitable fashion to visitors. If he wishes to visit any of the company basement meeting rooms or take a walk about the grounds, he has only to ask the permission of Mrs. Green, the rarely able woman in charge of the cottage, whom the boys and every one else love to call "Mother" Green. At 9 o'clock he goes to bed in a dormitory where the windows are not barred and the doors are unlocked. In a word, the boy is being prepared to return to a world where all he will have to protect him from failure will be his own powers of self-control and his own willingness to do regular and satisfactory work. When the boy from such an honor cottage is finally paroled the change is not the pitifully sudden, abrupt one which it was when paroled directly from the companies. The outlook for the successful reformation of such boys should be doubly great.

*Schooling.* Last year about four hundred boys were enrolled in the eight different grades of the school organization at Preston and these were directed by a teaching force of six women and two men, one of the latter a supervising principal. This school work but slowly approaches the ideals of the management. The chief handicap is the varying types of boys to be dealt with and the impossibility with the present school equipment of segregating sufficiently and giving enough teachers to permit small groups. Boys of nineteen, with almost no education, must, because of the lack of sufficient number of teachers and school rooms, be placed in lower grades with young boys. The time of the perplexed teacher is, as a natural consequence, largely wasted in supervising the disturbances created by the uncouth, retarded, overgrown "boys." All the classes are still too large. There are, it is true, not more than twenty-five or thirty-five students in each group and this may seem a small number as compared with the embarrassing seventy-five often presented to the average teacher in the large city school. Reflection, however, will

show that at Preston the nature of the boys attending calls for much individual and special work of a kind impossible for one person to give to a group larger than ten or fifteen. This may seem an extravagant and idealistic standard, yet it seems fair to insist that it is merely common sense. If the object of such schools is to give, to the boys sent there, the facts and principles necessary to make them capable of establishing normal social relations, and if, further, each of these boys represents so notable a deviation from the standard of knowledge and principles required, it is plain that, unless a larger amount of time than is usually given to such boys can be devoted to them, no real results can be expected. The whole equipment, expensive as it is, risks being wasted since it is not of a kind calculated to accomplish the end for which it was set up.

What goes before is by no means criticism, only a plea for the aid necessary to carry further improvements desired equally by the management and this board. Much, and all of it on progressive lines, has already been done to organize a better schooling system. There is less of the indiscriminate mixing of young and old than formerly, even though what has been referred to remains. The youngest boys are now formed into a separate company, Company E, and these boys are already practically segregated from other students, for they have their own teachers as well as their own playground, their own cottage and their own dining-room. But there are still sixty boys in the company.

This Company E of sixty boys went to Sebastopol this summer, picked fruit on pay for each one half day during six weeks, lived the life of any group of boys in camps, with only the necessary discipline imposed on any large group of boys. They brought home earnings to the amount of several hundred dollars, health, and, it is hoped, inspiration to good work and a more regular and self-supporting life. Since the summer these, the most powerful group of boys, have been kept fully apart from the others.

The school curriculum needs widening. A demand for clerical training of various kinds, typewriting, shorthand, bookkeeping, shop arithmetic, etc., should be answered by courses in these commercial subjects.

*Industrial.* The industrial education is still hampered by the fact that the needs of the institution must be the first thought in the industries undertaken, rather than the training of the boy for commercial, industrial or agricultural pursuits. This is not as bad as it may sound. The needs of the institution are so many and so varied that, even with the principle of production for use at the institution, at least fifty per cent of the paroled boys have received training in one of the following industries: Brick and cement work, plumbing, electrical work, printing, boots and shoes, cabinet-making, carpenter work, tailoring, baking, dairy.

etc. The training they have thus received has always the advantage of being practical work as well as industrial instruction.

There is, however, the management tell us, much yet to be done in relation to the industrial training that can be offered. During the coming year, Mr. Derrick plans to give his personal attention to the reorganization and development of trade training and to increase the shop space whose narrow limits at present prevents the application of this class of training to all those qualified to take it.

It is important to keep in mind the large percentage of fundamentally unfit with which this school must deal. For these defectives, or borderline types, the proper place of course is at a school for the special defective class they represent. But, during the time they must still come to Preston, it is only right and proper that the routine work of the place should be assigned to them. It is wholly unfair to keep, in the house squad, for a very long time, any adolescent boy with a healthy body and mind which can be cultivated. Such work should be and is, we are informed, to be so organized that each boy does a legitimate turn at it, but no one is kept steadily at it who has any promise.

*Segregation of types.* The fundamental hindrance to the real character development which the scheme of self-government and standard schooling imply lies in the present impediments to any exact segregation. Mr. Derrick has taken the right first steps to get past this difficulty. He has installed a man to make the Binet tests and thus get some notion of the mental age of each resident at the school. This expert finds that a conservative estimate would justify the statement that about 30 per cent of the boys are defectives or at least morons. This fact constituted, nothing can at present be done. On the one hand the courts of the state as yet neglect to note the difference between plain criminality and criminal defectives. They send to Preston a tragically varied set of "boys" ranging from men of 28, hardened in crime, vice and lust, to boys of 8, guilty only of runaway habits due to neglect or vicious parents. The blame does not always lie with the judge so committing except that he has not, perhaps, informed himself as fully as he should about other means available for caring for such boys. The only segregation of all the boys thus far possible has been to classify them in companies roughly corresponding either to age or to behavior. Moral degenerates or defectives can not as yet be specially dealt with and moral degenerates are a sickening impediment to the effective operation of any honor system or progressive training. Their sinister influence spreads the more readily because of the presence of so many mental defectives. A large number of these moral deviates are kept in a separate company which is under the strict control of state officers.

Only when the new cottages are completed can this serious handicap to progress be done away with.



*Athletics.* Increased stress has been laid upon athletic work during the past year and the excellent results show what promise this type of recreation has, especially for adolescent boys. All branches of outdoor sport have received attention. Regular schedules have been run in baseball, football, basketball and track, and the interest of the boys in all these branches is very keen. The grounds devoted to recreation are being made better each year and are now quite extensive. Last year a running track was built and was used during the spring. The gymnasium is located in the basement of the chapel, and, while it is not a very suitable place, it is used a great deal. A large number of boys actively take part in this athletic work. The inter-company track meet had 100 entries; during the baseball season there were two teams from each company playing regular games each week and the same was true of football and basketball. Gymnasium classes are held every morning and afternoon and about 400 gymnasium boys get gymnastic work once a week. During the summer the swimming pool is in constant use.

*Records.* For those who understand the vast importance of good record keeping, as a means to measure the inevitableness of these social failures whose presence in every community necessitates the heavy expenditure of time and money which institutional care requires, it will be the source of satisfaction to know that a new system of records is being installed. The system calls for five blanks: (1) the commitment blank with a comprehensive questionnaire to be filled out by the court or probation officer committing the child to Preston, (2) a social history blank to be filled out at the school, (3) a record of the results of a mental examination, (4) a record of the physician's examination for general physical condition and especially for physical defect, (5) a discipline and credit sheet upon which will be recorded punishments, school records, credits, etc.

To use this system successfully, better cooperation with the various probation officers is looked for. The State Board of Charities and Corrections hopes to give its best services in aiding to do whatever is necessary in order that this vitally important next step be taken.

*Recommendations.* The quiet influence of self-government, the honor system, better schooling, a development of athletics and a better staff of officers have made possible a great many things. The band has made several trips to surrounding towns and every time its members have made good. The track team and band made a trip to Berkeley last spring and won there a notable triumph. Any one who saw the behavior of all the 35 boys and the use they made of their liberal freedom needed no further proof of the success of the present policies in the Preston School.

Preston is a different place today from what it was two or three years ago, a place infinitely more hopeful for the boy who is sent there. The

present administration is making the most efficient possible use of the actual equipment and is steadily improving it. But when all has been said, Preston is still far from embodying the standards of those who have it in charge and a management so far-seeing, reliable and wholly devoted to the work should have the sympathetic backing of every intelligent citizen of the state for the furtherance of their plans. If this institution and that at Whittier are to be industrial schools for lusty young rebels against social rulings, they must not also be forced to perform the functions of a moron colony and an adult reformatory. The facts that three classes of students, adults, boys and defectives, must be dealt with wastes deplorably the energies of the officials and blocks progress toward accomplishing the true purposes of this school. When the courts shall have a reformatory for the younger men whom they now send to Preston because they hate to send them to the penitentiary, when these same courts shall have machinery for discovering defectives and a place to send these for appropriate care, then the authorities at Preston will be freed to do the work really assigned to them. Among the many needs at Preston, then, the greatest perhaps as at Whittier, is the establishment in this state of a reformatory and of a colony for the custodial care of morons, borderline and degenerate types.

### WHITTIER STATE SCHOOL.

Whittier.

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Close to the foothills about 12 miles east of Los Angeles, with lawn and pond, flowers and palmtrees, the tower of its large main building conspicuous for miles around, with its well-kept orchards and farm, some two hundred acres of excellent land, all told, the Whittier State School has a splendid property, but one which has with the passing of time, become quite unsuited for the purpose for which it has been used.

There are electric cars at its front gate, a steam railway bisecting its grounds, state highway or county roads on three sides, automobiles, motoreycles, and joy riders, turning night into day, a city across the street, and 400,000 people but a few miles distant, a cottage system earnestly advocated for years, and a congregate system actually realized.

During the past two years Whittier has been passing through an experience that is doubtless without a parallel. From conditions calculated to destroy all hope, a new Whittier school is emerging that gives great promise of rendering a real service to the state. Just prior to the beginning of the last biennial period, in an effort to solve the



problems of the institution, and to make it do the work for which it was created and maintained, the trustees of the school invited Mr. Fred C. Nelles to accept the superintendency.

Setting aside the idea that the boys and girls were essentially criminal and unworthy of the consideration given those outside an institution, the new superintendent proceeded with simple directness to give practical expression to a friendly interest in their welfare. All extreme forms of punishment were discontinued. The child must receive justice, and that without fail, but he must also be treated with consideration and his individuality be respected. By some this was regarded as foolish, by others as unwise; and there were those of the administrative staff whose sense of the proprieties was so rudely shocked that they resigned. A bitter opposition to the new regime made every effort to prevent it from succeeding. In the girls' department this resulted in seriously disturbed conditions and was only corrected when Mr. Nelles installed an entirely new force of officers, as he ultimately found it necessary to do. From that time on conditions improved, and the department was running quietly and the new policy was finally established when it was delivered to the Board of Women Trustees, who succeeded to its care as the nucleus of a new California School for Girls.

Practically the entire indoor life for boys was lived in one great structure known as the "main" building. This building of five and one-half stories with its tower rising high into the air, had an imposing appearance. But for all the years since it was built it had stood in the way of the realization of the purpose of the founders of the school, namely, "the Cottage System." Playrooms, dormitories, library, school rooms, all were in this central location. Officers' quarters, superintendent's apartments, offices, detention rooms, and hospital were also there, and suddenly it all had to be vacated. Attached to the Trades Building and close to the power house was a 60-foot brick smokestack. Without warning, just before daylight, one morning of March of 1913, this 60-foot came crashing down. Tons of brick crushed through the roof of the power house and Trades Building. Power plant and heating system were wrecked. Printing department, tailor shop, plumber's shop, shoe shop, band room, all had to be immediately abandoned.

A telegram from the Engineering Department at Sacramento requested immediate investigation of the various buildings, with the result that the entire main building and the two-story Trades Building were declared to be unsafe. Emergency relief was asked of the legislature, and arrangements made to transfer over 130 boys to the other state school at Ione. Those boys selected for the transfer, without exception, quietly stepped aboard the train and all arrived at the Preston school without mishap or any unpleasant incident. Most interesting

were the trips, when in groups of from 20 to 40, at different times, some of these boys were returned. Auto trucks were employed to minimize the expense. By day and by night, over the mountains, and through the cities the laughing, singing crowd of boys, full of the fun of such an outing, traveled the 500 miles between Preston and Whittier. From daylight to dark, and through the night, while eating the picnic meals by the roadside, the hours were filled with opportunities to quietly slip away unseen; notwithstanding, no boy on any trip failed to complete it, nor was any single attempt made to take advantage of the chance to run away. Probably these trips stand unique in the handling of state school wards.

The shoe shop found itself in the hayloft at the stable. The tailor shop secured a corner of the dining-room; an unfinished cottage was hurriedly completed, and where 25 boys were supposed to go with a house father and mother to look after them, were quartered two officers, the mending room, operating room and dispensary, dentist, superintendent's quarters and 70 boys. The barn, tool house, tents and sheds were pressed into service for sleeping and living quarters. Then came the killing frost of the winter of 1913 and \$10,000 of income was lost in a night.

Believing that as a maximum limit, only 85 boys could be accommodated at Whittier, the legislature made an appropriation on this basis. The new California school for girls was created by the 1913 legislature. The girls' department of the Whittier State School was to be absorbed by the new State School for Girls. Appropriations were made for Whittier on the basis of the girls' support coming from the money set aside for the new school. By reason of unlooked-for conditions, it became necessary for the Whittier School to continue to support the girls' department for several months, an unexpected drain of over \$10,000 on resources already much reduced.

Tuberculosis in the herd of dairy cattle, and a riot of Johnson grass and morning-glory in the fields had to be met and overcome. It is questionable if another institution anywhere has been called upon to pass through as many trying experiences in so short a space of time; truly a task calling for the most intelligent supervision, for limitless patience and the most persistent effort.

The response from the boys was remarkable. One group of some two dozen used an open lath house belonging to the flower garden for their headquarters. Proud of the freedom and the trust shown them, they conducted themselves in an exemplary manner. The system of "passing" the boys from one part of the grounds to another fell into disuse. Mutual confidence and respect created a homelike atmosphere that did away with much of the customary institutional feeling. A

loyalty to the school and a desire to justify the friends of the boys in their support and to guard the "good name of the school" grew up, and this is now regarded as one of the most effective checks on misconduct. "It will hurt the good name of the school," is considered the last word. The old anxiety to rush away the moment parole or discharge was granted is not as much in evidence; and there are those who leave with the almost sentimental regret of the graduate as he leaves his alma mater. To some it is in spirit the nearest they have approached to home; to many it has been the first of consistent, willing effort to do an earnest day's work. To others it has meant a trade mastered; thus a means of earning an honest living has been assured them. The response to the sincere and human friendliness has been remarkable. The more severe and at times questionable methods that have been employed as a punishment or to secure obedience to rules and regulations, have been discarded. The old time "Oregon boot" with its pounds of iron about a boy's ankle, was immediately thrown out. No corporal punishment has been given for over two years. Deprivation of privileges is mainly resorted to, and in extreme cases short periods of isolation, with a possible diet of bread and milk, is the extreme method employed. This is of less and less frequent occurrence. The boys have responded well to the new treatment, which has conserved their self-respect and appealed to their manly qualities.

Without any special organization, the boys have assumed a measure of the burden of discipline by frowning down those who would make trouble. To try to be "hard" would mean to become unpopular. To persist would be to receive from the boys as a group, treatment that no single boy could withstand.

There are no walls and for the most part no fences, and such as exist are no barrier, yet the number of boys who leave is less than ever before in the memory of officers of the school. Scores of boys can leave any day, some do from time to time, but their leaving is regarded as an evidence of ingratitude and a sign of weakness. "He will learn better," "too bad he slipped up," "wonder what's gone wrong with him now," have replaced with the boys the former jubilation over a "successful getaway." Only as a boy has a chance to do wrong and resists is he built up. Many failures occur before the old weakness is replaced by strength of character. Some boys will run away repeatedly before they wake up to the new conception that the real fight is not to get away, but to stay and to work and to study, and to make good. Not so much because he must, but because he should.

It is interesting to note that those who, through wanderlust, or for any reason, are "absent without leave," a large percentage regret their action, and come back of their own accord with "I am sorry," "I'm



willing to take my medicine and make another try." The new "another try" is to hold himself steady, up against his job, and not the old attempt to "escape."

One is reminded somewhat of the little old-fashioned school where some of the higher branches of education were not conspicuously present, but where the foundation principles of a truly successful life were made real to the boy, such as honesty, industry, loyalty and a cheerful obedience to authority. "Play clean," "play fair," is the motto in the school athletics, and its spirit has begun to dominate in all the activities of the institution. To create a desire to learn has been considered of more moment than to compel study. To induce self-control rather than emphasize a system of a ceaseless guarding and an ever-present wall of artificial restraints. And the response has come.

More work is being done by fewer boys than heretofore, the manager of the farm department stating that with half of the force he is doing more work. And of the farm, a committee of experts from the University of California, headed by Dean Hunt, after careful inspection, stated: "Matters pertaining to the farm have been worked out thoroughly and well. The Whittier State School farm is an example of an efficient, well-directed and well-planned institution."

Boys who have been paroled and discharged are remaining to complete their training, and one who had by hard work earned the money and paid his own fare to his old home in New York, and had returned to that city, actually packed his suitcase and retraced his steps over 4,000 miles between him and the institution that had befriended him. Family differences had broken up his home in New York and he wanted to be near those who after years of trial he had found were his friends. "I want to work in the school or somewhere around there, where I can get advice when I need it," was his simple explanation. A boy believed to be lost to all that was good and whose every impulse seemed to be tainted with evil, has completed his course and is now a competent printer. Out of his own earnings he has gone on with a correspondence course of the International Typographical Union, and the old life seems to be sealed off by a wall of new ideals and aspirations supported by the ability to earn his living without asking favors in the open labor market. While yet in the school a boy has taken the State Civil Service examination for blacksmith helper.

A number of boys are members of the Amateur Athletic Union of America. Band boys are paid by outsiders for their services and have made a tour of the state in a musical act. The band is much sought after for celebrations in Los Angeles and surrounding towns, appearing regularly and with credit in company with professional organizations. Boys compete in the annual Athletic Carnival and the trophy case holds, as a part of its possessions, gold, silver and bronze medals won

at the University of California Interscholastic Meet, the Occidental College Annual Carnival, the Tournament of Roses contests, in Pasadena, and numerous city and local gatherings. The school won as a permanent trophy the handsome sterling silver Reach Loving Cup, in the Los Angeles Municipal Baseball League of 1914, and the Loving Cup for the Intermediate State League of 1913, and for the past year has been custodian of the Occidental Football Trophy.

The Whittier Band is a recognized "booster section" of Whittier College in football contests, and the school farm furnishes the goat to head the "Snake Dance" that celebrates a victory. This association on an equal footing with schools and colleges and the success with which the boys have met in open contests, has exerted a very positive influence for good and indicates possibilities for development not always recognized or conceded. Speaking generally, with reference to both work and play, there is building up an earnest, wholesome spirit that will mean more of honest endeavor and a looking toward accomplishment as the real source of pleasure.

Among the trades taught with the direct purpose of preparing the boys for earning a livelihood are printing, tailoring, painting, carpentering, blacksmithing, baking, cooking, laundry work, engineer's helper, dairying, cattle and hog raising, teaming, vegetable gardening, care of lawns and gardens, waiting table and music.

Not only were the buildings in a state of repair bordering on collapse, but pipe lines, sewer systems, and trades equipment were all in need of overhauling. Much time, energy and expense has been called for and very much remains to be done. Despite the shortage of funds, however, new buildings are springing up. An addition to the trades group is now finished. It will house the tailor shop, shoe shop, plumbing shop and provides space for fire apparatus and garage. A first-class swimming pool has been completed and is in daily use. By utilizing the circulating water for the power house a constant change is made possible and the waste pipe from the pool leads to the irrigating ditches so that there is constant change of water without any loss.

An assembly hall of 50 feet by 100 feet is nearing completion. This will afford a means for spending profitably and pleasantly the long winter evenings. Attached to the assembly hall is a bowling alley, and from it through a shower bath room there is access to the swimming pool. To lose the privileges represented by this group of activities will be a material factor in cases where special discipline is required. The foundations are in for a new hospital and receiving cottage. All these buildings will have a hip roof of old mission tile. They are well built and of pleasing appearance. The mission style has been adopted and ultimately a cement plaster finish will be given to all the principal buildings and the tile roof will be used. This will tend to harmonize



them all and to hide the dilapidated appearance of some of the older structures.

Many of the trades are greatly in need of new or additional equipment to make it possible to give proper instruction. All the clothing worn by the boys is made in the tailoring department. Boys are learning the trade from the sewing on of the button to the drafting and cutting of suits. Boys leaving the school are outfitted from head to foot. All clothing is made to measure for each of the boys. The extra thought and care given to its making is being answered by greater effort to give it proper care by the boy. Possibly in no department is the greater change evidenced than in that of the kitchen and dining room. Good food, well and cleanly prepared, of sufficient variety and abundant quantity, is always served. Conversation is freely indulged in and the meal time is one of boyish enjoyment.

Special attention has been paid to the religious work. All Catholic boys are required to attend mass regularly, and this part of their training is directly under the parish priest in Whittier. Jewish boys are permitted to go home for the principal religious festivals each year. A general religious service is held in the chapel Sunday afternoon conducted by one of the ministers from Whittier.

Lectures and special entertainments of a high order are provided. Friends of the school volunteer their services, and the General Film Company of Los Angeles provides a selected list of films without charge for every Thursday night. Many of the films have high educational value, and all are a source of enjoyment. At frequent intervals groups of the boys spend the evening in the superintendent's apartment. The influence for good exerted by the family of the superintendent, who is keenly interested in each of the boys individually, can not be overestimated. To be treated as guests has led them to know the gentlemen's part. The following quotation from a woman resident on the school grounds speaks for itself:

"One of the noteworthy things that impresses every woman who has occasion to be on and about the state school grounds is the absolute courtesy extended to her by each and every boy. No boy ever seems too busy, or too heavily burdened, or too thoughtless, but that he meets one with a pleasant word of greeting and a cheery smile. In the busy whirl of life it is easy for one to grow careless of little courteous acts and our boys are certainly worthy of commendation for the manner in which they conduct themselves toward the women who live on the grounds, and the many visitors who are with us from time to time. It is noticed and appreciated."

Men of larger experience and more highly educated are being attracted to the school, which now numbers several college men in its force of officers, whereas, college-trained men were seldom met before, they can now be found in many departments.

Professor Ernest J. Lickley, the head of the compulsory education work and of night schools in Los Angeles, has undertaken to revise the

educational activities of the school. A radical departure from the customary courses of study and methods of teaching is planned. School work and trades work are to be so co-ordinated that the one will at all times supplement the other. The objective point will be the fitting of the boy to earn his living honestly. Much interest attaches to the plans that are being proposed.

The medical survey by Dr. Ernest B. Hoag disclosed health conditions in advance of those found in the regular grammar schools of the city. The doctor's final report is not yet available. In the course of the past year, a psychological investigation was made by Mr. J. H. Williams under the direction of Dr. L. M. Terman of Leland Stanford Junior University. Following is an excerpt from the report:

"A commendable and noteworthy feature of the Whittier State School is the characteristic tendency of the present officers of the institution to apply broad and progressive principles to the administration of the complicated task which they have in hand. Their request for a psychological survey is an indication of a decidedly modern educational spirit, and of a desire to render the greatest possible service to the state. \* \* \* The investigators were left free and the entire service of the school in all its departments was put at their disposal to aid in carrying on the study as they saw fit. The psychological investigation involved the testing of 150 boys (practically the entire enrollment of the school at that time), and the subsequent tabulation and interpretation of the results in the research laboratory of the Buckell Foundation of Stanford University.

The result of the psychological survey will appear in a detailed report within the next few weeks. A general statement of results, however, may be of interest here. Classification of boys according to mental level, as measured by the revised Binet scale, gives the following results:

1. Definitely feeble-minded 28 per cent approximately.
2. Borderline group 25 per cent approximately.
3. The 'dull normal' group 22 per cent approximately.
4. Average or superior intelligence 25 per cent approximately.

The surprising equality of these groups in percentages is significant when it is remembered that approximately 75 per cent of ordinary school children fall into the last group and that the remaining 25 per cent are distributed among the first three groups, number three being the largest. Further discussion of these facts and their significance will appear in the final report of the survey. Analysis of the data shows that while a considerable amount of mental deficiency exists among delinquent boys, yet many cases were found here of strictly normal and some of even superior intelligence. Some of the boys possess the general mental activity which would be sufficient to carry them with credit through a good highschool and to make them splendid students in a first class university. The giving of psychological tests is but one part of the work which should be carried on by a department of research. Equipped with the laboratory apparatus for giving mental and physical tests with field workers for both investigation and follow-up work, the department could not only determine the condition of each boy entering the school, but to look into the causes of his delinquency, keep in constant touch with his progress during his stay, and report on the efficiency of the school for training by following up his record after dismissal. Thus an important service would be rendered not only to the school, the boy and the boy's family, but to the people of the state upon which devolves the responsibility of training and caring for its citizens."

From moneys earned at the institution some new equipment has been secured, and a few of the departments are thoroughly modernized and the graduates have an established earning capacity. Over \$40,000

worth of produce was raised and stock sold from the farm. Over \$20,000 of this sum was available in cash and deposited in the Whittier contingent fund, an interesting financial situation which few institutions could duplicate. An unused appropriation of some \$4,000 for a dairy was found too small an amount of itself, it was supplemented with \$1500 of earnings from the farm, and some shelter roofs were pressed into service. As a result a thoroughly modern and sanitary dairy with James patent stanchions and a 315-ton concrete silo are now completed and in use. Over 300 tons of corn were raised on 15 acres of the school property and cut and stored in this silo. It is of added interest to note that the particular field on which the corn was raised was full of Johnson grass two years ago.

The creamery built between the blacksmith's shop and the carpenter's shop was torn out and a new little creamery with cement floor and a new arrangement for aeration and cooling of the milk by passing it over a series of ammonia-cooled pipes was constructed immediately adjoining the cold storage rooms. The milk is now handled carefully and the butter is more uniform and of better quality.

By careful breeding and absolute guarantee on all the young stock sold, the name of Whittier, among raisers of thoroughbred Holstein cattle, is considered an assurance of high-grade stock. Top-notch prices are obtained double that previously secured, and a market created that calls for more than the school can furnish. The non-registered cows are being replaced with registered cattle, some being closely related to world-record animals valued at many thousands of dollars. Records are kept in a most careful manner.

The father of one of the boys is operating a small dairy. His son, who is about 18 years of age, is in the dairy department of the school. He has learned the difference between the methods used at home and those employed at the institution and is looking forward to the time when he will be able to return and modernize his father's plant.

In all the work of the farm, the element of the ultimate profit is kept always before the boy. He knows the detail of every sale, the value of every variance and pedigree, the cost of food and the cash meaning of its care. All the grade hogs are being sold or being used for pork. In a short time nothing but registered pigs will be on the farm. The school can not begin to supply the demand for surplus hogs, and the prices have been steadily increased until they are now three, four and five times those received two years ago. Returns from olives were many times in excess of anything ever received before, and all the orchards are in improved condition and becoming more productive. New and much larger irrigating pipes are being laid.

There has been a growing conviction that our state wards could be grouped to much better advantage. Whittier is now proposing, and



the proposal is receiving favorable consideration, that it be turned into a parental school. The objections that may be fairly urged against its location as a state school would not apply with equal force to a school of this character. A willingness to temporarily set aside the buildings and grounds now being used by the California School for Girls as a location for the defective delinquent, has also been expressed. This would result in the Preston School at Ione becoming the only state school, until such time as a new and modern plant for state school purposes could be secured.

The two years have been full of stress and strain of contending against the heaviest of odds and the most difficult of conditions, but out of what was well-nigh chaotic, is coming not only system and order but an entirely new conception of the state's duty and of the possibilities for good stored up in some of the children who have become its wards. In bringing about such a radical change in the life and conduct of the school it was inevitable that much criticism should arise. This would be due in part to an unfortunate desire to prevent the new policy from succeeding, and partly of a misconception and failure to understand just what was taking place. On the contrary, those who were in a position to know the real facts have steadfastly upheld the policy.

An extremely difficult situation has been successfully met. Some very real problems are on the way toward a satisfactory solution. Whittier has justified its existence and earned for itself an undisputed place in the corrective and educational work of the state.

### CALIFORNIA SCHOOL FOR GIRLS.

Whittier.

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The present California School for Girls is situated on a five-acre tract of land adjacent to the grounds of the Whittier State School and a part of the original property of the latter institution.

At the time of the last biennial report of the State Board of Charities and Corrections, the Whittier State School numbered 222 boys and 63 girls. That same report contained a clear recital of apparent reasons and necessities militating toward the establishing of a separate school for girls.

For reasons later stated in the report of 1912, the State Board of Charities and Corrections believed the separation of these schools of such paramount importance that some means should be devised whereby an earlier nominal establishment of a separate girls' school could be attained than the most optimistic hope could possibly expect through the necessarily long procedure of the choosing of a new site and the erection of new buildings.

Early in 1912 recommendation was made by this Board to the effect that an amendment be made to the bill for state training school for girls previously presented at the legislature in 1911. This amendment provided that a board of trustees to consist entirely of women should be appointed and assume at once the management and control of the girls' department at the Whittier State School, retaining the girls' department in the present buildings at Whittier until such time as the new buildings are constructed and the girls removed. Then the buildings now occupied by the girls at Whittier would revert to the Whittier State School.

A law with similar provisions, together with an appropriation of \$200,000 for the new school, was passed by the legislature of 1913, as embodied in chapter 401.

In January, 1914, the new board assumed control and the California School for Girls supplanted in name and management the former girls' department at Whittier State School.

The five-acre tract on which the present buildings are situated affords opportunity for the raising of walnuts, oranges, blackberries, loganberries, and vegetables. Chickens and hogs complete the small farm. Flower gardens are another source of interest to the girls.

It is useless to enter into any detailed description at this time of the buildings, as they are only temporarily occupied, unless it be to say that they are wholly inadequate for the needs and purposes of the school. It might be mentioned that scrupulous care keeps two old and dilapidated buildings in cleanly and sanitary condition. That a small hospital equipment in two rooms makes provision for good medical care under the direction of a doctor in regular attendance and a trained nurse constantly on duty. The officers' dining table is removed from its former room and is now placed in the main dining-room of the school. All the officers eat at this table.

The room previously used as officers' dining-room is now the commissary office of the school. The same rooms which some year or more previous had been equipped as bath, sleeping rooms, sitting rooms, and dining-room to serve for detention purposes, are now used as a receiving cottage and minister to the needs of the incoming girl, or



such other girl as must for positive reasons be removed from the large dormitory to private quarters.

Officers' quarters are maintained in the Honor Cottage. The girls assigned to this cottage are generally those who work their way through the main building. Training, plus good conduct, is required for entrance into Honor Cottage.

The board of managers meets monthly at the school, thus keeping in close touch with every small as well as larger detail that concerns the welfare of the girls.

The capacity of the school is 60, with an enrollment at the present time of 57. Of this number one third have been committed from Los Angeles County, San Francisco and Santa Clara following in order, as counties sending largest number of girls.

The courses in study are maintained through the eighth grade. Forty-one girls are in attendance at school. The remaining sixteen girls are those few who have passed the eighth grade, are new girls having just entered and not yet enrolled in classes, or those girls who, for reasons of health, are ordered by physicians to an outdoor employment. The health of the girl is primarily considered and the physician's orders precede all rules in importance.

It is desired to give each girl the particular training for which she is fitted and an effort is made by careful watching and testing to ascertain her preference and her peculiar fitness. If her ability to receive such instruction to a practical working end is sufficient, she receives individual attention as far as possible.

Four girls are now taking the commercial course. Two girls are preparing for office work. Three school sessions a day occupy the hours from 9 to 12, from 1 to 4, and from 6:30 to 7:30. This last period is an evening special class for English, spelling, arithmetic, and commercial geography, with seventeen pupils enrolled. Some of the girls attend two sessions of this school, some only one, the time being adjusted to the needs and wants of the girl. Again, here is individual care and attention exercised. Four girls are given music lessons. Two girls are in training in the hospital department as nurses. Every girl is required to take domestic science received through practical instruction in the preparation of vegetables and food in the main kitchen and in the canning of vegetables, preserving of fruit, making of jellies and pickles.

Laundry work occupies a part of the time of all girls and each girl is expected upon her parole to be able to cut, fit and make a simple dress. All clothes worn in the school and all linen for the house are made by the girls.

A collection of 100 books from the County Library offers reading matter for all, and current topic lectures and discussions four times a week furnish the girls with wholesome, live and vital information. The matrons frequently read aloud to the girls in the evening.

Recreation is provided for the girls in gardening, tennis, physical culture in the open-air pavilion, and in programmes arranged for evening hours. Always a supervisor of recreation is present wherever the place or whatever the hour, and the officer in charge of the evening recreation hours has her evening well programmed—thus are successful and enjoyable evenings given the girls.

The clothing is neat, clean, and trim. Blue gingham dresses are chosen for morning wear; colored ginghams for afternoon, and white for Sunday. Gymnasium suits and garden dresses of khaki complete the wardrobe in this line.

A thorough medical examination and care is given to the girls by Dr. Zuber, a woman physician, who spends two half days a week at the school.

The California School for Girls has shown its live interest in forward movements by its psychological work undertaken this past summer, when all members of the school were submitted to the Binet-Simon intelligence test as applied by scientific and trained psychologists.

Religious training is found in the regular Sunday afternoon services. These services are non-sectarian; Wednesday is the day chosen by the Catholic priest for his weekly visits to the school. Since the establishment of the school in January, 1914, there have been 33 dismissals with 47 now on parole.

It is not aimed to parole girls too rapidly, perhaps less so than formerly, as the plan now includes a more extensive education and training of the girl; a closer personal touch that shall help the girl to "find herself." And in every case possible such an equipment of mind, of hands, and of heart is sought that shall successfully fortify the girl in her life as she is later placed amongst strangers and thrown on her own resources. This naturally means a more devoted, more assiduous training, and one to extend over a longer period of time.

The girls are told, and environment and attitude of school officers substantiate the message, that the school stands to the girl as home. Here she is welcomed to return when life presses too hard or a change of employment makes a break in her daily routine. A telephone to the parole officer will bring an accompanying friend on the journey back to the school. Emergency times may always command the telephone or telegraph message to the school that shall bring such home counsel and advice as any other girl would obtain from her own home. The girl who leaves the school on parole knows that such messages may be

sent C. O. D. if extremity demanded such a course. It is a pleasant commentary on the training and wholesome home feeling of the school to know that girls may and do voluntarily return between changes of employment dates to "visit" the school for short periods of a few days.

The parole officer arranges for the opening of a bank account for each girl as she secures her first employment and encouragement is given to increase this saving. Economy and wisdom in the buying of clothes and suitable expenditures for extras is another part of the girl's training received from the parole officer while the girl is on parole. The majority of girls, when paroled, are given places at house work. However, other occupations are receiving increasing attention. One girl is training for nurse, another is acting as practical nurse; one is receiving instruction preparatory for office work; one is in night school; another attending a high school. So the individual work places the paroled girls in different spheres.

A talk with those closely connected with the handling of delinquent girls shows very clearly their viewpoint in wishing an intermediate sentence law. The problem of the "defective" girl is so closely interwoven with that of the delinquent girl that an intermediate sentence law might solve many a difficult case. Not until defective delinquents are removed from the jurisdiction of a school of this kind, can a girl be turned loose on herself and the community on a gauge of chronological age only, which often greatly exceeds the mental age.

Satisfactory work in these institutions would be greatly accelerated by more complete and correlated records. Such records should be kept by probation officers and furnished to the school. We would scarcely expect a medical man to intelligently diagnose a case that furnished no history; and still we demand the more subtle and finer work of mental and moral upbuilding with little assistance as to atavistic tendencies, all of which play so important a factor in the defective delinquent, as well as the merely delinquent; in fact, the two classes can not be separated without such records which render valuable primary assistance.

The resume of the work as at present conducted, is in no sufficient manner indicative of the plans made for the school when new commodious and suitable cottages shall offer facilities to better and more perfected methods.

The grading is finished on the new site at Ventura and the erection of the new buildings will proceed at once. However, they can not be ready for occupancy before next May and the transfer will probably be made at the close of the present fiscal year.



## STOCKTON STATE HOSPITAL.

Stockton.

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The Stockton State Hospital is located in the heart of the city of Stockton on a tract of land consisting of 114 acres. This cramped area within the city of Stockton seriously interferes with the work of this institution by making it necessary to reduce the freedom of the majority of patients to a minimum. There are 1,340 men in the hospital and all but 90 of them live in the main building. Nearly 1,000 men spend all their leisure time behind the high brick walls which enclose the very small yards. The remaining number have the privilege of wandering about in the front park. With the women conditions are much better. The yards are larger and are enclosed by wire fences, which are a great improvement over the solid walls and which besides allowing a proper circulation of air, do not have the depressing prison-like appearance.

Most of the men who have "parole of grounds" live in the three open wards, but there are a great many who live in the closed wards and are allowed to go to the front yard instead of being sent to the walled yard in the rear. It would seem that this privilege might be extended to a larger number of men. The walled yards lessen the work of the attendants and probably if a larger number were allowed this extended freedom, the number of attendants would have to be increased. At present there are 65 attendants for the 1,340 men, or an average of 1 day attendant to 20 patients.

*Need of enlarged yards.* The front park is small and is not a very suitable place for a large number of patients owing to its proximity to the residence section of Stockton. What is needed is more yard space which would allow greater freedom to a larger number of patients. This could be safely done by parking and wiring the space now used for a vegetable garden. The expense of doing this would be heavy and would require a special appropriation, but if this hospital is going to remain on its present site the change will have to be made.

*Buildings.* Male wards are all located in the two main buildings. Both of these buildings are very old, but the new flooring which was put in during the last year has placed them in a very good state of

repair. All the doors are made of wooden bars, which, besides allowing good ventilation, also enable the attendant to keep close watch on the patient. The largest ward in the men's department cares for 84 men and the smallest for 36. Most of the wards are crowded and in some it is necessary for patients to sleep on the floors. This overcrowded condition is not an unusual one, but is one that has existed for a considerable time. The transfer of patients to Agnews relieved the situation for a while, but the new entrants have more than offset that temporary relief.

The buildings for the women are entirely separate from the male department. They are also old, and constant work is necessary to keep them in repair. One very excellent feature is the sleeping porches which have been built on several of the wards and which are used during a large part of the year.

*Improvements.* A new building for the use of male patients is in course of construction and will be ready for use about the first of the year. Part of this building will be used for the physically sick and another part will be reserved for those cases showing suicidal tendencies. The lower part of the building will probably be used for an open ward for the better class of male patients.

The male tubercular patients are now segregated on a screened porch which has been built on the first floor of the administration building. This porch is large enough to accommodate 20 patients. There is no similar place for the women.

All the wards in the men's buildings have been refloored and are now in a very good condition. Part of the floors are pine and part maple.

An old building is being remodeled for a gymnasium and recreation hall. This will not be large enough to meet the recreational needs of the hospital, but it will be a great improvement over the present equipment.

A much needed elevator is being installed in the women's building and will soon be ready for use.

The heating system has been entirely remodeled and a modern steam plant installed. The buildings, which under the old system, were cold and uncomfortable, are now kept warm during the cold weather. All the buildings in the male and female departments are connected with this new system.

The ironing room in the laundry has been equipped with electric irons, a change which makes possible better and faster work.

*Treatment.* Stockton, like our other state hospitals, is very well equipped for hydro and electrotherapeutic work; in fact, the electro equipment is probably the best in the state. The operating room is



equipped in the most modern way. There is no laboratory in this hospital, and all the laboratory work must be done elsewhere. The Wasserman tests are done by a San Francisco physician.

The receiving building where all new cases are received and where all surgical cases are cared for, has become too small to meet the needs of this hospital. This building, which contains all the treatment apparatus, has a capacity for 25 men and 25 women. New patients are detained in this building for varying periods, but the large number of entrants which are being sent to this hospital makes it impossible to keep them there for a proper length of time.

There are five physicians in this institution including the medical superintendent. These physicians are unable to handle properly the large amount of necessary work and there should be at least two more physicians added to the staff.

*Farm.* In 1905 a farm of 520 acres, located two miles from the hospital, was added to the original site. This land has proved to be very productive and has more than paid for itself. The original plan was to gradually move a considerable number of the patients out to this farm, but the land was too wet and low for such purposes and has to be abandoned. At present there are about 100 male patients living in the buildings which have been built on this land.

The dairy herd suffered considerably by the inroads of tuberculosis and only 110 cows are being milked at the present time. New cows are being added to the herd just as fast as money is available for this purpose. The dairy barn, which was built in 1907, is in fair condition and while not of modern construction, serves the needs very well.

*Re-education work.* There is being undertaken some very valuable re-educative work among the demented women. The work is in charge of one woman, who divides it into two parts. During the morning she takes her class of 30 into the assembly hall and gives them various gymnastic exercises. Women who were unable even to thrust their arms to the front have been developed wonderfully and are now able to not only take care of themselves but also to do useful work about the hospital. The other class of work given these patients is sewing and fancywork, and here again the results have been more than satisfactory. Women who were unable to sew a stitch have been taught to do real good fancywork.

The results of this work have been such as to justify an extension of it, and the woman now in charge will have a trained assistant in the near future. The old building which is being remodeled for a gymnasium will house this educational work. The gymnasium work will be done on the lower floor and the sewing and fancywork will be taught in the rooms built for this purpose on the upper floor. Similar gymnastic work will probably be undertaken for the men.

*Recreation.* In the women's department, there is a small assembly hall which is used for recreational purposes. Each Monday evening there is a dance and a moving picture show for the least disturbed men and women. On Sunday evening the same moving picture show is given for the more disturbed women. There are about 100 men who are allowed to attend the Stockton Theater and some of the women go under proper supervision.

The men's department needs a recreational hall. This need will be partially met by the improvised gymnasium, but even with this new addition, a large majority of the male patients will be without recreation.

*Needs.* The most pressing needs of this hospital, as presented by the management, are as follows. These looked-for improvements will relieve present overcrowding but will not assure provisions for future increases which are bound to come.

1. Two wings on the receiving building to relieve the congested conditions which exist at the present time. These wings will each consist of a good-sized dormitory.

2. Two new cottages, similar in construction to the one now being completed. These cottages will be used for convalescent male and female patients and will increase the number of open wards.

3. An isolation and tubercular hospital.

4. Laboratory for pathological research work.

5. New cattle for the dairy.

In commenting on these needs, this Board wishes again to call attention to the recommendations made in its last biennial report regarding the future of this hospital. "Before any more large sums of money are expended at the Stockton State Hospital, there should be serious consideration of the future of this hospital. The present site, in the city of Stockton, will eventually be vacated. The land is of more value for city purposes than for an insane hospital site. The main buildings are old and will soon have to be replaced by new ones, if the hospital is to remain in this location. The site is not large enough for a hospital built on the cottage plan and it is on the cottage plan that all construction in insane hospitals is now made. It can not be denied either that the heat of the summer in Stockton is not favorable for the cure of insanity. Considering all these matters, we believe it inadvisable to make any large appropriation except for things absolutely essential to the present well-being of the patients."

## NAPA STATE HOSPITAL.

Napa.

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Napa State Hospital, under the present superintendent, Dr. A. W. Hoisholt, has enjoyed two years of quiet but steady progress, which stand out very clearly when compared to the rather stormy periods which preceded. Under former administrations there had been inefficiency, graft, and petty scandals continually arising which gave the hospital an unsavory reputation with the public. But under the present administration, these conditions have disappeared and in their place have been substituted efficiency and honesty which have reestablished public confidence in the hospital.

*Buildings.* The larger part of the population is housed in the main building, which is divided into two large wings by the "center" where the administrative offices are located. One of these wings is used for the women and the other for the men. The wards are all built upon the same plan and differ only in size. The rooms for the patients open out on one central corridor which is about sixteen feet wide. This corridor is used during the time the patients are not on the grounds and contains chairs and tables. In most of the women's wards, these corridors are decorated with plants and flowers; the corridors in the men's wards are bare. The rooms were originally built to accommodate one patient, but the rapid increase in population has made it necessary to keep two in most of them. Each ward also contains a dormitory which accommodates from four to ten. The largest ward contains about eighty patients and the smallest about twenty-five. Every ward has its toilets, showers, and tubs. The floors are bare and are kept in excellent condition. All the rooms are well lighted and the ventilation is excellent in practically all the wards. This building was erected in 1875 and has undergone very few changes since that time.

Phillips open cottages for working men have a capacity of about three hundred. One of the dormitories in this group is used for the senile bed-ridden patients and one is used for those old chronic cases that continually wander away if not carefully watched. These patients have a screened yard to stay in during the day. A porch runs around this dormitory and one end of it is partitioned off for six male tubercular

patients. Here they get an ample supply of fresh air and are completely segregated from the other patients. With the exception of this dormitory, the others in this group are open during the day and the men have free access to them. One large room is reserved for a smoking and recreation room. There are no private rooms in this group of cottages, all the men sleeping in dormitories.

A group of seventeen cottages provides excellent accommodations for three hundred and forty chronic incurable women. These cottages are arranged in two rows of nine each, with a large building in the center for the dining and recreation rooms. The patients have free access to these cottages and during the day they can wander about in the enclosed space in which the cottages are located. Each cottage is connected with the dining and recreation rooms by a covered porch. These cottages are all one story in height, not plastered, but neatly painted on the inside. The cost of constructing these cottages was about \$35,000.

*Treatment and receiving building.* A one-story building near the entrance to the grounds serves for the receiving of new women patients and for the treatment of quiet acute cases of both sexes. Incoming male patients are received in a special ward in the main building.

The treatment room is thoroughly equipped with the most modern hydro and electrotherapeutic apparatus, most excellent work being done.

*Laboratory.* In a room originally built for a scullery, a pathological laboratory has been equipped and a graduate physician is in charge. The Wasserman test and urinal examination are made for every new patient. On suspicious cases there is an examination of the sputum. This laboratory, although in rather inconvenient quarters, is doing excellent work and represents one of the most advanced steps in the treatment of these mental deviates in the California hospitals.

*New improvements.* North Pay Cottage, which was formerly used by the male pay patients, is now being remodeled for the care of the acute disturbed male patients. At the present time there is no place for this class of patients and they are mixed with the chronic disturbed. This cottage, when completed, will care for about thirty cases. The building will be equipped with a complete hydrotherapeutic apparatus. The patients will be cared for in one dormitory, which is arranged so that one night nurse will be able to watch all the patients. Two rooms will be reserved for convalescents and the sun porch has been built for the use of the patients during the day and an enclosed park will provide the open air life.

A similar arrangement is desired for the acute disturbed female patients and an appropriation will be requested to remodel the South Pay Cottage, which is now used for female pay patients.



The cold storage plant has been finished and is now in full operation. This plant supplies all the ice that the institution needs and provides ample cold storage space for foodstuffs, etc.

The new laundry building is about completed and is ready for the installation of machinery. A special appropriation of \$5,000 will be necessary to equip properly this very excellent building.

The new dairy is well under way and will be ready for use in a few months. This new building is constructed of reinforced concrete and provides stall space for 200 cows. A milk house adjoins the main dairy building. When completed, this institution will have an excellent dairy and a better equipment will not be found in the state.

A new recreation hall has been built on the "Avenue" and will soon be ready for use. This hall will replace the small one now being used in the main building and will supply a long-felt want. The building is one story and the large hall, which has an excellent stage, will be used for dances, moving pictures and other forms of entertainment. The money for this building was provided from the contingent fund.

The last of the cottages to be built in the workingmen's group has been started. This cottage, which will be an open one, will be similar in construction to those already in use.

One of the most valuable improvements is the rock-crusher, which is providing rock for all the new construction work and the roads. The initial cost of this plant was \$1,500 and it paid for itself during the first month that it was operated.

*Employments of patients.* There are about 300 regularly employed patients in the institution. Practically all the farm work is done by patients and this activity engages a large part of the regularly employed. Those engaged on the Coombs Ranch live and eat in a house near their work. The same is true on the Spencer Ranch, Smith-Brown Ranch, and the Poultry Farm. These men are the most reliable patients and there is rarely any attempt to escape from these groups. There are a good many employed in the gardens and in doing various odd jobs about the hospital.

*Recreation and outdoor life.* One of the best features of the work at Napa is the abundance of outdoor life that all the patients enjoy. Every day there are over 800 patients allowed to wander around in the front park where there is an abundance of both shade and sunshine. Attendants are stationed around the yard to see that no one wanders off; those who attempt to get away are returned to the walled yards in the rear. In the four yards which are enclosed by high brick walls, the more noisy and disturbed patients are allowed the benefit of the open air. Every day that the weather permits the patients are let out of their wards at 9 a. m. and return at 11 a. m. In the afternoon they are let



out at 1:30 p.m. and return at 4 p.m. Last year, there were only fifteen days that the patients did not get out into the yards for some period of time.

About 200 men and women use the assembly hall each Tuesday evening for music, moving pictures and dancing. This event is thoroughly enjoyed by all present and provides excellent recreation.

*Dining-room and kitchen.* All the food that is used in the institution is prepared in the one main kitchen and distributed to the various dining-rooms of which there is one for each ward. There are two menus—one for the infirm patients and one for the general mess. The quality of food is excellent, and the diet is varied. There is an abundance of pure unseparated milk given to the patients. The men who live around at the various ranches have their food cooked and served there.

*Water supply.* The domestic water supply comes from Lake Marie, situated at the head of Coombs Canyon. From the lake the water flows in an open creek for two miles, and from there it is piped to the hospital by a 6-inch and a 4-inch pipe. The supply, which in former years was insufficient for the needs of the institution, is now quite ample.

The garden is now irrigated by water pumped from the tidewater canal. Before the present pumping system was installed, the garden was irrigated by the sewage from the institution. The sewage is now carried to the river and there is disposed of.

*Reclamation.* The value of the farm is being greatly increased by the reclaiming of 200 acres of bottom land, which was formerly nothing but swamp. This land, which is very fertile, will be used for raising alfalfa, etc.

*Needs.* Among the various needs of this institution the following are the most important, and the legislature will be asked by the board of this hospital to make the following appropriations:

1. Remodel South Pay Cottage for the acute disturbed women; hydro and electrotherapeutic equipment will be provided for this building. The estimated cost of this is \$15,000.

2. A general hospital for the physically sick, to be used for male and female patients. The capacity will be 100 and the estimated cost is \$75,000.

3. A home for employees to cost \$50,000. This building is very badly needed, as the present quarters for the attendants are very poor.

4. Special building for a laboratory and morgue with equipment, \$15,000.

5. Purchase of land over which the domestic water supply flows, \$7,500.

6. Laundry equipment, \$4,000.

7. Two cottages for officers, \$6,000.

8. Workingmen's home on the Smith-Brown ranch, \$10,000.

## AGNEWS STATE HOSPITAL.

Agnew.

## BOARD OF MANAGERS.

DR. FRED H. BANGS.....	San Jose
T. S. MONTGOMERY.....	San Jose
EDWARD WHITE.....	Watsonville
DUNCAN MCPHERSON.....	Santa Cruz
HORACE WILSON.....	San Francisco

DR. LEONARD STOCKING, Medical Superintendent.

The Agnews State Hospital is located at Agnew, Santa Clara County, on a tract of land consisting of 330 acres.

*General Plan.* The plan of the buildings at Agnew is admirable. In the center are the receiving wards for the male and female patients, with the treatment building standing between them, making the latter very accessible. Directly back of the treatment and receiving building is the domestic group containing the commissary, general kitchen, laundry, bake shop and employees' dining-room. On the right are women's wards, the quiet and convalescent patients being kept in front, and the more disturbed patients in the rear. The same arrangement is used with the men.

*Methods.* This institution is brand new, not only in equipment, but also in methods. Every effort is being made by the superintendent and staff to make this institution a real hospital where the mentally sick may receive the best of everything. They are striving to break down the old feeling that the "insane asylum" is a place to be greatly dreaded and to be used only as a last resort. That this feeling is being broken down, is shown by the numerous cases of voluntary commitments. Very frequently one of the discharged patients, who is unable to get along on the outside, voluntarily comes back and says he wants to stay. Paroled men are allowed to go out to look for work, and, if after three or four days they have been unsuccessful, they are allowed to return to the hospital. The majority of cases that are committed are made to feel that their presence is essential to their mental and physical health, and when they are made to feel this, they become contented and this feeling makes possible curative work that would otherwise be impossible.

What was formerly accomplished by padded cells, locked doors, walled yards, and various other restraining influences, is now accomplished by vastly different means. Dr. Stocking believes that every person, whether he be mentally diseased or not, has some good quality through which he can be reached, and it is upon this principle that he is attempting to run this hospital. In a great many wards there are no screens upon the windows and some 300 of the patients live in open

cottages. Restraint is used only on the very worst patients and is used on them only when the attendants have other duties to perform and are unable to watch them closely. Agnews is now a hospital and not a prison, and the success of the new methods is best shown by the general contented spirit that exists among the majority of patients.

To assist him in carrying out this constructive work, Dr. Stocking has a most excellent staff of men and women attendants. No small amount of the success of this hospital is due to their sympathetic and willing cooperation.

*Treatment.* The treatment building is thoroughly equipped with two sets of hydro and electrotherapeutic apparatus and is used on nearly fifty cases each day. Thoroughly competent nurses are in charge of these rooms and excellent results are obtained.

Each receiving ward is equipped with a room for a continuous bath and the effect of this treatment on the most violent patients is very quieting.

The operating room is located on the second floor of the treatment building and is equipped in the most modern fashion. Adjoining this department are the special wards where the surgical cases are cared for.

*Laboratory.* Special rooms are reserved for laboratory work and one of the resident physicians is in charge. The Wasserman examination is done by a San Francisco physician, but aside from this, all the laboratory work is done at the hospital. Special stress is being laid on the salvarsan treatment.

*Overcrowded wards.* With very few exceptions the wards are badly overcrowded. Dormitories that were built to accommodate 50 patients now have 85 in them. The beds are crowded in so close together that it is impossible to walk between. Beds are set up in the day rooms, thus making these rooms, which are used a great deal, too small. These overcrowded conditions are most noticeable in the women's wards, with the exception of the convalescent cottage which is kept down to its normal capacity. The overcrowding is especially noticeable in the ward above the laundry where the chronic disturbed cases are kept. Here 14 women sleep on the floor of the day room each night. This is not only hard on the patients but also on the attendants whose work is greatly increased by this overcrowded condition.

The men's wards are not so badly overcrowded because the old barracks, built after the earthquake, are being used to accommodate 340 of the chronic custodial cases. These old shacks have long outlived their usefulness and should be discarded just as soon as possible. The floors are all worn out, and are in such a condition that they are very hard to keep clean.



For a considerable length of time Dr. Stocking tried to keep the population of Agnews down to its normal capacity of about 1,000. He succeeded in doing this until a year and a half ago. Stockton and Napa were both overcrowded at that time and it became necessary to transfer 200 patients to Agnews. The present overcrowding dates from that transfer.

To relieve these conditions, the new building for convalescent women is practically ready to be occupied and a new working women's cottage is in course of construction. On the men's side, new temporary quarters will be started at once to take care of the men now quartered in the "barracks."

To make room for the constantly increasing numbers, Dr. Stocking releases just as many as he possibly can. Chronic cases are often allowed to go to their homes if the homes are suitable and a good many of these cases have been able to get along fairly well in this way.

*Types of patients.* Agnews has a larger percentage of chronic cases than the other state hospitals owing to the fact that for a long time after the earthquake no new cases were received. The old cases were gradually sifted until very few of the acute cases remained. So when the new patients began to come in again they had a disproportionate number of chronic custodial cases to care for.

The presence of the inebriates is considered a constant menace by the present administration. This class of patients is constantly disturbing the mental cases, creating dissatisfaction and generally tearing down the constructive work of the hospital. The class usually committed under this head are very low grade cases and incapable of much benefit even under the most favorable conditions. To mix these men and women with patients suffering from mental disease is considered a crying shame by Dr. Stocking, who deems highly important that the state hospitals be rid of this class of patients.

*Recreation.* The new Assembly Hall was recently finished and is now being used. The building was constructed in the best manner and every effort was made to make this hall just as artistic as possible. The main room can be used for dances, concerts, moving pictures and theatrical performances. The superintendent plans to make almost constant use of this hall and thus make it a real social center for both patients and officers. In the afternoons he intends to provide moving pictures for the disturbed patients, a class that is usually debarred from these entertainments on account of their noisy behavior. Noise will not hurt the building and the moving pictures will provide no small amount of enjoyment to these unfortunates.

One very fine feature about this building is a smaller hall upstairs, which is to be turned into a reading and recreation room for the officers and attendants. The location of Agnews isolates them from

the ordinary pleasures and this hall will fill a great need and will materially assist in procuring better service.

Baseball is the favorite outdoor sport for the men and a considerable number participate. Croquet grounds are also provided for their use. The convalescent wards are provided with pool and billiard tables which are used extensively. Most of the patients that are physically able to get around are allowed about four and a half hours in the yards each day. On the rainy days when they are forced to stay inside, they use the covered porches which are built on most of the wards.

*Farm.* One of the most important needs of this institution is more and better farm land. A great deal of the 330 acres now owned by the state is very poorly adapted for agricultural uses. At the present time the state must buy a large part of the fodder used for live stock. Nearly \$6,000 a year is spent for canned fruit and the gardens do not produce enough vegetables to supply properly the needs of the hospital.

An increased acreage would make it possible to colonize a large number of the physically able chronic patients. Under proper supervision they could become self-supporting and would receive a great deal of benefit from the outdoor work. An expenditure of \$100,000 for new land would be a very profitable investment by the state and the addition of this land to the present holdings of this hospital would place it on a firmer basis.

The dairy is in need of rehabilitation. The herd was badly crippled by the inroads of tuberculosis and has not been increased. They are milking 25 cows; to supplement their own supply of milk they must buy 100 gallons a day. All the milk is pasteurized before it is used.

The entire dairy equipment has been purposely neglected, awaiting an appropriation for a new barn and new cows. Both these additions should receive the attention of the coming session of the legislature.

The poultry farm is in good condition, but should be enlarged, and will be just as soon as money is available.

*Employment of patients.* The policy of the present administration is to have every one who is physically able do some kind of work. In a great many cases the tasks required are small and in other cases the patient works six hours a day. This latter class includes about 30 per cent of the population and probably 75 per cent do some work. Those men working all day are employed in the various branches of the farm—in the laundry, boiler rooms, kitchens and dining-rooms; the ones working for short periods work in the wards and dormitories. The women are engaged in the laundry and sewing rooms and in the various dormitories and wards. There is a great deal of fancywork and basket weaving done by the patients.



The Board of Managers is asking the legislature for the following appropriations:

	Construction	Furnishing	Total
One workers' cottage.....	\$52,500 00	\$7,000 00	\$59,500 00
One convalescent cottage.....	45,000 00	4,000 00	49,000 00
One nurses' home (men).....	43,000 00	5,000 00	48,000 00
One staff house (physicians).....	20,000 00	4,500 00	24,500 00
One cottage (steward).....	4,000 00	1,250 00	5,250 00
Dairy barn and equipment.....			25,000 00
Dairy herd of 100 cows.....			10,000 00
Total of special appropriations recommended.....			\$221,250 00
Support appropriation for sixty-seventh fiscal year.....		\$176,000 00	
Support appropriation for sixty-eighth fiscal year.....		198,000 00	
			\$374,000 00
Salary appropriation for sixty-seventh fiscal year.....		\$152,000 00	
Salary appropriation for sixty-eighth fiscal year.....		171,000 00	
			\$323,000 00
Total appropriations .....			\$918,250 00

### MENDOCINO STATE HOSPITAL.

Station, Ukiah. Postoffice, Talmage.

#### BOARD OF MANAGERS.

W. A. S. FOSTER, <i>President</i> .....	Willits
A. J. FAIRBANKS.....	Willits
J. L. McNAB.....	Ukiah
A. HOCHHEIMER.....	Willows
GEO. D. CLARK.....	San Francisco

ROBERT L. RICHARDS, Medical Superintendent.

The Mendocino State Hospital is situated on a tract of 130 acres, protected by hills from cold winds in winter and hot winds in summer. There is also a farm of 300 acres and an additional 450 acres held for water rights. The plan of the main buildings is as follows: In the center the first floor is given up to administration and officers' dining-room. On the second floor are officers' and guests' rooms, and on the third is a ward. In the north wing are men's wards; first floor receiving, second untidy, and third violent. In the south wing are women's wards with the same arrangement. Over the bakery and laundry is a ward for male patients who work. There is a cottage for convalescent men and one for women. These cottages contain the apparatus for hydro and electrotherapeutic treatment. Ward seven for the men is a group of small cottages whose sides are part canvas and which can be kept almost completely open. There is a central congregating building, and the whole group is surrounded by a high wire fence. This ward was originally intended for tuberculous patients, but a portion of these grounds has been completely separated and is used for debilitated

and senile, but non-tuberculous cases. In the rear of the main buildings is a cottage for men employed as farm hands and mechanics. There are the usual shops and farm buildings.

Special mention should be made of the *sanitation* at Mendocino State Hospital. All scraps from the dining-rooms are immediately removed to garbage cans in a corrugated iron shed just back of the kitchen. From here the garbage is hauled away usually twice a day. As a further precaution against flies there has been extensive screening, and a generous supply of fly-traps has been installed. The stables are cleaned daily and the manure is thrown into concrete bins which are securely covered. These pits are emptied about once in two weeks. This arrangement guards against the breeding of flies and at the same time enhances the value of the manure as fertilizer. Sewage goes into septic tanks on the farm. The liquid after being freed from all solid matter is used to irrigate ten acres of beets which are fed to the dairy cows.

*Improvements.* The most important *additions to the equipment* during the past years are as follows: The high board fence around the old "bull pen" has been torn down and replaced by a mission cloister. The men's rear parole ground is now surrounded on three sides with a corridor twelve feet wide, supported by reinforced concrete columns and covered by a tile roof. This presents an attractive appearance and protects patients from heat in summer and rain in winter. Its importance is suggested by the fact that last winter there was a period of three weeks during which patients were confined to the wards. The change is so satisfactory that the same plans will be carried out on the female side. A new cottage to accommodate fifty patients who will work on the farm is just completed. It involves an experiment in the way of unguarded windows everywhere, except in the two dormitories. A female tubercular cottage with a capacity of thirty patients is under construction. The operating room is now thoroughly equipped and an additional sterilizing and etherizing room has been furnished. Other improvements are a new gas plant, a mattress and upholstery shop, irrigation facilities, hedges and flower plots. The new dam and reservoir are also nearing completion.

*Treatment.* But most important from a social point of view are the advances being made in the *care of patients*. As in the other state hospitals the merely custodial care is being displaced by the therapeutic. The success of reeducation, together with the medical treatment, is infusing a new spirit into the hospital and removing the old stigma and hopelessness associated with mental diseases. The baskets, rugs, and fine needlework of some of the women patients are really very good.

Two exhibitions of the needle art department have attracted a great deal of favorable comment and the demand for this work is increasing among the patients. This is one token of what may be accomplished with the mentally sick if taken in time. About 40 per cent of the patients are employed in one way and another, and as more facilities are provided a larger number will be given some occupation. The proceeds of the work have been divided between cost of materials, one third to the patient and one third to the amusement fund. The balance in this fund June 30, 1914, was \$127.76.

*Records.* A very careful study is made of each individual patient. Case histories and case records have been carried to such a degree of efficiency that all the information about any patient can be speedily obtained. In addition to its fundamental importance to the care of patients while in the hospital, this study has made possible the discharge of a large number of cases that could be provided for elsewhere. In the last fiscal year there were discharged 67 recovered insane patients, 52 recovered inebriates, 31 improved, 34 unimproved, 4 not insane, and 39 not to be benefitted by further treatment. Thus the case-study has the further advantage of making possible a statement to the public of what the state hospital is accomplishing.

For an institution of this type a considerable degree of freedom is given the patients. The women in the convalescent cottage have what is known as "parole of grounds." That is, the doors are left open during certain hours and they can come and go at will except that they may not pass certain boundaries. In the new farm cottage for men there are no guards on the windows except in the dormitories. In working about the grounds and on the farm patients are trusted to a degree that does not comport at all with the popular idea of an "asylum."

*Voluntary patients.* Another feature worthy of notice is the presence of voluntary patients. True, their numbers are small, but they are growing. During the past year eight voluntary patients were received and cared for. The provision for admission without commitment by a court is one more step toward a public recognition of the nature of mental diseases and toward such early treatment as will reduce the number of chronic insane.

*Inebriates.* Mendocino State Hospital has so far treated over 400 inebriety cases, without serious interference with the care of the insane and without damaging results to the inebriates from associating with mental cases; in fact, a very large proportion of the inebriates are mentally defective.

*Needs.* The board of managers and medical superintendent have estimated the needs of the hospital for the two next fiscal years as follows:

For support .....	\$273,907 00
For salaries .....	207,893 00

#### SPECIAL APPROPRIATIONS.

New receiving building and equipment.....	100,000 00
Nurses' home .....	20,000 00
Night watches' home .....	5,000 00
Three electric elevators .....	7,500 00
New main pipe line .....	25,000 00
Repairs to plumbing .....	5,000 00

### SOUTHERN CALIFORNIA STATE HOSPITAL.

Patton.

#### BOARD OF MANAGERS.

H. MCPHEE, <i>President</i> .....	Santa Ana
E. W. BURKE.....	Highlands
AUSTIN F. PARK.....	Redlands
W. A. AVEY.....	Riverside
E. C. MERRYFIELD.....	Colton

JOHN A. REILY, M.D., Medical Superintendent.

*Improvements.* Southern California State Hospital has been for the last two years the scene of busy building operations. In 1912-13 two new cottages were erected at a cost of \$27,000 each, and during the past year four more cottages of approximately the same size and cost have been completed. The six have a total capacity of 420 patients. Each cottage has a very pleasant dining-room with small round tables, seating four persons, a bit of home atmosphere being thus preserved. Each cottage has two large dormitories, a sleeping porch, and a few private rooms for patients as well as quarters for four attendants. These last are very necessary, as most of the staff have utterly inadequate living accommodations. Each of the cottages already in use has its own garden which is an important means of occupying and reeducating the patients. A new power house has been built, but equipment has not yet been installed. Just across from the power plant a new laundry will be erected. The other important addition to the physical equipment of the hospital is an addition to the reservoir. This removes a serious danger, for in the past the water pressure has been too low to provide adequate protection against fire.

*Overcrowding.* Like all the other state hospitals, this institution is overcrowded. However, this condition is not so bad as it was two years ago. Computed on a basis of 500 cubic feet of air space for each patient, which is the legal requirement, the excess in 1912 was



400 patients, in 1914 only 200. The basement of the main building is being used for sewing room, tailor shop, shoe shop, sleeping quarters for attendants, and dining-room for patients and attendants. This is very unsatisfactory and the crowded condition should be relieved by the construction of a nurses' home.

*Attendants.* Visitors to the Southern California State Hospital are particularly impressed with the character of the nurses and attendants. Dr. Reily seems to have been very fortunate in securing capable and dependable help. Sixty per cent of the employees are married couples. This contributes towards permanency and an attitude of serious attention to business. "Booze," gambling and abuse of patients are, of course, tabooed, and with apparent success. In each of the male wards, except the receiving ward, there is a married couple. Here an unmarried woman is in charge. The results seem to be (1) more kindness on the part of the male attendants, (2) less resistance on the part of the patients, (3) a more homelike appearance, and (4) an almost complete elimination of complaints. Dr. Reily is planning to put into one of the new cottages a force of four women with a male night attendant. They will begin with about fifty male patients and gradually increase this number until the capacity has been reached. About the only objections to the present force, as expressed by the patients, are limitation of freedom and lack of personal attention. The first is unavoidable under present conditions. It is planned to build wire enclosures about the cottages and buildings which will avoid the appearance of "a bull pen," and yet will make it possible to indulge to a greater extent the open door idea of permitting patients to pass in and out of the wards at will and enjoy a measure of freedom. This will add materially to their comfort and enhance their chances for recovery. The second objection is due to the fact that there is only one attendant to twenty patients, if we do not count the night watchman.

*Re-education.* Considerable work is being done along the line of re-education. For example, women who are at first unable to care for themselves to the extent of answering calls of nature are taken into the assembly hall where an attendant will throw a bean-bag toward them. At first there may be no response. In a few days perhaps they will pick it up and later attempt to throw it back: gradually hand and eye coordinations are re-established until they can not only handle a bean-bag but can play catch with a ball. After this they are taught lace work and basket making, embroidery, laundry work, etc. At the same time they are acquiring self-control and learning to care for themselves. Many cases which come to the hospital in bad state of dementia are able after a time to do very creditable work. If we



include those engaged in house work, 50 per cent of the patients are employed in one way or another.

Surroundings are made as pleasant and as nearly like those of normal life as is possible. Fruit trees have been set out all over the grounds and patients are allowed to go into the orchard to pick fruit.

*Recreation.* Walking, croquet, tennis, field sports, band concerts, and orchestra recitals are provided. All of the patients, except those who are confined to their beds, are permitted to enjoy some of these amusements. The patients are out in the morning from two and a half to three hours and in the afternoon for a similar period.

*Dismissals.* Before being dismissed from the institution, patients are given a sheet of paper with questions to answer. Every effort is made to have them understand that the way in which they answer will in no way affect the fact of their discharge or parole, as the case may be. The questions are about as follows:

Do you feel able to go home?

Do you believe you can take care of yourself outside of the hospital?

Have you any complaint to make of the way in which you have been treated in the hospital? If so, please give details.

Have you noticed any mistreatment of other patients? If so, give details.

Who has been especially kind to you?

Have you any recommendations to make to the management of the institution?

Not over one per cent of the signed replies indicate any complaint or suggestion. Of course the patients do not feel perfectly free in filling out the blank, but everything possible is done to bring out their real feelings and opinions. An obvious advantage of this system is the protection it gives to the superintendent of the hospital.

*Manufactures.* The hospital manufactures its own sheets, pillow slips, pillows, mattresses, shirts, overalls, shoes, marking ink, and baking powder. Shirts and overalls which were formerly purchased at about 50 cents each are now produced on the grounds at a cost of 30 cents. Last year 20,000 gallons of peaches and apricots were canned. A great many olives and other fruits were also put up. These were all used on the grounds. It is estimated that \$5,000 worth of oranges have been consumed in the hospital in a single season. All these things help keep down the cost of running the institution and add to the general satisfaction of patients and staff.

*Needs.* The following appropriations will be asked from the legislature:

Support for sixty-seventh fiscal year-----	\$228,000 00	
Support for sixty-eighth fiscal year-----	252,000 00	
Salaries for sixty-seventh fiscal year-----	174,000 00	
Salaries for sixty-eighth fiscal year-----	198,000 00	
		<hr/>
Total regular appropriations-----		\$852,000 00
Two patients' cottages and furnishings-----	\$50,000 00	
Hospital building-----	60,000 00	
Kirker Bender fire escapes-----	5,000 00	
Nurses' home-----	30,000 00	
New deep well and pumping station-----	10,000 00	
Industrial building-----	30,000 00	
Fences, wire for enclosures-----	5,000 00	
Electric wiring-----	8,000 00	
		<hr/>
Total special appropriation-----		198,000 00
		<hr/>
Grand total-----		\$1,050,000 00

## SONOMA STATE HOME.

Eldridge.

### BOARD OF MANAGERS.

ROBERT A. POPPE, <i>President</i> -----	Sonoma
MAJOR C. E. HAVEN-----	Oakland
REV. A. C. BANE-----	Westerville, Ohio
E. M. NORTON-----	Healdsburg
PERCY S. KING-----	Napa

WM. J. G. DAWSON, M.D., Medical Superintendent.

*Study of types.* Pursuant to its policy of meeting in conference with those responsible for, and interested in, the welfare of the inmates of the various institutions under the jurisdiction of the State Board of Charities and Corrections, this Board, at its regular meeting in January, 1914, decided to invite the members of the board of managers and the superintendent of the Sonoma State Home, together with a number of medical experts, to attend a meeting to be devoted to a discussion of the "Care of the Defectives in the State." On the evening of March 5, 1914, such a conference was held, at which it was decided that the first essential in the discussion of this problem was an understanding of the types present in the Home, and at the request of this Board and upon invitation of those present representing the Home, Dr. William P. Lucas, Professor of Pediatrics at the University of California, agreed to undertake such a study. Under his direction a classification, according to mental age, of about three fourths of the population of the Home was made by Dr. Kate Brousseau, who was assisted during a part of the time by Miss Grace Lyman. The work is still in progress, and upon its completion the results will be published in pamphlet form by this Board. A report of the study thus far com-

pleted has been made by Dr. Lucas, and the following excerpts are quoted as being of especial interest:

This study will deal almost entirely with developmental plans and concern itself wholly with the educational aspect of the institution. In order to do this our study has been focussed upon the physical, recreational, vocational and educational aspects of the institution. \* \* \*

The material development of the grounds, the care of the wards, the attention to the physical wants of the children, deserve hearty praise from the state. The inmates are well fed and well clothed, and the attention to the details in the care of the children is exceedingly good, especially when one considers the large number the superintendent must care for and the comparative crowding of the buildings. From a purely physical standpoint, it is as well regulated an institution as any state provides for its feeble-minded. The physical condition of the children and their care can not be very materially improved under present conditions as provided by the state, and certainly what the state has not made possible, we can hardly criticise the superintendent and the Home for not having. The cottages are over full, but the sanitary care and hygiene of the children is well looked after. The children receive nothing but kind and considerate treatment. What they lack is due to a failure to have the children classified on admission and grouped more according to their potential capacities, and in providing some organized scheme for carrying out their educational and vocational training and so increase their usefulness and happiness. Moreover, such a plan would materially repay the institution by the increased productivity of the children, a consideration which I hope to develop at greater length in this report. \* \* \*

The problem of the defective child does not end when the physical comfort and care of the child alone has been looked after, any more than does the problem of the normal child end with the provision for its ordinary physical wants. Education especially adapted is as much a necessity for the defective child as it is for the normal child; he needs these opportunities and advantages as much as his normal brother and they should not be denied him simply because he is not capable of acquiring them in the ordinary way. \* \* \*

The State Home for the Feeble-Minded has at the present time a population of between 1,000 and 1,100 defective children and adults, which for the purposes of this study will be spoken of and considered as children. Our classification studies, which are based on psychological tests, including the Binet-Simon method, have shown that this population can be divided into three large groups. For general consideration, we will speak of the groups as the Idiot, whose mental ability ranges from naught to two years; the Imbecile, whose mental capacity is that of the child between two and seven years of age, and the Moron, with a mental range of between eight and twelve years.

Of the population of the institution, 825 have had psychological tests by the Binet-Simon method. The grouping of this number is as follows:

Idiots .....	281
Low grade (mental age—0) .....	50
Middle grade (mental age—1) .....	105
High grade (mental age—2) .....	126

Of the middle grade idiots, 8 were registered as capable of work, such work being polishing, making beds and dressing others, and one of these could do the work without constant supervision. Forty-seven of the high grade idiots were capable of work and ten could do this without direction. There was more variety to the work they were capable of doing; besides polishing, they could make beds, dress and undress others, carry dishes into the kitchen, sweep, cut wood, pick up papers in the yard, and do garden work.

Imbeciles .....	389
Low grade (mental age 3-4 years) .....	137
Middle grade (mental age 5 years) .....	72
High grade (mental age 6-7 years) .....	180

Low grade imbeciles capable of work number 59 and 14 of these could work well if shown and without supervision. Work they could do was polishing, running



errands, working in the garden, feeding and dressing lower grade children, doing dishes, cleaning sinks, keeping the lavatories clean, making beds, helping to take laundry back and forth, sweeping, scrubbing, dusting, waiting on table and helping in the kitchen, and one girl could darn. Twenty-nine of the middle grade imbeciles are able to work and 9 of these without direction. The work they could do was practically the same as that of the lower grades, with the addition of taking care of the food baskets and cans, darning and setting tables. Seventy-eight of the high grade imbeciles were able to work, 18 without constant supervision and 9 more were registered as capable and could take responsibility. One of these latter workers sees to the linen and clothes, another saws wood, several wash children, in addition to the types of work mentioned above. Some of the children with a mental grade of 7 years help in the laundry, polish silver and help in the hayfield or orchard.

Morons -----	155
Low grade (mental age 8-9 years)-----	106
Middle grade (mental age 10 years)-----	30
High grade (mental age 11 years and over)-----	19

The percentage of morons capable of doing work is still higher, 57 per cent as against 42 per cent of the imbeciles and 19 per cent of the idiots. Of these workers 57 are low grade, 19 middle grade and 13 high grade morons. Thirteen morons are registered as being good workers without direction and 18 others can take responsibility. We find in this group a still greater variety of work, for in addition to the work done by the lower groups, some of the girls do sewing, fancywork, embroidery, one girl writes letters for the other girls, another does hairdressing and others do basketry, run the sewing machine and do mending, while some of the boys do farm work, carpenter work, cabinet work, pick grapes and use the pick and shovel.

Of the idiots, some are absolutely helpless and others have the intelligence of children of two years, so that from an educational standpoint this group needs very little. Their care is mainly that of supervision and nursing, prevention of injuries, and keeping them occupied. They should be housed separately and not placed, as at present, among the other grades. Such a plan is poor economy and results in the deterioration of the higher grade children. This is perhaps more clearly understood when one considers simply the question of supervision by the attendants. Where there are any idiots in the group the personal care of the attendants is concentrated necessarily upon them. The higher types are consequently allowed to shift for themselves or to amuse themselves, and as a result they tend to deteriorate to a lower level because their faculties are not developed, but become atrophied through inattention and a lack of systematic supervision. This deterioration is especially true in relation to their games and forms of amusement, which are of the most limited type. Studies with the lower types of the defective child have shown that the play or recreational methods of instruction were often the most successful in stimulating and developing their limited faculties. This class comprises perhaps the most hopeless and discouraging type to care for in an institution, for there is so little that can be done outside of physical care and supervision, and an opportunity for some recreational advantages, which certainly should be developed.

The imbecile group offers a variety of problems and opportunities for development. Ranging, as this group does, over a mental period of from two to seven years, there is a wide divergence of needs and possibilities. What the child with the mentality of two or three years enjoys, the child of five or seven has long passed beyond, so that it is almost impossible to handle all these varying mental ages by the same means. The great need during this period is one of training in habits, vocation and recreation. The lowest of this group can participate to a slight degree in outdoor games and gymnastic work, and to a certain extent because of their physical development, in some types of simple outdoor manual work or indoor routine manual tasks. The members of the upper subdivisions of this group, with a mental range of from five to seven years, are more capable and therefore need more attention. If left to their own devices they soon retrograde, and instead of maintaining the power which they have of mental development, they often fall back almost, if not completely, into the idiot group. It is a well recognized psychological and educational principle that

unless faculties are developed by use, they soon deteriorate and even disappear. \* \* \* It is also a well known educational fact that a group of children will tend to strike a common level, and if the higher grade imbeciles are kept with the lower subdivisions of the group, or with the idiots, their tendency will be to retrograde through such constant association to a lower grade of intellect and effort, and thus another important element in the management of these cases makes itself evident.

The problems that the smaller moron group presents are far more complex than are those of the imbecile group. Whereas little can be accomplished in the way of ordinary school work with the preceding group, a good deal can be done with the moron group, through certain types of graded school work, or through proper vocational or manual training of various types. There is hardly any vocational trade in which they are not capable of accomplishing something, when they are properly trained and supervised, if the vocational work has been selected after careful study of the child's potential capacity. One of the first principles, however, in dealing with all defectives, is that they need constant training and supervision. \* \* \* Another very well recognized precept in the handling of the defective child is that, whereas the normal child alone can fairly well employ himself during the recreational period, the defective child has not the same ability. \* \* \*

Let us now consider the conditions as they exist at the present time in the Home as related to school grade work and vocational training, recreation and the distribution of cases. Our classification has brought out the fact that almost every cottage or ward has in it a mixture of all three grades, that there is only to a limited extent a separation of the idiots from the imbeciles and the imbeciles from the morons. This has been more or less the result of necessity rather than choice. The growth of the institution has been so rapid and the accommodations for cases so limited, that in many cases children have had to be put wherever there was room for them, without regard to their mental classification. From what we have already said, it is plain that there can only be one result from this type of distribution. The work of supervision demanded of the attendants must necessarily be concentrated on the more helpless and the lower grades, and it is therefore probable that a certain number of those we have classed as idiots were undoubtedly at first low grade imbeciles, and the same is true to a greater or lesser degree of each succeeding higher group.

To a certain extent this problem has been met successfully by a fairly well organized plan of detailed work, but without supervision. Where a child has been capable of caring for a more defective one, this has been taken advantage of, and rightly so. \* \* \* A large amount of necessary work around the institution can and is to some extent being done by the higher grade imbecile and moron children and adults, but we feel that in many instances development to a higher type of work might have been gained had more careful and extended classification and supervision been available. \* \* \* In many cases, their field of activity could undoubtedly have been widened had they had adequate supervision, and in so much their usefulness to the institution increased, and their own happiness and development have been more satisfactory.

In the education of the defective, school work, as it is understood, holds a secondary place to vocational training, and such school training must be adapted to the individual mental capacity of the child taught. When it is considered that the institution has only five teachers for all types of work, vocational and ordinary grade teaching, it is not at all surprising that the number who are able to avail themselves of this work is also small. The lower and middle grade imbecile can only be given kindergarten work, and such work, to be of any advantage, must be over long periods, and a great deal of individual attention must be given to each child. The large number of this group in the institution at the present time would demand quite a corps of kindergarden teachers. As a matter of fact the institution has been able to provide only one. For this reason individual attention has been meagre and the time allotted each small group very short. \* \* \*

The same conditions exist for the higher grades. \* \* \* There is no question but that the large number of imbeciles and morons at present unable to have instruc-



tion, shows the need for developing and increasing the staff of teachers. There are 126 high grade idiots. Forty-seven of these have shown their ability to work, and 10 of them have even been taught to do work without constant supervision. We feel sure that a good many more of the 126 could be developed along the same lines if there were greater opportunities for kindergarten work and for manual training under supervision. \* \* \* There are 155 morons and practically all of these are capable of much further development than they are at the present time able to have. When one considers the amount of vocational training available for children, one is at once struck with the dearth of this type of training. \* \* \*

The natural ability of many of these defectives along musical lines is well recognized, and yet we find that only 16 have the opportunity to take piano lessons. There are 14 in the choir, 3 who are getting individual vocal lessons, and there are 15 in the band. This number is, of course, all that one instructor could take care of or develop with any degree of satisfaction.

Gymnastic work is considered a most important line of development for defectives, because it not only makes for better physical development and posture, but also greatly increases their interest and happiness in the institution (one finds that the children talk more of their music and gymnastics than of almost any other of their activities). \* \* \* Out of a possible 500 or 600 children who should be getting this training, only 60 are able to do so. If only a definite plan could be formulated to give every child capable of taking domestic work some of the simpler setting-up exercises, teaching them how to stand and walk, and having a definite recreational program adapted to each group, the advantages in the way of increased efficiency in their work would more than repay for the inauguration of such a plan. \* \* \* There should also be a number of recreational supervisors, who would take charge of the gymnasium work. The development of this side of the institution is absolutely necessary if the higher types of defectives are to be admitted, for unless these children are given the opportunity to enjoy recreational advantages, they are going to become discontented and their mental development will be retarded. \* \* \* In order to carry out an educational plan of this scope, there would have to be an educational director, because the magnitude of such a plan requires special training and a great deal of time devoted to the individual problems which the various groups of children would present. It would be asking entirely too much to expect the executive head of an institution to carry out such a plan. It is neither within the requirements of an executive head, nor are there many executives who are qualified to develop such an educational plan. \* \* \* The necessity for such a plan will be even greater if the state is going to take up the problem of the high grade moron, a type of which the institution has very few at the present time. If the state is going to develop a high grade moron colony for girls at Eldridge, it should preferably be placed in small cottages, erected at some distance from the present group of buildings. \* \* \* Whether it is thought advisable or not to develop a moron colony at Eldridge, the problem of developing the educational, vocational and recreational aspects of the Home still would have to be considered. With 500 to 600 teachable children at present in the Home, this question must be faced and some adequate solution sought.

We feel that the problem of the epileptic is one that should be dealt with in an entirely separate institution. Though many of the epileptics are mentally defective and many epileptics become feeble-minded because they are epileptics, still it has been found that they are much better if they are isolated from the ordinary type of defective children. The development of an epileptic colony is mainly along the lines of outdoor manual work. \* \* \*

To summarize our studies, the program which we have suggested for vocational and educational development would be as follows:

*First*—A redistribution and segregation of the cases according to their mental and psychological classifications.

*Second*—The development of the kindergarten department, so that every child in the lower grades would have an opportunity to be studied and to develop whatever capacity it had. One kindergarten teacher can not care for more than 10 or

15 children at a time, and the period of instruction should be at least two hours a day for each child, besides the vocational and recreational work for which these children would have to be supervised.

*Third*—The opportunity for higher grade work should also be increased and enough teachers appointed so that there would be at least one teacher for every 20 to 25 children, and their school period should be at least half a day, the other half day being allotted to recreation and vocational duties.

*Fourth*—The development of a vocational school which would include instruction in such lines as sewing, fancy and plain, dressmaking and tailoring, shoe making and cobbling, textiles, broom making, carpentry, sloyd work and agriculture, for example. Each of these types of work will need a specially trained teacher and no one teacher can supervise more than 15 or 20 children while at work, or teach them so they will develop materially along their special lines. This type of supervision will really repay the institution, as through it the grade of work which the children can do will be very much higher and their output will be increased to such an extent that in time a plan of this kind will become more or less self-supporting.

*Fifth*—A definite recreational plan for all of the children should be developed with a great deal more opportunity for gymnasium work. The children should be taught how to stand and how to walk properly. Opportunity for outdoor games should be developed for all of the children and should be under the supervision of a well-trained recreational worker. There will have to be a number of recreational supervisors for the boys and girls of the different types. Preferably they should have their own playgrounds and they should be required to spend several hours in such exercises and recreation as they are capable of participating in.

*Sixth*—To carry out this educational plan there must be an educational director who will have charge of all the school work and the recreation. Such a director, of course, must be one with considerable training and experience.

*Seventh*—A well-equipped vocational school should be erected, which would probably cost in the neighborhood of a hundred thousand dollars. There should be from 20 to 30 teachers connected with this educational, vocational and recreational system, all under the direct supervision of the director.

*Eighth*—A moron colony should be developed, which would mean the erection of 8 or 10 cottages, each holding 15 or 20 girls, with a housemother and teacher residing with each group. These cottages should be so placed that the children could have easy access to the vocational school, where they will be occupied most of the day.

*Ninth*—The question of the segregation of the epileptics is a pressing one, and the development of a colony for this type in another part of the State, or at some distance from the Home, is much to be desired.

*Tenth*—The staff of resident physicians should be large enough to warrant a study of their cases and give them time in addition for reading and studying. There should also be a pathologist in charge of a well-equipped laboratory, with competent assistants.

*Family histories.* Another very interesting piece of research work has been recently commenced at the Sonoma State Home. This is a study of the family histories of a number of selected cases, which is being undertaken by a field worker sent out from the Eugenics Records Office at Cold Spring Harbor, New York, and who is working under the direction of the Lunacy Commission of California. Some very interesting data are being compiled.

*Investigations.* In February, 1914, the chief clerk of this Board accompanied the president of the State Civil Service Commission and the secretary of the State Board of Health to the Sonoma State Home, for the purpose of examining into certain matters of sanitation, concern-

ing which complaint had been made. In March a hearing of these charges was held by the board of managers of the Home, at which, upon the invitation of that board, two members of the State Board of Charities and Corrections were present. The complaints involved such matters as the improper handling of garbage and manure, bad sanitary conditions in Maple Cottage, inadequate segregation of tuberculous inmates, and insufficient attention to the matter of vaccination. A report has been received from the board of managers of the Home, which states that improvement has been made in these conditions, and a recent inspection by a representative of this Board shows this to be the case.

*New buildings.* The legislature of 1913 provided for the erection of three new buildings at the Home; an additional nursery for boys, a second cottage for epileptic girls, and a dormitory building for female employees. Of these new buildings, only the nursery for boys has been erected. This is about ready for occupancy and will house 60 small boys, of the brighter type. It is a very attractive cement building, two stories in height, with two large porches. The accommodations for children consist of two large wards, a small sick room with a capacity of three beds, a fine large playroom provided with a patent drinking fountain, dining-room, lavatory equipped with 24 faucets and 20 toilets with low seats, bathroom in which are two bathtubs and two showers, all located on the ground floor. On the second floor are sleeping quarters for employees. Good kitchen, pantry and sewing-room are provided. The entire interior is painted white and there is indirect electric lighting.

The lumber for the new dormitory building for female employees is on the ground and as the bids received did not come within the \$5,000 appropriated for this purpose, it is to be constructed by day labor, under the supervision of the steward of the Home. This structure is planned primarily to house the night attendants, thus providing quiet sleeping quarters for many who now sleep on the wards.

The new cottage for epileptic girls has not been started as yet, but it is hoped to commence building operations in the near future.

*Improvements.* Recent improvements at this institution include the completion of a new incinerator, clearing of the ground and wire fencing for a playyard at Maple Cottage, new swings and benches in the girls' playyard. In course of construction at the present time are a new concrete septic tank, consisting of three units with a capacity of fifty thousand gallons each, concrete conduits for the steam pipes leading to Maple and Laurel cottages, concrete manure pit, concrete cesspool and new calf shed at the dairy, and a new well. The appearance of the grounds has been improved by the laying of cement walks



around the Administration Building and the setting out of additional plants, hedges and shrubbery.

*Addition to teaching staff.* The recent employment of a gymnasium teacher increases the number of instructors to six, classes in the following subjects being held: Music, kindergarten work, school grade work, sloyd, fancywork and gymnasium. The superintendent feels that this addition to his staff will prove of great advantage to the children.

*Present needs.* The needs of this institution are many and urgent and large appropriations will be asked of the legislature. For the sake of convenience, the management of the Home has listed the desired improvements in three groups, on a basis of their relative importance. The following are considered of primary importance:

One cottage for epileptic males (90 inmates) .....	\$20,000 00
Furnishing for same .....	5,000 00
Building for laundry .....	15,000 00
Remodeling Madrona Hall for commissary and bakery .....	5,000 00
Additions to electric power plant .....	15,000 00
Water and steam piping, with plumbing repairs .....	15,000 00
Improvement of grounds and roads .....	5,000 00
Cottage for first assistant physician .....	3,500 00
Furnishing for same .....	1,500 00
Girls' nursery building .....	20,000 00
Furnishing for same .....	5,000 00

In the second group are listed the following:

Infirmiry building for low-grade girls (90 inmates) .....	\$20,000 00
Furnishing for same .....	5,000 00
Cottage for females of marriageable age (90 inmates) .....	20,000 00
Furnishing for same .....	5,000 00
Schoolrooms and Assembly Hall .....	65,000 00
Furnishing for same .....	5,000 00
Industrial school building .....	10,000 00
Dormitory for male employees .....	10,000 00
Furnishing for same .....	2,500 00
Apartment house for married employees .....	20,000 00

Conceded as very important, but marked third on the list is a

Moron settlement of ten cottages .....	\$65,000 00
Furnishing for same .....	10,000 00

Estimates of the necessary support and salaries appropriations are as follows:

Support, sixty-seventh fiscal year .....	\$161,888 40
Support, sixty-eighth fiscal year .....	174,889 80
Salaries, sixty-seventh fiscal year .....	138,960 00
Salaries, sixty-eighth fiscal year .....	150,120 00

The idea of the superintendent in making the foregoing classification is that the first duty of the institution is to comfortably house its present population and to provide accommodations for the waiting list of 140. The present housing capacity, under normal conditions, is 1,038, while the population now numbers 1,072. The general average increase for the past ten years has been about 93 inmates per year.

With the completion of the new boys' nursery building and the cottage for epileptic females, there will be accommodations for an additional 120 inmates, which will still leave a waiting list. It is estimated that there are about 7,000 feeble-minded in the State of California for whom institutional care should be provided. There can be no question about the necessity for all the new buildings for inmates, appropriations for which will be asked of the legislature.

Another cottage for epileptic males is one of the most pressing needs of the institution. There are approximately 286 of this class in the Home, to house which there are at present two cottages for males and one for females. One of the cottages for males cares for both cripples and epileptics. The normal capacity of each of these buildings is about 50, which leaves nearly 150 epileptics scattered among the remaining population. When erected, the new cottage for epileptic females, appropriation for which was allowed by the legislature of 1913, will partially relieve this condition, but the state should make provision for the complete segregation of this class. Many of the epileptics are almost normal mentally and such close association with the feeble-minded is detrimental to them. Indeed, it is a question as to whether it might not be better to provide for these unfortunates in a separate colony.

The nursery building for girls would permit of the segregation of the very small girls, some of whom are little more than infants, who are now scattered among the older girls and old women.

The infirmary building for low-grade girls would take care of such as are in poor physical condition, and, together with the nursery building, would relieve the congestion in other departments and provide additional accommodations for the waiting list.

The reasons for the establishment by the state of a moron colony have been set forth in the report of Dr. Lucas, and the legislature will be asked to appropriate the necessary moneys. The question of a suitable site presents some difficulties, which might perhaps be best met by the establishment of the colony as an entirely separate and distinct institution, at some other location. The state is large enough to support two institutions for the feeble-minded, and the ideal arrangement would be to have one entirely devoted to the care of the high-grade or moron type, and the other, the Sonoma State Home, devoted to the idiot and imbecile. This plan, however, has one decided drawback—it would make difficult the visiting of the children by their parents. The question of practicability may make it necessary to provide at each institution for every type of defective.

In case provision for the moron colony is not made by the legislature, it will be asked to appropriate money for the erection of a cottage for females of marriageable age, with a capacity of 90 inmates.



In addition to increased accommodations for inmates, there is great need for new quarters for employees. Their work is very trying and difficult, requiring infinite patience and kindness, and the state should provide them with suitable living quarters. Many are obliged to hire cottages off the institution grounds, and some of the male employees are forced to sleep in the two railroad depots at Eldridge. Appropriations for a dormitory for male employees and an apartment house for married employees are being asked for. It would seem that these two might well be combined into one building and thus effect a saving of money.

A request for the schoolrooms and Assembly Hall was made at the last session of the legislature, and granted, but owing to lack of funds, the necessary money was not appropriated. This will be asked for again and it is to be hoped that there will be no difficulty this time, for both this building and an industrial school building are very greatly needed improvements. The educational and industrial training needs of the Home have never been adequately met, the inmates being denied proper opportunities along these lines, owing to the lack of facilities to carry on the work. It might be feasible to combine the school and industrial class rooms in one building, though the board of managers is asking for two structures.

The new building for laundry is certainly very necessary, as is also the remodeling of Madrona Hall for the use of the commissary and bakery. The commissary is now located in the basement of the main building, with insufficient room, and the bakery is dark and cramped for space. Additions to the electric power plant would permit of the installation of a number of needed conveniences, *i. e.*, power for the sewing machines, electric irons for the use of the girls working in the laundry, electric lights for the milking barn, and electric light during the daytime when necessary. Water and steam piping, plumbing repairs, and improvement of the roads should be provided for.

### INDUSTRIAL HOME FOR THE ADULT BLIND.

Oakland.

#### BOARD OF DIRECTORS.

JOHN P. IRISH, <i>President</i> .....	Oakland
GEO. E. RANDOLPH, <i>Vice-President</i> .....	Oakland
J. W. SCOTT.....	Oakland

JOSEPH SANDERS, *Superintendent*.

The usual membership of the board of directors is five, but since the resignations of Mr. H. C. Capwell and Mr. Warren Olney, Sr., over a year ago, no appointments have been made to fill the vacancies.

*Investigation.* In December of 1912 charges against the management of the Industrial Home for Adult Blind were brought by the

Blind Men's Club of California, certain members of which were inmates of the Home. At the request of Governor Johnson, a committee of this Board conducted an investigation of these charges, a public hearing occupying five days and twelve sessions being held at the institution, at which the Blind Men's Club was represented by its members responsible for the charges, and the management of the Home by some of the members of the board of directors and the superintendent. All of the witnesses offered by either side and a number of additional witnesses called by the committee, were sworn and examined. As a result of this exhaustive investigation, the committee filed a complete report with the Governor, concluding with the following recommendations:

#### I. MATERIAL IMPROVEMENTS.

*First*—That a refrigerator or cold storage rooms of sufficient capacity to care for the various food stuffs be provided. (This has been done.)

*Second*—That, in view of the fact that the present men's dormitories are in a disgraceful and antiquated condition, a new dormitory with a capacity for housing from 80 to 100 men should be constructed at as early a date as possible. There is sufficient ground to provide for a one-story building in the form of a quadrangle with a central court, which we recommend. Such a building should also contain adequate hospital accommodations and a dispensary. This request for a new men's dormitory has been made frequently by the board of directors. (In process of construction.)

*Third*—That a central heating plant be constructed, either in connection with the new dormitory building, or as a separate building, and all the buildings heated from this plant.

*Fourth*—That radiators be placed in the rooms occupied by the women and those rooms made comfortable during cold weather.

*Fifth*—That the present old buildings occupied by the men have the heat turned on during cold days and nights and whenever the comfort of the inmates requires it.

*Sixth*—That hot water for washrooms and for baths be made available daily at times to be fixed by the board of directors.

*Seventh*—That the quality of beds and bedding be improved, and methods be devised by which it may be certain that all blankets be washed at least once a year. (A number of blankets are now sent out to the laundry each month.)

*Eighth*—That new chairs be provided for the smoking room and benches be placed in the yard at places convenient for the inmates. (New benches have been installed in the smoking room.)

#### II. SUPERINTENDENCE.

*First*—That there should be a better organization of the service, a better definition of the duties of the employees, and more instruction given in regard to the performance of those duties. In general, more system and more efficiency are required. The necessity of having a seeing man charged with the responsibility of seeing that employees perform their work properly is apparent.

*Second*—That there be employed a trained nurse, who shall have the care of those who are sick, care of the general sanitary conditions, and also charge of the linen room. The physician's work and salary could be reduced sufficiently to pay the wages of such a nurse.

#### III. GENERAL POLICIES.

*First*—EDUCATION. That sufficient stress has not been placed by the directors and superintendent upon the instruction of the adult blind, the primary object of this Home. The first clause of the organic act creating this Home reads, "The ob-

jects of the Industrial Home for the Adult Blind are: First, the instruction of such blind admitted thereto in some trade or trades to enable them to contribute to their own support." At present, broom making, cane-seating of chairs, and piano tuning are the only vocations taught. We are satisfied that more trades should be introduced into the educational part of the work. In addition to the industries mentioned in the next paragraph, the blind have been successfully taught elsewhere shampooing, massage, typesetting, telephoning and reporting. This committee considers the educational part of the work of this Home of first importance, as it is the first mentioned of the objects of the Home's creation.

*Second*—NEW INDUSTRIES. That new industries should be added, to include such vocations as are available for the blind. The following are in use elsewhere and are here suggested for consideration: knitting, crocheting, lace weaving, rug weaving, bead work and the making of mattresses, baskets, brushes, mops, and for men with partial sight, truck gardening and poultry raising.

*Third*—STATUS OF STUDENTS. That closer attention should be given to the first sentence of the second section of the act, which reads, "Every person who has been a resident of the state for three years prior to his application for admission is, if of suitable age, character and qualifications, entitled to the benefit of instruction in such home free of charge, though he is not of such physical strength as to be able to work every day." While this section provides for free education, it does not require the pupil to remain at the Home. When possible, he should on the contrary be encouraged to reside in his own home. Nor does this mean free maintenance if he is able to pay, but it does contemplate that those who are physically able shall perform work when at the Home. Pupils should not be maintained free at the Home while being taught only a short period each day, and performing no other work, and especially blind men of means, in good physical condition, should not be maintained at the Home free, while neither studying nor working there.

*Fourth*—WAGES AND MAINTENANCE. That the second part of the first section of the act, which reads, "And second, the furnishing of a working home for the adult blind, who, after learning a trade or trades, desire to remain at the Home as workmen, but all who so remain must pay to the state, through the board of directors, the cost of their maintenance at the Home. The rate of wages to be paid these workmen, as well as the amounts which they must pay for their maintenance, must be fixed by the board," be followed. This will require the fixing of a monthly or weekly cost of maintenance. Probably this rate will have to be less than the real cost, to enable the workers to pay the cost and have enough left to pay other necessary expenses. The wages should then be increased to all that the shop would warrant. The present policy tends to pauperize. Many of the inmates now think the state furnishes them a home and maintenance free, and that it makes no difference whether they work or not. Those who are physically unable to work and are indigent, should be classified as "aged and enfeebled" and be maintained free of charge, as the law provides. This does not mean that a man "aged and enfeebled" who draws a good government pension should be maintained free at the Home.

*Fifth*—ACCOUNTING. That, in view of the fact that while we found no dishonesty in the keeping of the accounts, we did find considerable confusion in methods, and lack of an effective system of checks on outgoing products from the factory, we recommend that the matter be taken up by the State Board of Control and a definite system of accounting be prescribed as soon as possible. Along this line, we quote from the 1911 special report upon this institution made by the Department of Public Accounting of the State Board of Control: "Proper records have not been kept recording the receipt and issuance of raw material used in the manufacture, or of supplies received and consumed at the Institution." (Accounting system has been installed by Board of Control.)

*Sixth*—ADMISSIONS. That the law distinguishing between the laborers and aged and enfeebled be more closely followed, and that on admission the status of the inmate shall be determined and appear in the records of the superintendent and the directors, and that when it becomes necessary to transfer a worker to the "aged and enfeebled" class, that the records shall show this transfer. According to the or-



ganic act, the final word of admission lies with the doctor, who certifies as to the physical condition of the applicant, and we recommend that this be changed so as to leave the final word with the board of directors and the superintendent, who may consider not only the physical ability of the applicant, but also his economic status and the general propriety of his admission into the Home.

*Seventh—OUTMATES.* That, in accordance with the provision of the law, the Home should encourage the blind people to live at home with their families wherever feasible, coming only to the shop for their daily instruction and labor. The present system has just the contrary influence and encourages those who could and should live at home, to become inmates of the institution. That the purpose of the law should be more closely adhered to in encouraging the blind people to work in their own homes after they have acquired knowledge of the trades. Further, we should like to recommend that wherever it is not feasible for the blind person residing in the vicinity to come to the shop for instruction, provision be made for instruction in his own home, thus following a precedent set by other institutions of a similar nature.

*Eighth—DISMISSALS.* That no inmate shall be finally dismissed until he has been given a hearing by the board of directors.

*Ninth—RECREATION.* That the superintendent make more effort to provide entertainment and recreation for the inmates. At present the matter is left entirely to outside volunteers. In view of the lack of proper recreation rooms for both men and women, we recommend that they be provided. The recent improvements on the grounds, while they may have added to the appearance, have sadly reduced the opportunities of the inmates for outdoor life, and it seems to us something should be done to bring back the privacy which the hedges and trees gave in the past.

*Tenth—REVISION OF ORGANIC ACT.* That the organic act be amended and revised so that the Adult Blind Fund shall be no longer available for payment of the general expenses of the institution. That all moneys earned by the shops and industries shall be turned into this fund; that only charges of manufacturing, wages, raw materials, and actual superintendence of the shop be charged to it, and when the fund reaches \$10,000, which sum is suggested so that raw materials may be bought advantageously in the market, that no more additions to be made thereto. That the surplus of the shop shall be divided annually in three parts, the proportions to be determined by the board of directors; one part being paid out as deferred wages to the shop laborers in twelve monthly installments during the ensuing year, the amount of the bonus to be proportionate to the wages earned during the past year; a second part of this surplus to be distributed among the "aged and enfeebled" inmates for their personal expenses; and a third part to be used for the introduction and development of new trades and industries. In this manner the wages of the workers would be increased. This would also enable a reorganization of the shop and the elimination of the incapables, who at present draw a small wage and do little, if anything, toward the development of the industries.

As there are other parts of the organic act that should be changed, we recommend that a committee of the board of directors of the Home be appointed to co-operate with a committee of this Board in making such revision.

In conclusion, we wish to say that we believe that most of these recommendations cannot be carried out without changing the superintendency of the institution. The present superintendent is a blind man and there is no one officially charged with the duty of seeing for him. We agree with the members of the board of directors that a blind man makes the best instructor for the blind, for which place the present superintendent is especially fitted. His services would be of most value to the state in such a position, while as superintendent his limitations are obvious. We think the appointment of a seeing superintendent, especially chosen for a special fitness, would be an indispensable condition to the carrying out of these recommendations, and would have the effect of lifting the institution to higher efficiency. We recommend that the present superintendent be retained if possible as the head of the department of instruction, in its wider scope.

parts of the Industrial Home for the Blind. First, the instruction of such blind admitted therein is given not only by order to enable them to contribute to their own support. As a general rule, however, the instruction of chairs, and piano tuning are the only vocational taught. It is suggested that more trades should be introduced into the educational part of the work. In addition to the industries mentioned have been successfully taught elsewhere. This committee considers the educational part of the work at the Home of first importance, as it is the first requirement of the plan for the Home's location.

Second—New Industries. It will be necessary to add, to include such new ones as are available for the blind. Those now in use elsewhere and have suggested for consideration are: basket making, lace weaving, rug weaving, bookbinding and repairing. This committee suggests, however, that for men with partial sight, track producing a steady income.

Third—STATUS OF STUDENTS. That there should be given to the first students of the school similar to the act, which reads, "Every person who has been a resident of the state, he has every right to his application for admission to it of suitable age, character and qualifications entitled to the benefit of instruction in such home free of charge, should be it not of such physical strength as to be able to work every day." While the Industrial Home does for free education, it does not require the pupil to remain at the Home. When possible, he should on the contrary be encouraged to leave the Home. Nor does this mean free maintenance if he is able to pay his own expenses. It should not be maintained free at the Home while being taught, but a short period each day, and performing no other work, and especially keeping in mind, in good physical condition, should not be maintained at the Home for while neither studying nor working there.

Fourth—WAGES AND MAINTENANCE. That the second part of the first section of the act, which reads, "And should the furnishing of a working home for the blind, who, after having made an effort, desire to remain at the Home as students, but all who are not so, must pay to the state, through the board of directors, the cost of their maintenance at the Home. The rate of wages to be paid these students, as well as the amount which they must pay for their maintenance, must be fixed by the board of directors. This will require the fixing of a monthly or weekly cost of maintenance. Probably this rate will have to be less than the real cost, so public charity is left to pay the cost and have enough left to pay other necessary expenses. The rate should then be increased to all that the shop could produce. The general rule must be to pay more. Many of the inmates now have the same facilities, food, house and maintenance free, and that it makes no difference whether they work or not. Those who are physically unable to work and are infirm, should be called as "aged and enfeebled" and be maintained free of charge, as the law provides. That does not mean that a man "aged and enfeebled" who lived a good industrial position should be maintained free at the Home.

Fifth—ACCOUNTING. That in view of the fact that while we found no dishonesty in the keeping of the accounts, we did find considerable confusion in methods, and lack of all efficient system of checking on outgoing products from the factory, we recommended that the matter be laid up by the State Board of Control and a definite system of accounting be provided, as far as possible. Along this line, we quote from the 1912 special report on this institution made by the Department of Public Accounting of the State Board of Control: "Proper records have not been kept showing the receipt and location of raw material used in the manufacture, or of finished material and products of the institution." (Accounting system has been suggested by Board of Control.)

Sixth—ADMISSIONS. That in view of the fact that between the laborer and enfeebled be very much different, and that on admission the status must be determined, and that the records of the superintendent, and that when a laborer becomes unable to transfer a "non-productive" class, that the records should show the transfer.



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In conclusion, we wish to say that we believe that most of these recommendations cannot be carried out without changing the superintendency of the institution. The present superintendent is a blind man and there is no one officially charged with the duty of seeing for him. We agree with the members of the board that a blind man makes the best instructor for the blind, which is a very good suggestion. The superintendent is especially fitted to his service, and we would not recommend such a position, while as long as he is so well qualified, we would not recommend the appointment of a seeing man. The appointment of a seeing man would be an indispensable part of the reorganization, and we would have the honor to recommend that the present superintendent be continued in his department of instruction.

the following: "The American Medical Association, created in 1847, is the largest and most influential organization of medical professionals in the United States."

1947	1947
1948	1948
1949	1949
1950	1950
1951	1951
1952	1952
1953	1953
1954	1954
1955	1955

The American Medical Association (AMA) is a national organization of medical professionals in the United States. It was founded in 1847 and is the largest and most influential organization of medical professionals in the United States. The AMA's primary purpose is to represent the interests of its members and to promote the highest standards of medical practice. It also provides a variety of services to its members, including continuing medical education, advocacy, and research. The AMA is a non-profit organization and is governed by a board of trustees. It is a member of the International Medical Association and the World Medical Association.

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COUNTY CHARITIES AND  
CORRECTIONS.

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## COUNTY CHARITIES

COUNTY

County	Location of jail	Sheriff	Jailer of chief deputy
1. Alameda	Oakland	F. Barnet	Chas. Clark
2. Alpine	Markleeville	C. A. Grover	
3. Amador	Jackson	J. S. Davis	C. Bradshaw
4. Butte	Oroville	J. B. Webber	M. B. Webber
5. Calaveras	San Andreas	Joshua Jones	— Wesson
6. Colusa	Colusa	C. D. Stanton	W. T. Beville
7. Contra Costa	Martinez	R. R. Veale	A. D. Joslin
8. Del Norte	Crescent City	A. J. Huffman	Edw. Jones
9. El Dorado	Placerville	C. F. Hand	L. J. Dordoundy
10. Fresno	Fresno	W. S. McSwain	R. J. Venn
11. Glenn	Willows	J. A. Bailey	E. H. Masterson
12. Humboldt	Eureka	R. A. Redmond	J. F. Helms
13. Imperial	El Centro	M. Meadows	
14. Inyo	Independence	C. A. Collins	A. A. Brierly
15. Kern	Bakersfield	T. A. Baker	T. T. Baker
16. Kings	Hanford	L. D. Farmer	H. H. Warnock
17. Lake	Lakeport	Lyon Fraser	Ed. Alter
18. Lassen	Susanville	A. Hunsinger	J. S. Church
19. Los Angeles	Los Angeles	W. A. Hammel	Geo. Gallagher
20. Madera	Madera	S. W. Westfall	W. K. Heiskell
21. Marin	San Rafael	J. J. Keating	Chas. A. Redding
22. Mariposa	Mariposa	R. A. Prouty	Asa Prouty
23. Mendocino	Ukiah	R. R. Byrnes	J. J. McGimsey
24. Merced	Merced	S. C. Cornell	J. C. Ivers
25. Modoc	Alturas	A. E. Smith	L. M. Estes
26. Mono	Bridgeport	J. P. Dolan	
27. Monterey	Salinas	W. J. Nesbit	J. H. Robinson
28. Napa	Napa	E. A. Kelton	G. B. Swift
29. Nevada	Nevada City	H. R. Walker	John R. Martin
30. Orange	Orange	C. E. Ruddock	E. W. Boynton
31. Placer	Auburn	G. McAulay	E. H. Gum
32. Plumas	Quincy	L. A. Braden	C. P. Moseley
33. Riverside	Riverside	F. P. Wilson	H. F. Nelson
34. Sacramento	Sacramento	J. H. Donnelly	F. E. Myers
35. San Benito	Hollister	J. J. Croxon	H. W. Prescott
36. San Bernardino	San Bernardino	J. C. Ralphs	T. O. Carter
37. San Diego	San Diego	F. M. Jennings	W. S. Flint
38. San Francisco	San Francisco	F. Eggers	T. Kennedy
39. San Joaquin	Stockton	W. H. Riecks	G. E. McAllister
40. San Luis Obispo	San Luis Obispo	C. A. Younglove	R. R. Hankenson
41. San Mateo	Redwood City	J. H. Mansfield	O. J. Parker
42. Santa Barbara	Santa Barbara	Nat Stewart	J. R. Janssens
43. Santa Clara	San Jose	A. B. Langford	Frank Rice
44. Santa Cruz	Santa Cruz	H. B. Trafton	R. H. Rountree
45. Shasta	Redding	J. Montgomery	J. N. Logan
46. Sierra	Downieville	J. Johnson	T. F. Wayman
47. Siskiyou	Yreka	C. B. Howard	P. C. Pollard
48. Solano	Fairfield	J. J. McDonald	E. W. Newman
49. Sonoma	Santa Rosa	J. K. Smith	C. H. Meyer
50. Stanislaus	Modesto	A. S. Dingley	
51. Sutter	Yuba City	F. B. Noyes	B. Schillig
52. Tehama	Red Bluff	J. W. Boyd	W. T. Stevenson
53. Trinity	Weaverville	J. W. Boyce	W. H. Clement
54. Tulare	Visalia	W. W. Collins	
55. Tulumne	Sonora	Wm. Sweeney	Wm. H. Squires
56. Ventura	Ventura	E. G. McManroe	J. J. Salcido
57. Yolo	Woodland	J. W. Monroe	R. N. Woods
58. Yuba	Marysville	Geo. H. Voss	H. M. Lydon

1Approximate date.

2Remodeled.

3Front part; the rest is older.

4Basis of computing capacity is in general 2 men to a cell 6 feet by 8 feet.

## AND CORRECTIONS.

## JAILS.

Date built	Capacity <sup>1</sup>	Maximum number prisoners	General character of building
1909	130	127	Class A; fireproof.
<sup>1</sup> 1880	4	4	Wooden; in poor state of repair.
<sup>1</sup> 1865	28	12	Basement of courthouse; concrete and stone.
1903	24	32	Practically fireproof; in good repair.
1862	12	12	Basement of courthouse; stone.
1877	16	16	Wooden floors; brick walls, concrete surfaced.
1902	30	40	Fireproof; excellent repair.
1890	8	9	Stone, with wooden floors; flimsy construction.
1913	18	10	First floor of courthouse; stone and wood, new.
<sup>2</sup> 1913	125	100	Practically fireproof; in good repair.
1894	12	18	Practically fireproof; in good repair.
1909	60	32	Fireproof; excellent repair.
?	16	44	Brick; concrete floor; fair state of repair.
1908	18	12	Concrete; practically fireproof.
?	65	110	Old style stone; in bad shape of repair.
?	30	30	Brick and granite; practically fireproof.
1870	4	4	Wood and brick; very poor.
1911	25	10	Stone; good; nearly fireproof.
1902	300	400	Stone; good; fireproof.
<sup>2</sup> 1910	30	30	Granite; good; fireproof.
<sup>1</sup> 1870	20	20	Basement of courthouse.
<sup>1</sup> 1886	4	4	Granite; fair repair.
	20	30	Brick; concrete surface; fireproof.
1902	40	65	Stone and brick; fireproof.
<sup>1</sup> 1898	6	10	Brick and wood; not satisfactory.
<sup>1</sup> 1880	8	8	Stone; nearly fireproof.
1905	48	40	Concrete and stone; good repair.
<sup>2</sup> 1875	}	25	Concrete; wood floors; fair repair.
1856			
1870	24	24	Stone, brick and wood; nearly fireproof.
1894	80	125	Brick; practically fireproof.
1895	26	45	Granite; part of courthouse; nearly fireproof.
1864	20	15	Brick and frame; not satisfactory.
1900	60	40	Brick, concrete surface; good.
1910	135	200	Brick; class A.
	12	12	Brick; poor repair.
<sup>3</sup> 1904	72	100	Stone and brick; some wooden floors.
1912	180	130	Concrete; fireproof.
1862	}	440	Brick; some wooden floors.
1880			
<sup>1</sup> 1890	80	100	Brick; fireproof.
1872	30	70	Basement of courthouse.
<sup>1</sup> 1875	15	15	Brick; wooden floors; unsatisfactory.
<sup>1</sup> 1900	35	30	Stone; practically fireproof.
1864	70	125	Brick; fireproof; old style.
1890	25	35	Brick; good repair.
1887	20	36	Stone and brick; wooden floor.
<sup>1</sup> 1855	6	5	Part of frame courthouse.
1900	15	20	Stone, with wooden floors and stairs.
1907	60	56	Concrete; class A; fireproof.
See	}	32	Brick; poor repair.
remarks			
1910	45	30	Concrete; fireproof.
<sup>1</sup> 1870	4	4	Brick; practically fireproof.
<sup>1</sup> 1870	12	17	Stone; brick; poor repair.
<sup>1</sup> 1885	4	6	Backroom and basement of courthouse.
1890	26	20	Brick; practically fireproof.
<sup>1</sup> 1850	13	13	Stone; fair repair.
<sup>1</sup> 1880	18	30	Brick; wooden floor.
<sup>1</sup> 1860	10	20	Wooden; in bad state of repair.
<sup>1</sup> 1865	35	30	Misdemeanor department in bad repair.



## COUNTY

County	Bars and screens	Segregation	
		Departments	Compliance with law
1. Alameda	Adequate	8	Yes
2. Alpine		1	No
3. Amador	Adequate	2	No
4. Butte	Adequate	4	<sup>5</sup> No
5. Calaveras	Adequate	2	No
6. Colusa	Windows not properly protected	4	<sup>5</sup> No
7. Contra Costa	Adequate	3	<sup>5</sup> No
8. Del Norte	Utterly inadequate	2	No
9. El Dorado	Adequate	4	Yes
10. Fresno	Adequate	6	Yes
11. Glenn	Not safe	1	No
12. Humboldt	Adequate	6	Yes
13. Imperial	Not safe	1	No
14. Inyo	Adequate	3	<sup>5</sup> No
15. Kern	Adequate	4	<sup>5</sup> No
16. Kings	Adequate	3	<sup>5</sup> No
17. Lake	Not safe	1	No
18. Lassen	Adequate	2	<sup>5</sup> No
19. Los Angeles	Adequate	8	Yes
20. Madera	Adequate	3	<sup>5</sup> No
21. Marin	Hard to guard	3	<sup>5</sup> No
22. Mariposa	Not safe	2	<sup>5</sup> No
23. Mendocino	Adequate	1	No
24. Merced	Adequate	3	<sup>5</sup> No
25. Modoc	Not safe	1	No
26. Mono		1	No
27. Monterey	Soft steel bars	3	<sup>5</sup> No
28. Napa	Adequate	1	No
29. Nevada	Fairly adequate	4	<sup>5</sup> No
30. Orange	Adequate	3	Yes
31. Placer	Safe	2	No
32. Plumas	Not safe	2	No
33. Riverside	Adequate	3	<sup>5</sup> No
34. Sacramento	Adequate	9	<sup>5</sup> No
35. San Benito	Adequate	3	No
36. San Bernardino	Adequate	8	Yes
37. San Diego	Adequate	9	Yes
38. San Francisco	Adequate	3	Yes
39. San Joaquin	Adequate	5	Yes
40. San Luis Obispo	Fairly adequate	1	No
41. San Mateo	Hardly adequate	3	No
42. Santa Barbara	Adequate	3	<sup>5</sup> No
43. Santa Clara	Adequate	4	<sup>5</sup> No
44. Santa Cruz	Adequate	3	<sup>5</sup> No
45. Shasta	Hardly adequate	2	No
46. Sierra	Not safe	1	No
47. Siskiyou	Hardly adequate	2	No
48. Solano	Adequate	7	Yes
49. Sonoma	Adequate	1	No
50. Stanislaus	Adequate	3	<sup>5</sup> No
51. Sutter	Not safe	1	No
52. Tehama	Not safe	1	No
53. Trinity	Not safe	1	No
54. Tulare	Misdemeanor dept. not adequate	5	<sup>5</sup> No
55. Tuolumne	Adequate	3	No
56. Ventura	Hardly adequate	2	No
57. Yolo	Not safe	2	No
58. Yuba	Misdemeanor dept. not safe	3	<sup>5</sup> No

<sup>5</sup>Men waiting trial are not kept separate from those serving sentence.

## JAILS.

General cleanliness	Lighting		Heating	Ventilation
	Natural	Artificial		
Good	Fairly good	Electric	Hot air	Good
Fair	Dark	None	Stove	Poor
Dirty	Dark	None	None	Poor
Good	Good	Electric	Hot water	Good
Dirty	Dark	Electric	Stoves	Poor
Fair	Bad down stairs	Electric	Stoves	Fair
Good	Good	Electric	Steam	Good
Bad	Good	Electric	Stoves	Fair
Good	Good	Electric	Steam	Good
Fair	Fair	Electric	Steam	Fair
Very good	Fair	Electric and candles	Steam	Fairly good
Very good	Good	Electric	Steam	Good
Not good	Cells are dark	Electric	None	Fairly good
Fairly good	Good	Electric	Furnace	Good
Not good but impossible to keep clean	Dark	Electric	Steam	Not good
Good	Fair	Electric	Hot water	Fair
Fair	Poor	Electric	Stove	Fairly good
Good	Good	Electric	Hot water	Good
Good	Fair	Electric	Steam	Good
Good	Good	Electric	Stoves	Good
Fairly good	Dark	Gas	Steam	Poor
Fair	Dark	Electric	Stoves	Poor
Fair	Fair	Electric	Stoves	Fairly good
Fair	Not good	Electric	Stoves	Fair
Good as conditions permit	Good	Electric	Stoves	Good
Good as conditions permit	Dark	-----	Stoves	Fair
Fair	Fair	Electric	Steam	Good
Fair	Dark	Electric	Stoves	Poor
Fairly good	Dark	Electric	Stoves	Poor
Good	Fair	Electric	Steam	Good
Fair	Poor	Electric	Stoves; steam	Poor
Not good	Poor	Electric	Stoves	Fair
Good	Fairly good	Electric	Hot water	Good
Good	Good	Electric	Hot air	Good
Poor	Dark	Electric	Stove; fireplace	Fair
Fair	Fair	Electric	Steam	Fairly good
Very good	Good	Electric	Steam	Good
Good	Cells dark	Electric and lamps	Steam	Fairly good
Cells dirty	Dark	Electric	Stoves	Poor
Fair	Dark	Electric and candles	Stoves	Not very good
Not clean	Dark	Electric	Stoves	Poor
Good	Good	Electric	Stoves	Good
Fair	Poor	Electric	Steam	Fair
Good	Fairly good	Electric	Steam	Good
Fair	Not good	Electric	Stoves	Fairly good
Fair	Poor	Electric	Stoves	Poor
Fair	Dark	Electric	Stoves; steam	Good
Good	Good	Electric	Steam	Good
Fair	Poor	Electric	Stove	Fair
Good	Good	Electric	Steam	Good
Fair	Dark	Electric	Stoves	Poor
Not very clean	Dark	Electric	Stoves	Fair
Fair	Dark	Electric	Stoves	Fair
Not clean	Poor	Electric	Stoves	Fair
Poor	Poor	Electric	Stoves	Poor
Fair	Fair	Electric	Stoves	Fairly good
Not clean	Dark	Electric	Stoves	Poor
Fairly good	Dark	Electric	Stoves; hot water	Fairly good

## COUNTY

County	Toilets			Bathing facilities			
	Number	Flush properly	Cleanliness	Tubs	Showers	Adequate	Cleanliness
1. Alameda	55	Yes	Good	1	10	Yes	Good
2. Alpine	1	Non-flush	Dirty	60	0	No	-----
3. Amador	2	Yes	Dirty	1	0	Yes	Dirty
4. Butte	4	Yes	Fair	3	0	Yes	Fair
5. Calaveras	2	Yes	Dirty	1	0	Yes	Fair
6. Colusa	3	Yes	Dirty	3	0	No	Dirty
7. Contra Costa	3	Yes	Fair	4	0	Yes	Good
8. Del Norte	4	Non-flush	Dirty	0	0	No	-----
9. El Dorado	9	Yes	Good	0	2	Yes	Good
10. Fresno	13	Yes	Fair	5	1	Yes	Fair
11. Glenn	2	Yes	Fairly clean	1	0	Yes at present	Fair
12. Humboldt	30	Yes	Good	3	7	Yes	Good
13. Imperial	2	No	Dirty	1	0	Yes at present	Fair
14. Inyo	2	Yes	Good	1	0	Barely	Good
15. Kern	7	Some	Dirty	6	0	Yes	Fair
16. Kings	4	Yes	Fairly good	1	0	No	Good
17. Lake	1	Yes	Fair	60	0	No	-----
18. Lassen	17	Yes	Good	2	1	Yes	Good
19. Los Angeles	100	Yes	Fair	2	10	Yes	Good
20. Madera	26	Yes	Fairly good	2	2	Yes	Good
21. Marin	10	Yes	Not clean	1	0	No	Fairly good
22. Mariposa	1	Yes	Fair	60	0	No	-----
23. Mendocino	1	Yes	Fair	0	1	Yes at present	Good
24. Merced	15	Yes	Fair	4	0	Yes	Fairly good
25. Modoc	0	-----	-----	60	0	-----	-----
26. Mono	1	-----	-----	0	0	No	-----
27. Monterey	4	Yes	Good	1	1	No	Good
28. Napa	3	Yes	Not clean	2	0	Yes	Fair
29. Nevada	3	Yes	Fair	1	0	No	Fair
30. Orange	16	Yes	Fair	4	0	Yes	Fairly good
31. Placer	4	Yes	Fair	2	0	Yes	Fair
32. Plumas	12	Yes	Dirty	1	0	No	Fair
33. Riverside	17	Yes	Fair	5	0	Yes	Good
34. Sacramento	80	Yes	Good	3	9	Yes	Good
35. San Benito	1	Yes	Dirty	1	0	Yes	Good
36. San Bernardino	7	Some	Dirty	7	0	Yes	Fair
37. San Diego	94	Yes	Good	9	1	Yes	Good
38. San Francisco	220	Not all	Some dirty	3	40	Yes	Good
39. San Joaquin	25	Hoppers	Fair	5	0	Yes	Fairly good
40. San Luis Obispo	2	Yes	Fair	1	0	No	Dirty
41. San Mateo	3	Not all	Dirty	1	0	No	Dirty
42. Santa Barbara	3	Yes	Good	3	0	Yes	Good
43. Santa Clara	3	Yes	Fair	3	0	Yes	Fairly good
44. Santa Cruz	4	Yes	Fair	4	2	Yes	Fairly good
45. Shasta	7	Hoppers	Fair	2	0	No	Not clean
46. Sierra	5	Poorly	Not very	60	0	No	-----
47. Siskiyou	2	Yes	Fair	2	0	Yes	Fair
48. Solano	32	Not all	Fairly	2	4	Yes	Good
49. Sonoma	1	Yes	Fair	2	0	Yes	Fair
50. Stanislaus	25	Yes	Dirty	1	2	Yes	Good

<sup>6</sup>No bathtub, but washtub is used.<sup>7</sup>Water has to be heated on stove.<sup>8</sup>If there are more than 3 prisoners, allowance is reduced to \$.85.<sup>9</sup>Three meals to prisoners that work.<sup>10</sup>For first 10 prisoners \$.40 per capita; \$.30 for all over 10; \$.15 extra for lunch to prisoners that work.<sup>11</sup>Allowance reduced to \$.35 for over 20 prisoners in one month.<sup>12</sup>When there are less than 15 prisoners, allowance is \$.40.

## JAILS.

Daily allowance	Food		Washing	
	Prepared by	Done by	Provisions	
\$0.25	Trusties	Prisoners	Tubs.	
75	Hotel	Prisoners	Washtub.	
50	Hotel	Prisoners	Bathtub.	
52½	Sheriff's house	Prisoners	Bath tubs.	
40	Hotel	Prisoners	Bath tubs.	
40	Hotel	Prisoners	Pail and stove.	
37½	Trusties	Prisoners	Stationary tubs.	
70	Jailer's wife	Washwoman	None.	
1.05	Jailer's wife	Prisoners	Washtubs and boards.	
30	Cook	Prisoners	Stationary tubs.	
50	Sheriff's house	Prisoners	Bathtubs.	
50	Trusties	Prisoners	Laundry.	
50	Hired cook	Prisoners	Bathtub.	
40 to 60	Hotel	Prisoners	Tubs.	
35	Trusties	Prisoners	Bathtubs.	
37½	Trusties	Prisoners	Washtubs.	
61.00	Deputy's home	Prisoners	Tub and washboard.	
70	Jailer's house	Prisoners	Stove, boiler and tubs in basement.	
16	Chef	Prisoners	Steam laundry.	
40 to 60	Private house	Prisoners	Washtub.	
34	Restaurant	Prisoners	Tubs.	
60	Hotel	Prisoners	Tub.	
50	Sheriff's house	Prisoners	Buckets.	
140, 30	Hired cook	Prisoners	Bathtubs.	
60	Prisoners	Prisoners	Tub.	
75	Sheriff's house	Prisoners	Washtub.	
25	Trusty	Prisoners	Stationary tubs.	
35	Prisoners	Prisoners	Bathtub.	
40	Hotel	Prisoners	Washtub.	
936, 24	Trusty	Prisoners	Two stationary tubs.	
1140	Sheriff's house	Prisoners	Stove and bathtubs.	
50	Hotel	Prisoners	Tubs.	
25	Trusties	Prisoners	Bathtubs.	
25	Trusties	Prisoners	Laundry sinks.	
60, 40	Prisoners	Prisoners	Bathtub.	
25	Trusties	Prisoners	Bathtubs.	
37½	Trusty	Prisoners	Bathtubs.	
17 to 19	Hired cook	Prisoners	Tubs in laundry.	
20, 30	Hired cook	Prisoners	Stationary tubs.	
40	Sheriff's house	Prisoners	Bathtub.	
50	Trusty	Prisoners	Pail and stove.	
40	Hired cook, some- times trusty	Prisoners	Bathtub.	
10	Trusty	Prisoners	Bathtub and buckets.	
35	Trusty	Prisoners	Washtub.	
40	Hotel	Prisoners	Bathtub and pail.	
1.00	Hotel	Prisoners	Stove and tub.	
60	Hotel	Prisoners	Bathtub.	
50	Trusty	Prisoners	Tubs.	
40, 1235	Trusty	Prisoners	Bathtub.	
50	Trusty or hired cook	Prisoners	Stationary tubs.	

## COUNTY JAILS

County	Toilets			Bathing facilities			
	Number	Flush properly	Cleanliness	Tubs	Showers	Adequate	Cleanliness
51. Sutter -----	1	Yes	Fair	0	0	No	-----
52. Tehama -----	1	No	Fair	1	0	At present	Fairly good
53. Trinity -----	2	One does	Fair	0	0	No	-----
54. Tulare -----	8	Yes	Dirty	2	0	Yes	Dirty
55. Tuolumne -----	6	All but one	Dirty	1	0	Yes	Dirty
56. Ventura -----	6	Yes	Dirty	1	0	Hardly	Fair
57. Yolo -----	2	Yes	Fair	1	0	No	Fair
58. Yuba -----	3	Yes	Fair	1	1	Hardly	Fairly good

\*No bathtub, but washtub is used.

\*Three meals to prisoners that work.



—Continued.

Food		Washing	
Daily allowance	Prepared by	Done by	Provisions
60	Undersheriff's house		None.
35, 52½	Trusties	Prisoners	Bathtub.
70	Restaurant	Prisoners	Pail.
40	Hotel	Prisoners	Bathtub.
40	Sheriff's wife	Prisoners	Bathtub.
50	Jailer's house	Prisoners	Tub in basement.
40	Hotel	Prisoners	Boiler on stove.
35	Hotel	Prisoners	Pails, sinks.

County	Beds	
	Kind	Bedding
1. Alameda	Hammocks	Blankets
2. Alpine	Cots	Mattress, blankets
3. Amador	Cots and floor	Blankets and sheets
4. Butte	Hammocks	Blankets
5. Calaveras	Cots	Mattress, blankets, pillow
6. Colusa	Cots, wall bunks	Blankets, pillow
7. Contra Costa	Wall bunks	Mattress, blankets
8. Del Norte	Cots, wall bunks	Mattress, comforts, blankets and pillow
9. El Dorado	Wall bunks	Mattress, blankets, one sheet, pillow slip
10. Fresno	Hammocks, wall bunks	Straw ticks, blankets
11. Glenn	Hammocks, wall bunks	Blankets, comforts, mattress
12. Humboldt	Hammocks, wall bunks	Blankets
13. Imperial	Wall bunks, floor	Blankets
14. Inyo	Wall bunks	Blankets, comforts
15. Kern	Hammocks	Blankets
16. Kings	Hammocks	Blankets
17. Lake	Cots	Mattress, sheets, blankets, pillow
18. Lassen	Hammocks, iron beds	Blankets, sheets and comforters
19. Los Angeles	Hammocks, cots, wall bunks	Blankets
20. Madera	Hammocks	Comforters, blankets
21. Marin	Iron	Blankets, sheets, pillow
22. Mariposa	Iron	Mattress and comforters
23. Mendocino	Wall bunks	Mattress, blankets, sheets, pillow slip
24. Merced	Hammocks, floor	Blankets and mattress
25. Modoc	Wooden and wall bunks	Mattress, blankets
26. Mono	Wooden	Comforters, blankets, straw ticks
27. Monterey	Wall bunks	Mattresses, blankets
28. Napa	Iron	Two blankets, mattress, pillow
29. Nevada	Hammocks, iron beds	Mattress, blankets, pillow
30. Orange	Wall bunks	Blankets
31. Placer	Hammocks	Blankets
32. Plumas	Wall bunks	Blankets, comforters, pillow
33. Riverside	Hammocks, wall bunks	Blankets
34. Sacramento	Wall bunks	Straw tick, blankets
35. San Benito	Floor	Blankets, mattress
36. San Bernardino	Wall bunks	Blankets
37. San Diego	Hammocks	Blankets
38. San Francisco	Wall bunks	Blankets
39. San Joaquin	Floor, wall bunks	Mattress and blankets
40. San Luis Obispo	Hammocks	Blankets
41. San Mateo	Floor	Mattress and blankets
42. Santa Barbara	Hammocks and iron beds	Blankets
43. Santa Clara	Floor and iron beds	Blankets and straw tick
44. Santa Cruz	Wall bunks	Mattress and blankets
45. Shasta	All kinds	Mattress, blankets, sheets, pillow
46. Sierra	Iron and wall bunks	Blankets, sheets, mattress, pillow
47. Siskiyou	Wall bunks and iron beds	Blankets, mattress, pillow
48. Solano	Wall bunks and hammocks	Blankets, comforts
49. Sonoma	Wall bunks	Mattress and blankets
50. Stanislaus	Wall bunks	Mattress and blankets
51. Sutter	Wall bunks	Mattress and blankets
52. Tehama	Wall bunks	Blankets
53. Trinity	Wall bunks	Mattress, comforts
54. Tulare	Iron	Mattress, blankets
55. Tuolumne	Cots	Mattress, blankets
56. Ventura	Hammocks	Blankets
57. Yolo	Floor	Mattress, blankets
58. Yuba	Floor hammocks	Mattress, comforts

<sup>20</sup>In every county there is need of outdoor work for prisoners or extension of work already provided.

## JAILS.

Cleanliness	Disinfectants	Work <sup>29</sup>
Good	Prescription from University of California -----	Inside jail 17 trustees.
Fair	-----	None.
Dirty	Anti-germine -----	None.
Very clean	Anti-germine -----	Yard and road, ball and chain for old timers.
Dirty	Anti-germine -----	None.
Fair	Various kinds with spray -----	Cleaning jail.
Fairly good	Anti-germine, sulphur -----	Jail, yard, streets.
Not clean	-----	Courthouse, jail, ground.
Good	Anti-germine -----	Jail and grounds, road work occasionally.
Fair	Hot water, steam -----	Jail, park, courthouse.
Fair	Various kinds with spray -----	Jail work.
Good	Germoline -----	Jail and lawn.
Fair	Anti-germine -----	Jail and roads.
Fair	"Kills the Bugs" -----	Courthouse, yard, jail.
Not clean	Anti-germine -----	Eight trustees work on lawn and jail.
Good	Anti-germine, hot lye water -----	Only for two trustees.
Good	Sulphur -----	Lawn, woodchopping.
Good	Creoline, formaldehyde -----	Jail work, piling wood.
Good	Steam, various sprays -----	Chain gang on road, jail work.
Comforters not clean	Germo -----	Park and jail, adequate.
Fairly good	Insecticide -----	Jail work, lawn.
Fairly good	Chloride of lime -----	None.
Fairly good	Various sprays -----	Gravel pit, lawn, woodpile.
Not clean	Insecticide germo, scrubbing comp. -----	Jail, park and grounds; two thirds of prisoners work.
Fair	Anti-germine -----	Janitor work in courthouse, jail work.
Fair	None -----	Cutting wood.
Good	Various sprays -----	Jail work.
Fair	Anti-germine -----	Lawn and yard.
Fairly good	Anti-germine -----	Jail work.
Fairly good	Germo and other liquid -----	Jail work, county farm.
Dirty	Anti-germine, chloride of lime, lye -----	Jail work.
Dirty	Entomocide -----	Yard, jail work.
Good	Various sprays, hot water -----	Lawn, kitchen.
Good	Sheep dip, anti-germine -----	Jail work.
Poor	Anti-germine -----	Yard, jail work.
Fair	Various sprays -----	Three road camps, jail work.
Good	Anti-germine, steam -----	Jail work.
Good	Sulphur sprays -----	Jail, garden, roads, 90 employed.
Dirty	Anti-germine -----	Jail work, chain gang on road.
Fairly good	Bug-o-cide -----	Jail work and yard.
Dirty	Creosote -----	Jail work.
Fair	Germo -----	Kitchen, lawn.
Poor	Sulphur and various sprays -----	Eight trustees in jail.
Fair	Various sprays -----	Three trustees do jail work.
Fair	Various sprays -----	Chain gang breaks rock.
Fairly good	None -----	Jail work.
Fair	Various sprays -----	Yard and jail work.
Good	Various sprays, boiling water -----	Grounds.
Fair	Various sprays -----	Saw wood, jail work.
Fair	Anti-germine -----	Jail, courthouse, grounds.
Fair	Anti-germine -----	None.
Not very clean	Various sprays -----	Yard, courthouse and jail.
Fair	Gold Dust, sheep dip, chloride of lime -----	Clean cells.
Dirty	Various sprays -----	One trusty in jail.
Fair	Various sprays -----	Jail work.
Fair	Various sprays -----	Jail and yard.
Fair	Entomocide -----	Jail and yard.
Fair	So-lustre entomocide -----	Jail work.

## COUNTY

County	Recreation	Reading	Tobacco
1. Alameda -----	Cards	Magazines and books	No
2. Alpine -----	None	Magazines	No
3. Amador -----	None	Magazines and papers	Yes
4. Butte -----	None	Very little	Yes
5. Calaveras -----	None	Books and papers	Yes
6. Colusa -----	None	Papers	Yes
7. Contra Costa -----	Cards	Magazines and papers	Yes
8. Del Norte -----	Cards	Very little	Yes
9. El Dorado -----	Cards	Papers, magazines and Bible	Yes
10. Fresno -----	None	Magazines and books	No
11. Glenn -----	Cards	Magazines and papers	Only to workers
12. Humboldt -----	Cards and canball	Papers, magazines, books	No
13. Imperial -----	Cards	60 books, magazines, papers	To workers
14. Inyo -----	Cards	Papers and magazines	Yes
15. Kern -----	Cards	Magazines	No
16. Kings -----	None	Magazines	Yes
17. Lake -----	None	Magazines	No
18. Lassen -----	Cards	Magazines and papers	Yes
19. Los Angeles -----	Cards	Magazines and books	Workers
20. Madera -----	Cards	Magazines, no local papers	No
21. Marin -----	Cards, dominoes and checkers	Magazines and books	No
22. Mariposa -----	None	Magazines and papers	Yes
23. Mendocino -----	Cards	Papers and magazines	-----
24. Merced -----	Cards	Papers and magazines	No
25. Modoc -----	None	Papers and magazines	Yes
26. Mono -----	None	Magazines	Yes
27. Monterey -----	None	Magazines	No
28. Napa -----	Checkers and cards	Magazines	Yes
29. Nevada -----	None	Magazines and papers	No
30. Orange -----	Cards	Magazines and papers	No
31. Placer -----	Cards and checkers	Magazines	No
32. Plumas -----	None	Magazines and papers	No
33. Riverside -----	Cards	Magazines, books censored papers	No
34. Sacramento -----	None	Magazines	-----
35. San Benito -----	None	Magazines and papers	Yes
36. San Bernardino -----	Cards	Magazines	No
37. San Diego -----	Cards and music	Magazines and papers	Yes
38. San Francisco -----	Cards, moving pic- tures on Sundays	Magazines	Workers
39. San Joaquin -----	-----	Magazines and papers	To chain gang
40. San Luis Obispo -----	None	Magazines	No
41. San Mateo -----	None	Few papers and magazines	No
42. Santa Barbara -----	Cards	Magazines and books	Yes
43. Santa Clara -----	Cards	Books and magazines	No
44. Santa Cruz -----	None	Magazines	Yes
45. Shasta -----	Cards	Books, outside papers, no local	To workers
46. Sierra -----	Cards	Magazines and papers	No
47. Siskiyou -----	Cards	Magazines and papers	Yes
48. Solano -----	Cards	Magazines and papers	No
49. Sonoma -----	Cards and checkers	Magazines	Yes
50. Stanislaus -----	-----	Books, magazines, no papers	To workers
51. Sutter -----	None	Magazines	No
52. Tehama -----	None	Magazines	Yes
53. Trinity -----	None	Books and papers	Yes
54. Tulare -----	Cards	Books and magazines	No
55. Tuolumne -----	None	Magazines and books	No
56. Ventura -----	Cards and music	Magazines and papers	Yes
57. Yolo -----	Cards	Magazines, books and papers	Yes
58. Yuba -----	-----	Books and papers	To trustees

<sup>13</sup>Only to men sentenced for 90 days or over.<sup>14</sup>Only to trustees.<sup>15</sup>More if prisoners work.<sup>16</sup>Only to men sentenced for 60 days or over.<sup>17</sup>Only to men sentenced for more than 30 days.<sup>18</sup>Only to prisoners who work.<sup>19</sup>Not allowed when charge is petit larceny.

## JAILS.

Religious services	Punishments	Good time allowance	Kangaroo court
Yes	None	5 days in 30 days	One in each corridor
No	None		No
No	None		No
No	Dark cell	5 days in 30 days	No
No	None	None	No
No	None	None	No
Not often	Dark cell, loss of time	5 days in 30 days	Yes—sometimes
No	Locked in cell	5 days in 30 days	No
Not often	None		No
Yes	Dark cell	5 days in 30 days	No
No	None	5 days in 30 days	No
Yes	None	5 days in 30 days <sup>13</sup>	No
Yes	Loss of good time	5 days in 30 days	Yes
Not regularly	None	5 days in 30 days	No
Yes	Solitary confinement	5 days in 30 days <sup>13</sup>	Yes
No	None	5 days in 30 days <sup>14</sup>	No
No	None	5 days in 30 days	No
No	Dark cell	5 days in 30 days <sup>15</sup>	Sometimes
Yes	Dungeon	5 days in 30 days <sup>16</sup>	No
No	Dark cell	5 days in 30 days	No
No	None	5 days in 30 days	Yes
No	None	5 days in 30 days	No
Yes	Bread and water	5 days in 30 days	Yes
No	Dungeon	5 days in 30 days	Sometimes
No	None	5 days in 30 days	No
No	None		No
Yes	Solitary confinement	None	No
Yes	Lock in cell; loss of good time	6 days in 30 days	No
No	None	5 days in 30 days <sup>17</sup>	No
Yes	Lock in cell and dungeon	5 days in 30 days <sup>17</sup>	Yes
No	None	5 days in 30 days	Yes
No	None	None	No
Yes	Lock in cell; no food		No
	Dark cell		No
No	None	5 days in 30 days <sup>13</sup>	No
Yes	Dark cell	5 days in 30 days <sup>17</sup>	Yes
Yes	Lock in cell	5 days in 30 days	Sometimes
Yes	Dark cell		
Yes		5 days in 30 days <sup>18</sup>	
Occasionally	Dark cell, straps	5 days in 30 days <sup>19</sup>	No
No	None	None	No
Yes	Dark cell	5 days in 30 days	No
Yes	Dark cell	5 days in 30 days <sup>17</sup>	No
No	Dark cell	1 day in 6 days <sup>18</sup>	No
No	Bread and water	5 days in 30 days	No
No	None	None	No
No	None	5 days in 30 days	No
Not often	Dark cell	5 days in 30 days	Not regularly
Yes	Locked in cell	5 days in 30 days	No
Not often	Lock in cell; loss of time	5 days in 30 days <sup>17</sup>	Not often
No	None		No
Not often	None	5 days in 30 days	Sometimes
No	None	None	No
Yes	Solitary confinement	5 days in 30 days	No
No	None		No
No	Dungeon	5 days in 30 days	No
No		5 days in 30 days <sup>13</sup>	No
No		5 days in 30 days <sup>14</sup>	Not often



## COUNTY JAILS.

County	Special needs	Remarks
1. Alameda -----	Painting inside, especially kitchen	Rarely used. Few prisoners.
2. Alpine -----		
3. Amador -----	New jail in separate building	
4. Butte -----	One or two more deputies; complete segregation of prisoners.	
5. Calaveras -----	New jail in separate building	Few prisoners.
6. Colusa -----	New bathtubs; fireproof floors; complete segregation; use second floor in winter.	
7. Contra Costa -----	Relieve overcrowding; complete segregation	
8. Del Norte -----	New jail; meanwhile send prisoners under sentence to Humboldt County.	
9. El Dorado -----		
10. Fresno -----		
11. Glenn -----	Provisions for segregation	Alterations being planned.
12. Humboldt -----		
13. Imperial -----	New jail	New jail being planned.
14. Inyo -----		
15. Kern -----	Abolish kangaroo court in new jail	Contract let for new jail.
16. Kings -----		
17. Lake -----	New jail when finances permit	Very few prisoners.
18. Lassen -----	Segregation of prisoners	Meet needs of the county very well.
19. Los Angeles -----	Larger women's department	Very crowded; kangaroo court recently abolished.
20. Madera -----	Abandon comforters; use blankets only	Felony department should be above; misdemeanor department below.
21. Marin -----	New jail in separate building	
22. Mariposa -----	New jail eventually when finances permit	A very poor jail, but little used.
23. Mendocino -----	Enlarged windows; second tier of cells	Felony department should be above. New jail to be built on first floor of new court house. Very few prisoners.
24. Merced -----	Beds so men will not have to sleep on the floor; complete segregation.	
25. Modoc -----		
26. Mono -----		
27. Monterey -----		
28. Napa -----	More attention to cleanliness; new jail	
29. Nevada -----	Segregation of prisoners; better light and ventilation.	Ward for women or insane added; ventilation shafts put through.
30. Orange -----	Some provisions to relieve overcrowding	Not large enough; inconveniently arranged.
31. Placer -----	New jail in separate building	New insane and women's department added.
32. Plumas -----	New jail	
33. Riverside -----		
34. Sacramento -----	Receiving Department in basement; enlarge kitchen, laundry and storeroom.	Jail recently overhauled by new sheriff.
35. San Benito -----	New jail imperative	One open unsanitary hopper, serves as a toilet and sink for prisoners.
36. San Bernardino -----	Repair plumbing; hot water more frequently.	Complaints of vermin. Prisoners on road paid 35 cents a day.
37. San Diego -----		
38. San Francisco -----	New jail as soon as finances permit	
39. San Joaquin -----	New jail; more employees	
40. San Luis Obispo -----	Better means of heating water; new jail before long.	
41. San Mateo -----	New jail	Intention to build; local squabble over site.
42. Santa Barbara -----		
43. Santa Clara -----	Tear out brick cells and install steel cage; put in new toilets; increase food allowance.	
44. Santa Cruz -----		
45. Shasta -----	New jail when finances permit	
46. Sierra -----	Separate jail building when finances permit	Only 9 prisoners in 10 months.
47. Siskiyou -----	Proper segregation	Average population only 6.
48. Solano -----		
49. Sonoma -----		New jail nearly ready for occupancy. Class A.
50. Stanislaus -----	Finish third tier of cells; more salaried employees.	
51. Sutter -----	Abandon jail and send prisoners elsewhere	Only 8 prisoners in 6 months.
52. Tehama -----	Hasten new jail	New jail to be built.
53. Trinity -----	Use blankets instead of comforts; separate jail building.	Not used much.
54. Tulare -----	More attention to cleanliness	Plumbing repaired recently at cost of \$1,500.
55. Tuolumne -----	More attention to cleanliness; more light	Few prisoners.
56. Ventura -----	New jail	
57. Yolo -----	New jail; meanwhile transfer prisoners	Complaint of vermin; felons now sent to Sacramento.
58. Yuba -----	New jail; use blankets instead of comforts; beds off floor.	Complaint of vermin.

## COUNTY JAILS.

From the above tabulation, it appears that the average age of the county jail buildings of California is twenty-seven years. On entering a jail it is possible to tell in most instances whether it was built before or after 1903, since which year plans must be submitted to the State Board of Charities and Corrections for suggestion and criticism.

*Capacity.* In 23 jails the capacity has been exceeded during the past two years. This is a safe statement because in every case a liberal estimate was made of the capacity. In San Bernardino county jail 38 men were found in a department which should hold only 12. In Imperial county jail 44 have been housed in a cage of four cells.

*Buildings.* Twenty-seven counties have jails which are practically fireproof. Five others have jails which are in reasonable state of repair. Nine have jails which have been or should be condemned. In all but 14 counties the safekeeping of the prisoners is fairly guaranteed.

*Segregation.* Only 11 counties segregate the prisoners at all properly. The law requires at least four distinct departments for the separate confinement of (1) men awaiting trial on criminal charges, (2) men serving sentence, (3) witnesses, (4) women. Sixteen jails have four departments, but most of them are not arranged so that men awaiting trial on misdemeanor charges can be readily separated from misdemeanants serving time. Where this is done, and often where it is not done, they must be mingled with men awaiting trial on felony charges which, though legal, may be productive of still more evil results.

Penal Code, §1598. *Rooms required in county jails.* Each county jail must contain a sufficient number of rooms to allow all persons belonging to either one of the following classes to be confined separately and distinctly from persons belonging to either of the other classes:

1. Persons committed on criminal process and detained for trial.
2. Persons already convicted of crime and held under sentence.
3. Persons detained as witnesses or held under civil process or under an order imposing punishment for a contempt.
4. Males separately from females. Enacted February 14, 1872. Males and females to be separated. See next section.

§1599. *Prisoners to be classified.* Persons committed on criminal process and detained for trial, persons convicted and under sentence, and persons committed upon civil process, must not be kept or put in the same room, nor shall male and female prisoners (except husband and wife) be kept or put in the same room. Enacted February 14, 1872.

*Sanitation.* Thirty-three jails were found to be fairly clean but 12 could not be rated as satisfactory. In 16 jails the natural lighting is reasonably good while in 30, the cells, if not the whole interior, are dark. Nineteen jails are heated by steam, 5 by hot water and 32 by stoves. Ventilation is below par in 29. Only 15 jails come up to the standard of a toilet in every cell. In 8 the type of toilet is not satisfactory. Only

16 jails have shower baths and in 20 there is not an adequate supply of tubs. There are a number of cases in which hot water is provided but one day in the week and even more where the water must be heated on a stove by the prisoners. For the washing of clothes, 8 jails have stationary washtubs, but 21 use the bathtubs. Hot water is secured in the same manner as for bathing. Twenty-nine jails use wall bunks, 20 hammocks, 10 iron beds, 8 cots. In 9 jails part or all of the prisoners sleep on the floor. In 36 jails the bedding was found to be fairly satisfactory. In 22 much higher standards should be insisted upon.

*Food.* The daily allowance of food varies from \$.10 to \$1.05 averaging about \$.45. It is hard to compare these figures on account of the varying number of prisoners, distances from market and differences in methods of preparation. Where the meals are cooked in the jail, the allowance does not cover the hiring of cooks. Where the food is brought in from outside, the allowance covers both the cost of food-stuffs and of the serving.

*Occupation.* In only 8 counties do the prisoners have anything like regular work. In all jails, a few trustees clean corridors and cells and perhaps work on the lawn or chop wood. But the great majority of misdemeanant prisoners sit in idleness nursing their quarrels with organized society, plotting new mischief, teaching or learning the arts of a criminal career.

*Recreation.* Most jails fail to provide recreation of any kind except cards and old magazines or papers. Tobacco is furnished to all prisoners in 24 jails and to those who work in 8 other jails. Religious services are held in 26 jails. The majority of sheriffs seldom have to resort to any special punishment.

*Punishment.* When punishment is necessary, it usually takes the form of solitary confinement or loss of good time. The usual "good time" allowance is a deduction of five days a month for good behavior.

*The Kangaroo Court* is an organization of the prisoners for holding mock trials. Some sheriffs depend upon it to enforce cleanliness and order. In some cases, however, it means extortion. Newcomers who are suspected of having a sum of money are fined for "breaking into jail." The money is then spent for tobacco and other jail luxuries.

#### Control of Plans for County Jails.

(Chapter 683, Stats. 1911): All plans of new buildings or parts of buildings for any of the public institutions coming under the provisions of this section or any additions or alterations in such buildings, shall, before their adoption by the proper officials, be submitted to the Board for suggestion and criticism.

Under the present method of submitting plans and specifications to this Board, the work of preparing plans is considered completed before it comes to our attention. Architects dislike to alter finished plans and



for the very good reason that the stage at which changes can be easily made has passed. It would seem eminently desirable to devise some means whereby the influence of the State Board of Charities and Corrections can be more effectively brought to bear. Two ways of accomplishing this have been suggested. One is that the boards of supervisors should appoint an architect for a given jail or hospital instead of holding a competition. This architect should then be required to consult with the State Board of Charities and Corrections before proceeding with his plans, as well as during and after their preparation. The other scheme is to have the State Board of Charities and Corrections participate in preparing the program which is to be submitted to the competing architects, with power to require the rejection of any plans which may vary seriously from this program.

In order to make this control really effective, the act governing this matter would have to be amended. It should also be provided that it shall be unlawful for any county board of supervisors, any city council or board of town trustees to lease, purchase or make final plans for the building of any jail or lockup, or for alterations costing more than \$250, until said plans or repairs have been approved by the State Board of Charities and Corrections; and no contract for the purchase or lease or erection of any city, town or county jail or lockup shall be valid or of binding effect unless the approval of the State Board of Charities and Corrections has been placed on file in the office of the city or town or county clerk, as the case may be, before the execution of said contract.

#### State Control of Local Prisons.

The local prisons of Great Britain and Ireland have been under a central authority since 1877. Prisoners have been transferred from small and otherwise unsatisfactory jails so that nearly half have been closed. They are all supported from the imperial treasury.

In *Alabama* the state prison inspector has power to formulate rules and regulations for sanitation and general physical condition of jails. He is empowered to order repairs, to condemn and to order removal of prisoners where the jail is unfit and unsafe and where the care is improper. The only appeal from his order is to the governor, who, up to the present, has not interfered.

In *Pennsylvania* the State Board of Charities and Corrections is authorized to recommend the remodelling of any existing jail. If its recommendations are not carried out within a certain time the matter is turned over to the district attorney. A fine of \$100 hangs over officials who refuse to comply but up to the present has not had to be enforced. Within a year, ten jails have been condemned and are now (May, 1914) being remodelled.

In *Wisconsin* the Board of Control can close any jail on one year's notice.

In *Indiana* the Board of State Charities notifies the circuit court when a jail is found to be unfit for the confinement of prisoners. The circuit court is empowered to require the necessary repairs and changes. If the court fails to act within a reasonable length of time, the Board of State Charities reports to the governor who is empowered to condemn the jail and order it discontinued until put into condition which will meet the approval of the Board of State Charities.

Such powers as those just mentioned do not need to be exercised very often. The mere fact of their existence gives weight to the recommendations of the State Board. This authority is regarded as very valuable in the above mentioned states and might be very useful in California. The superior judges in this state may condemn a jail (Penal Code, §1603) and order the transfer of prisoners to an adjoining county but as a matter of fact this power is rarely, if ever exercised. There are many reasons: First, the judge may lack the standpoint derived from comparison of many jails and may not realize how bad conditions are in his jail; second, he may be restrained by a kind of local pride; third, he may be influenced by political pressure. Without removing this authority, the law might be so amended as to authorize the State Board of Charities and Corrections to order repairs and to make such repairs a proper charge against the county in question, or else to fix a penalty for failure to make repairs ordered by the said board.

#### The "Floater" Custom.

A great many vagrants are arrested in the various counties of the state and sentenced for 30 to 100 days. But instead of serving their time in jail, they are frequently given a suspension of sentence on condition of leaving the town or the county within 3 to 24 hours. The reasons for this practice are (1) a notion that this will effect an economy to the community, (2) general failure to take into account the vagrant as a human being and the effect of the system on him, (3) the crowded condition of many local jails. The first belief is obviously erroneous, for while a given county is passing hoboese on to its neighbors on the south, it is receiving a new supply from counties to the north. The "floater" custom not only fails utterly to do anything towards reform, but positively encourages vagrancy. It was in a measure responsible for the gathering of the "armies of unemployed" last winter. For no one will deny that these armies were made up in part, perhaps largely, of professional "bums" and agitators. Such a stupid policy of dealing with vagrancy so complicates the problems of unemployment as to render them well-nigh hopeless.



A system of outdoor work for misdemeanants as outlined below would make the "floater" custom unnecessary. Abolition of the "floater" and provision of work would be an important step toward solving the problems of vagrancy.

#### Outdoor Work for Misdemeanants.

From table No. 14 it may be seen that there were 10,030 persons who served sentence in the county jails of California during the year 1913-1914. By studying these figures in connection with the preceding tabulation and with the figures to be published by the bureau of labor statistics, one can see that the majority of these prisoners spent from ten to sixty days in idleness at the expense of the several counties. They were confined for the most part in narrow cages, poorly lighted and difficult to keep clean. They were not separated from men waiting trial, whether innocent or guilty, nor was there much segregation among themselves. Young fellows who had been out on a "lark" were put into the same cages with drunks, hoboes, petty thieves and even burglars and murderers. Some prisoners may perhaps spend the time reflecting upon their mistakes and resolving to do better, but it is too much to expect this of many. It is much more reasonable to expect them to listen to the recital of hardened criminals and professional bums, of the glamour of crime or vagrancy, or the wrongs done them by organized society. The "wrongs" of which the old-timer prates are often immediately exemplified and emphasized by dark, cheerless cells, poor sanitary conditions, inferior food, and dirty blankets. It is easy for the inmate of a jail to become embittered or at least to despair of getting back to respectability.

Many an offender has got his start toward the county jail by his failure to find a job, and, even if he does not already nurse a grievance, he listens readily to the enemies of law and order. Men in jail, like other human beings, have impulses which must find some means of expression. If circumstances repress the normal outlet some perverted expression of a perfectly natural impulse will come forth. The possibility of unnatural and anti-social acts is heightened by the abnormality of jail life—idleness, darkness, constant repression and the very worst associates—and these acts oft repeated become habits. It is for these reasons that the county jail has been aptly termed the "school of crime."

The idle prisoner does not learn the habits of industry and sobriety which are the best guarantee that he will not return to jail. On the contrary, he is being positively unfitted for a place in the outside world. Not only does he acquire anti-social attitudes, but he is weakened physically. Lack of exercise, darkness, exposure to disease,

improper food and vice render his body unfit for freedom, as his associates and repression unfit his mind.

Repression can not reform. There must be an active directing of energies into socially useful channels. If petty offenders are to be made better and society is really to be protected against their aggressions, they must be given some kind of regular work, preferably in the open air. This, if continued for a sufficient length of time, will send men out healthy, trained in regular work, and uncontaminated by the present "schools of crime."

Section 29, chapter 329, Statutes of 1913, permits the boards of supervisors of the various counties "to provide for the working of prisoners, confined in the county jail, under judgment of conviction of misdemeanor, under the direction of some responsible person, to be appointed by the sheriff, whose compensation shall not exceed one hundred dollars per month, upon the public grounds, roads, alleys, highways or public buildings or in such other places as may be deemed advisable for the benefit of the county."

This should be modified so as to compel the employment of all men serving sentence on misdemeanor charges. Undoubtedly the best plan would involve at least two state penal farm colonies. However, it might be permitted to counties providing work for prisoners under suitable conditions, to retain those actually employed, subject to the approval of the State Board of Charities and Corrections.

Los Angeles and San Bernardino counties are experimenting with road camps and state that these are successful. Orange County uses prisoners for work on the county farm. It is generally considered that road work requires more guards than farm work and is undesirable except in sparsely settled districts. The presence of prisoners is felt to be a menace to the neighborhood. The temptation to escape is great and the exposure of prisoners to the public gaze is undesirable. On the other hand, felons have been worked on the roads in Texas, Illinois, and other states on the honor system and with apparently satisfactory results. If this has worked for felons, certainly it ought to be feasible for misdemeanants. Moreover, road work does not involve the great initial expense that is necessary to establish penal farms or workhouses. In this state we have many miles of mountain roads to build and maintain. Road expense is the principal excuse advanced for not improving county jails and hospitals. It would seem that our conditions are as favorable as they could be for working prisoners on public roads. However, many counties do not have enough prisoners to justify the expense of maintaining and guarding road gangs.

On the other hand, farm work can be more easily correlated with other industries, thus meeting the needs of a greater variety of men. The men are in greater seclusion. A smaller force can supervise them.

Their health can be better attended to through medical attendance and hospital facilities. Only a small number of men can be profitably employed on a farm, but by having supplementary industries this difficulty may be met. Penal farms have actually been in operation for several years at Cleveland, Kansas City, Occoquan, Va., and at Guelph, Ontario.

There are about thirty such farm colonies in Germany and four in New Zealand. A very successful colony is located at Witzwil, Switzerland. The largest penal farm that has come to our attention is at Iwahig, Philippine Islands.

Not only are these institutions successful in actually accomplishing something for the inmates, but they also have a financial aspect that is worthy of consideration. It has been demonstrated conclusively that it is cheaper to keep prisoners employed on these farms than to confine them in idleness in jail. Indeed, the Cooley Farms of Cleveland are practically self-supporting. The San Diego Municipal Farm, while not strictly speaking a penal colony, belongs to this same category, and is in no way a burden upon the city, although inmates are paid 50 cents each per day. San Bernardino and Orange counties report that the employment of prisoners contributes materially toward their support and training.

In connection with outdoor work for misdemeanants it would be a very great advantage to have (1) an indeterminate sentence actual or quasi, (2) release on parole, and (3) an employment bureau.

If the purpose of imprisonment is really to help the offender, he should be restrained until he is able to go out as an normal citizen. We do not put people into hospitals for definite periods of time. So for misdemeanants, a kind of sick man, it would be the part of wisdom and economy to sentence them for an indefinite period, but not less than thirty days or more than two years. Then, when released, they should be sent out to some definite job, or to friends and relatives who will help them and will be in a way surety for their good conduct. In connection with the penal farm colony at Guelph, Ontario, there is an employment bureau which finds a job for every man going out who is able and willing to work.

Under such a system as that above outlined, our county jails would become places of temporary detention only. They would house persons awaiting trial and witnesses and those who were sentenced to state prison or farm colony only until they could be transferred. This would make desirable very radical changes in the plan of construction of all future jails. Having at least the presumption of innocence, all persons held in local jails should have individual rooms so that there would be no communication between them. But even if this ideal could not soon be attained, at least the plan proposed would go a long way toward reducing the evils and abuses of our present jail system.



## COUNTY

County	Location of hospital	Superintendent or steward	Physician
1. Alameda	San Leandro	C. A. Wills, M.D.	C. A. Wills
2. Amador	Jackson	Geo. Murphy	A. M. Gall
3. Butte	Oroville	M. L. Copeland	W. F. Gates
4. Calaveras	San Andreas	R. S. Crossett	J. A. Holland
5. Colusa	Colusa	Mrs. J. A. White	G. I. Cason
6. Contra Costa	Martinez	W. H. Hough	Edwin Merrithew
7. Del Norte	Crescent City	A. Moorhead	J. A. Tyler
8. El Dorado	Placerville	H. L. Thalls	L. M. Leiseuring <sup>2</sup>
9. Fresno	Fresno	Guy Manson, M.D. <sup>2</sup>	Guy Manson <sup>2</sup>
10. Glenn	Willows	W. I. Leake	C. W. Lund
11. Humboldt	Eureka	Jas. Bryce	B. M. Marshall
12. Inyo	Big Pine	C. E. Blake	C. E. Turner
13. Kern	Bakersfield	F. Buckreus	T. M. McNamara
14. Kings	Hanford	W. D. Drennen	
15. Lake	Lakeport	H. C. Wilkinson	M. A. Craig
16. Lassen	Susanville	C. C. Barham	W. E. Dozier
17. Los Angeles Farm	County Farm	C. C. Manning	C. E. Shank
18. Los Angeles Hospital	Los Angeles	Fred W. Fuller	C. H. Whitman <sup>2</sup>
19. Madera	Madera	J. M. Hensley	W. C. Reid
20. Marin	San Rafael	W. F. Jones	J. H. Kuser
21. Mariposa	Mariposa	Geo. J. Berthken	C. Hicks
22. Mendocino	Ukiah	D. E. Mankins	J. Liftchild <sup>2</sup>
23. Merced	Merced	Mrs. L. Cease	Bret Davis
24. Merced Branch	Los Banos	Mrs. W. R. Bibby <sup>3</sup>	J. L. McClelland <sup>2</sup>
25. Modoc	Alturas	Mrs. M. Pack <sup>3</sup>	M. E. Coppedge
26. Mono	Bridgeport	Mrs. Edith Olds	—, Cushman
27. Monterey	Salinas	H. A. Hunter	S. B. Gordon
28. Napa	Napa	I. J. Gamble	R. F. Clark
29. Nevada	Nevada City	G. A. Stewart	A. H. Tickell
30. Orange	Orange	J. R. McMurdo	John Wehrly
31. Placer	Auburn	W. A. Walsh	A. N. Couture, J. G. Mackay
32. Plumas	Quincy	D. McKenzie	M. B. Bolson
33. Riverside	Arlington	F. D. Pettes	W. W. Roblee
34. Sacramento	Sacramento	I. E. McCabe <sup>4</sup>	J. Harris <sup>2</sup>
35. San Benito	Hollister	John Butts	J. M. O'Donnell
36. San Bernardino	San Bernardino	John A. Marshall	P. M. Savage <sup>2</sup>
37. San Diego	San Diego	W. S. Heller	I. D. Webster
38. San Francisco City and County	San Francisco	C. M. Wollenberg	W. C. McIntosh
39. San Francisco Isolation	San Francisco	A. A. O'Neill, M.D. <sup>2</sup>	A. A. O'Neill
40. San Francisco Tuberculosis	San Francisco	R. G. Brodrick, M.D.	F. N. Rose
41. San Francisco Relief Home	San Francisco	C. M. Wollenberg	W. Kenney, M. Judell, W. W. Wood
42. San Joaquin	French Camp	W. Friedberger, M.D.	W. Friedberger <sup>2</sup>
43. San Luis Obispo	San Luis Obispo	J. E. Lewis	C. J. McGovern
44. San Mateo	San Mateo	J. R. Eubanks	W. C. Baker
45. Santa Barbara	Santa Barbara	T. H. Hicks	J. E. Bainbridge
46. Santa Clara Farm	Milpitas	J. S. Carson	W. E. Parkman
47. Santa Clara Hospital	San Jose	D. R. Wilson, M.D.	D. R. Wilson
48. Santa Cruz	Santa Cruz	B. F. Crews	W. H. Keek
49. Shasta	Redding	H. P. Walker	G. W. Sevenman
50. Sierra	Downieville	J. J. Quinn	R. B. Davy
51. Siskiyou	Yreka	E. F. Brickley	F. J. McNulty
52. Solano	Fairfield	J. H. Hoyt	W. G. Downing
53. Sonoma	Santa Rosa	Ida H. Laswell <sup>3</sup>	P. A. Meneray <sup>2</sup>
54. Stanislaus	Modesto	E. O. Frask	J. L. Hennemuth
55. Sutter	Yuba City	Warren F. Eager	Allen E. Gray
56. Tehama	Red Bluff	E. E. Thompson, M.D.	E. E. Thompson <sup>2</sup>
57. Trinity	Weaverville	E. E. Harrigan	D. B. Fields
58. Tulare	Visalia	Frank Osborn	E. D. Farrow
59. Tuolumne	Sonora	Andy Shine	—, Gould
60. Ventura	Ventura	A. L. Cagnacci	T. E. Cunnane
61. Yolo	Woodland	P. P. Lawson	W. J. Blevins
62. Yuba	Marysville	Chas. H. Bell	E. E. Gray

## HOSPITALS.

Date built	Type	Capacity	State of repair and material
1865	Hospital and almshouse....	500	Frame; most buildings old and dilapidated.
1889	Hospital and almshouse....	45	Brick and concrete; good repair.
1879	Hospital and almshouse....	85	Brick, frame and concrete good repair.
1891	Hospital and almshouse....	55	Frame; good repair.
1875 <sup>5</sup>	Hospital and almshouse....	40	Frame; flooring and roof need repair.
1910	Hospital and almshouse....	100	Brick good; frame bad.
1870 <sup>6</sup>	Almshouse.....	20	Frame very bad.
1912	Hospital and almshouse....	60	Frame, new building in good repair.
1903, 1909	Hospital and almshouse....	210	Brick and concrete; good repair.
1898	Hospital and almshouse....	30	Frame, fairly good repair.
1890	Hospital and almshouse....	95	Frame, good repair.
1905	Hospital and almshouse....	20	Frame.
-----	Hospital and almshouse....	85	Frame, good repair.
1910	Hospital and almshouse....	27	Brick with concrete floor; good repair.
-----	Almshouse.....	10	Frame; poor repair.
1870 <sup>5</sup>	Almshouse.....	14	Frame; very poor repair.
1914	Almshouse.....	415	Brick, mostly new.
1909	Hospital.....	750	Brick, good repair.
1898 <sup>5</sup>	Hospital and almshouse....	60	Frame, fair repair.
1914	Almshouse.....	75	Brick, new.
1904	Almshouse.....	30	Frame, out of repair.
-----	Hospital and almshouse....	-----	Frame fairly good.
1903	Hospital and almshouse....	55	Brick with concrete surface, good repair.
-----	Almshouse.....	11	Frame dilapidated.
1880 <sup>5</sup>	Almshouse.....	10	Frame fair repair.
-----	Almshouse.....	12	Frame, poor repair.
1885 <sup>5</sup>	Hospital and almshouse....	60	Frame, good repair.
1874, 1913	Hospital and almshouse....	57	New building is concrete, old building frame.
1861 <sup>5</sup>	Hospital and almshouse....	90	Frame very old, roof and floor bad.
1914	Hospital and almshouse....	115	Concrete new.
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1900 <sup>5</sup>	Hospital and almshouse....	95	Frame fairly good.
1911	Almshouse.....	42	Brick, good repair.
1900 <sup>6</sup>	Hospital and almshouse....	75	Frame good repair.
1872 <sup>5</sup>	Hospital and almshouse....	250	Frame, poor repair.
1898 <sup>5</sup>	Hospital and almshouse....	45	Frame, fair repair.
1889 <sup>6</sup>	Hospital and almshouse....	115	Indigents in miserable shack.
1904	Hospital and almshouse....	225	Brick, good repair.
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1910	Hospital.....	390	Concrete, fair repair.
1907	Hospital.....	100	Frame, good repair.
-----	-----	-----	-----
1911	Hospital.....	200	Frame, good repair.
-----	-----	-----	-----
1906	Almshouse.....	1300	Frame, good repair.
1893	Hospital and almshouse....	300	Frame, good repair.
1874	Hospital and almshouse....	60	Frame, fair repair.
1898	Hospital and almshouse....	55	Frame, good repair.
1875 <sup>5</sup>	Almshouse.....	70	Frame, fair repair.
1875 <sup>5</sup>	Almshouse.....	200	Frame, fair repair.
1907	Hospital.....	200	Frame, good repair.
1908	Hospital and almshouse....	100	Frame, good repair.
1901	Hospital and almshouse....	70	Frame, good repair.
1890 <sup>6</sup>	Almshouse.....	30	Frame, fair repair.
1886, 1900	Hospital and almshouse....	87	Frame, old building poor, new building good.
1870 <sup>6</sup>	Hospital and almshouse....	50	Frame, very poor.
1883	Hospital and almshouse....	65	Frame, fair repair.
1881	Hospital and almshouse....	60	Frame, good repair.
1870 <sup>6</sup>	Almshouse.....	25	Old frame house.
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1895 <sup>5</sup>	Hospital and almshouse....	56	Frame, good repair.
1890	Almshouse.....	24	Frame, fair repair.
1890	Hospital and almshouse....	44	Main building brick, good repair.
1896	Hospital and almshouse....	40	Frame, good repair.
1880 <sup>6</sup>	Hospital and almshouse....	46	Frame, very poor.
1890 <sup>5</sup>	Hospital and almshouse....	55	Frame, fair, floors are old.
1860	Hospital and almshouse....	80	Concrete, class A, fair repair.



## COUNTY

County	Sewage disposal	Fire protection
1. Alameda -----	Private sewer to bay	80 pounds pressure, 15 fire plugs, 6 chemical extinguishers.
2. Amador -----	Creek 100 yards away.	2 fire plugs-----
3. Butte -----	Sewer $\frac{1}{2}$ mile into ditch.	6 fire plugs, 80 pounds pressure-----
4. Calaveras -----	Cesspool.	8 fire plugs, hose cart, 12 chemical extinguishers.
5. Colusa -----	City sewer.	1 fire plug, 4 chemical extinguishers..
6. Contra Costa-----	City sewer.	7 fire plugs, 50 pounds pressure, several chemical extinguishers.
7. Del Norte -----	Open ditch.	None -----
8. El Dorado -----	City sewer.	4 fire plugs-----
9. Fresno -----	City sewer.	12 reels of hose, good pressure, chemical extinguisher.
10. Glenn -----	Cesspool.	Electric pump, 2-inch inside hydrants
11. Humboldt -----	Cesspool.	7 fire plugs, 60 pounds pressure, 2 chemical extinguishers.
12. Inyo -----	Sewer to creek.	None -----
13. Kern -----	City sewer.	2 fire plugs, 4 chemical extinguishers.
14. Kings -----	Cesspool inadequate.	6 chemical extinguishers, nearly fire-proof.
15. Lake -----	None.	None -----
16. Lassen -----	Creek.	None -----
17. Los Angeles Farm-----	Septic tank.	6 fire plugs, 2 40-gallon chemical extinguishers, good pressure.
18. Los Angeles Hospital....	City sewer.	15 fire plugs, city protection-----
19. Madera -----	Septic tank.	1 fire plug, 7 chemical extinguishers..
20. Marin -----	Septic tank.	Nearly fireproof, 2 fire escapes, 10 fire plugs.
21. Mariposa -----	None.	12 small chemical extinguishers-----
22. Mendocino -----	Septic tank.	2 fire plugs, inadequate-----
23. Merced -----	City sewer.	3 fire plugs -----
24. Merced Branch -----	Cesspool.	None -----
25. Modoc -----	Cesspool.	None -----
26. Mono -----	None.	2 chemical extinguishers-----
27. Monterey -----	Septic tanks.	4 inside fire plugs, several chemical extinguishers.
28. Napa -----	Septic tank.	8 fire plugs, 6 chemical extinguishers..
29. Nevada -----	Septic tank.	13 monitors, no fire escapes-----
30. Orange -----	Septic tank to be installed.	Fireproof, 9 reels of hose-----
31. Placer -----	City sewer.	8 outside plugs, 47 pounds pressure, 10 chemical extinguishers.
32. Plumas -----	Sewer to ditch 150 yards.	4 fire plugs, good pressure-----
33. Riverside -----	Septic tank.	4 fire plugs, 15 chemical extinguishers.
34. Sacramento -----	Septic tank drains into city sewer.	Hose carts and extinguishers, water tank 90 feet high, inadequate.
35. San Benito -----	-----	5 fire plugs, 2 chemical extinguishers..
36. San Bernardino -----	City sewer.	5 fire plugs, 3 chemical extinguishers, city protection.
37. San Diego -----	City sewer.	14 fire plugs, 6-inch main, 12 chemical extinguishers, city protection.
38. San Francisco City and County.	City sewer.	21 inside plugs-----
39. San Francisco Isolation	Private sewer to tidewater.	65-pound pressure. 15 plugs, sprinklers on roof, 30 chemical extinguishers.
40. San Francisco Tuberculosis.	City sewer.	9 plugs, 25 chemical extinguishers...
41. San Francisco Relief Home.	City sewer.	30 fire plugs, 100 chemical extinguishers.
42. San Joaquin -----	Sewer farm.	Special pump, 13 fire plugs-----
43. San Luis Obispo-----	City sewer.	6 chemical extinguishers, inadequate.
44. San Mateo -----	Cesspool.	2 40-gallon extinguishers, 4 small chemical extinguishers, lack of water.
45. Santa Barbara -----	Septic tank outlet to ocean.	3 fire plugs, 3 chemical extinguishers, city protection.
46. Santa Clara Farm-----	Septic tank.	9 fire plugs, 25,000-gallon tank, 80 feet high.

## HOSPITALS.

Arrangement	General cleanliness	Lighting	Heating
Poor -----	Good as conditions permit	Electricity	Steam and stoves.
Fairly convenient -----	Good	Electricity and gas	Stoves.
Fairly convenient -----	Fairly good	Electricity	Steam.
Fairly convenient -----	Good	Electricity	Stoves.
Fairly convenient -----	Fairly good	Acetylene gas	Stoves.
Main building good; indigent ward poor	Fairly good	Electricity	Hot water and stoves.
Old farmhouse -----	Good as conditions permit	Lamps and candles	Stoves.
Main building convenient -----	Fairly good	Electricity	Steam.
No elevator; otherwise good -----	Fairly good	Electricity	Steam.
Not convenient -----	Fairly good	Electricity	Stoves and grates.
Fairly convenient -----	Fairly good	Electricity	Steam and stoves.
Not convenient -----	Not clean	Electricity	Stoves.
Convenient -----	Good, except toilets	Electricity	Steam.
Good -----	Fairly good	Electricity	Steam.
Old house -----	Poor	Candles	Stoves.
Old houses -----	Good as conditions permit	Electricity	Stoves.
Good almshouse -----	Good	Electricity	Steam.
Good -----	Good	Electricity	Steam.
Fairly good -----	Fair	Electricity	Coal stove.
Good almshouse -----	See remarks	Electricity	Steam.
Poor; inmates climb stairs for meals -----	Poor	Electricity	Stoves.
Poor -----	Fair	Electricity	Stoves.
Good -----	Good	Electricity	Steam and stoves.
Old house -----	Good as conditions permit	Electricity	Stoves.
Old house -----	Fairly good	Electricity	Stoves.
Poor -----	Good as conditions permit	Candles	Stoves.
Fairly good -----	Good	Electricity	Stoves.
Operating room ought to be in main building -----	Good	Electricity	Furnace and stoves
Floors not on the level -----	Good as conditions permit	Electricity	Steam and stoves.
Good -----	Good	Electricity	Hot air; none in cottages.
Fairly good -----	Fairly good	Electricity	Stoves.
Fairly good -----	Good	Electricity	Steam.
Distances great -----	Good	Electricity	Steam, hot-air and stoves.
Good -----	Fairly good	Electricity and gas	Steam and stoves.
Poor; sexes not separated -----	Good	Electricity	Wood and coal-oil stoves.
Indigent quarters poor -----	Indigent quarters not clean	Electricity	Dry steam.
Good -----	Fairly good	Electricity	Steam.
Good -----	Good	Electricity	Steam.
Fair -----	Good	Electricity	Hot water
Good -----	Good	Electricity	No heat
Good almshouse -----	Good	Electricity	Steam.
Good -----	Excellent	Electricity and gas	Steam.
Inconvenient -----	Fair	See remarks	Stoves and grates.
Very inconvenient -----	Fair	Lamps	Stoves.
Very inconvenient -----	Good as conditions permit	Electricity	Stoves and gas.
Fairly good -----	Fair	Electricity	Steam and stoves.

## COUNTY

County	Sewage disposal	Fire protection
47. Santa Clara Hospital...	Cesspool.	10,000-gallon tank, 100 feet high, 6 fire plugs.
48. Santa Cruz .....	Septic tank.	60 pounds pressure, 8 fire plugs, 13 chemical extinguishers.
49. Shasta .....	Open septic tank.	5,000-gallon tank, 5 2-inch plugs, 10 chemical extinguishers.
50. Sierra .....	Creek.	None .....
51. Siskiyou .....		2 fire plugs, 9 chemical extinguishers.
52. Solano .....	Septic tank.	Good pressure, inside stair only.....
53. Sonoma .....	Septic tank.	6 chemical extinguishers, 6 fire plugs
54. Stanislaus .....	City sewer.	6 fire plugs, 6 reels of hose, good pressure.
55. Sutter .....	Runs into field; outdoor privy.	1 outside hydrant.....
56. Tehama .....	Septic tank.	None, pump to be installed.....
57. Trinity .....	Creek.	2 fire plugs, 1 chemical extinguisher..
58. Tulare .....	City sewer.	1 fire plug, 2 extinguishers, 1 fire escape.
59. Tuolumne .....	Creek.	4 inside plugs, 4 outside plugs, 16 chemical extinguishers.
60. Ventura .....	City sewer.	None .....
61. Yolo .....	Sewer to field.	Low pressure, very few plugs and extinguishers.
62. Yuba .....	Sewer to swamp and open ditch.	10 chemical extinguishers, 8 fire plugs, good pressure.

## HOSPITALS.

Arrangement	General cleanliness	Lighting	Heating
Good -----	Very good	Electricity	Steam.
Not convenient -----	Fairly good	Electricity	Stoves.
Toilets not convenient -----	Fair	Electricity	Stoves.
Not convenient -----	Fairly good	Electricity and candles	Stoves.
Fair -----	Fairly good	Electricity and candles	Hot-air
Old farm house -----	Good as conditions permit	Gas—see remarks	Stoves in some parts.
Fairly convenient -----	Hospital good; indigent quarters fair	Electricity	Steam.
Fairly good -----	Very good	Electricity	Stoves.
Not convenient -----	Good as conditions permit	Candles and lamp	Stoves.
Good, but needs more space on main floor	Good	Electricity	Stoves.
Good almshouse -----	Fairly good	Electricity and lamps	Stoves.
Fairly good -----	Fairly good	Electricity	Stoves.
Fairly good -----	Good	Electricity	Stoves.
Inconvenient -----	Fairly good	Electricity	Stoves.
Fairly good -----	Cobwebs, dirty floors and windows	Electricity	Steam being installed.
Fairly good -----	Fairly good	Electricity	Hot water.

## COUNTY

County	Ventilation	Toilets	
		No	Condition
1. Alameda -----	Windows not kept open in indigent quarters -----	25	Good -----
2. Amador -----	Fairly good -----	4	Good -----
3. Butte -----	Good -----	14	Fairly good -----
4. Calaveras -----	Good -----	7	Fairly good -----
5. Colusa -----	Windows not kept open -----	7	Good repair, inconvenient -----
6. Contra Costa -----	Good -----	16	Some in bad repair -----
7. Del Norte -----	Windows not kept open -----	6	Outside privies -----
8. El Dorado -----	Good -----	12	Inside, dirty -----
9. Fresno -----	Good in hospital; poor in almshouse -----	19	Good -----
10. Glenn -----	Windows not kept open -----	4	One outside privy -----
11. Humboldt -----	Windows not kept open -----	8	Fair -----
12. Inyo -----	Windows not kept open -----	3	Poor and dirty -----
13. Kern -----	Good -----	9	Not clean -----
14. Kings -----	Good -----	5	Fairly clean -----
15. Lake -----	Windows kept closed -----	2	Very bad, outside privies -----
16. Lassen -----	Windows not kept open -----	2	Bad odor, outside privies -----
17. Los Angeles, Farm -----	Good -----	52	Good -----
18. Los Angeles, Hospital -----	Good -----	57	Good -----
19. Madera -----	Windows not kept open -----	6	Not clean -----
20. Marin -----	Vents to roof -----	16	New -----
21. Mariposa -----	Fairly good -----	5	Three outdoor privies -----
22. Mendocino -----	Fairly good -----	8	Fairly good -----
23. Merced -----	Good -----	8	Good -----
24. Merced Branch -----	Windows not kept open -----	3	Two are outside privies -----
25. Modoc -----	Windows not kept open -----	3	Outside privies -----
26. Mono -----	Windows not kept open -----	1	Outside privy -----
27. Monterey -----	Good -----	5	Good -----
28. Napa -----	Windows fastened open, vents in new buildings -----	7	Good -----
29. Nevada -----	Good -----	8	Fairly good -----
30. Orange -----	Good -----	17	New -----
31. Placer -----	Good -----	10	Good -----
32. Plumas -----	Windows not kept open -----	6	Good -----
33. Riverside -----	Good -----	9	Good -----
34. Sacramento -----	Hospital good, indigent wards fair -----	35	Plumbing bad -----
35. San Benito -----	Fairly good -----	7	Good -----
36. San Bernardino -----	Good -----	13	Fairly good -----
37. San Diego -----	Good -----	10	Good -----
38. San Francisco, city and county -----	Good -----	30	Good -----
39. San Francisco, Isolation -----	Good -----	9	Good -----
40. San Francisco, tuberculosis -----	Good -----	19	Good -----
41. San Francisco, Relief Home -----	Good -----	580	Good -----
42. San Joaquin -----	Good -----	26	Exceptionally clean -----
43. San Luis Obispo -----	Good -----	11	Fair -----
44. San Mateo -----	Good -----	8	Fair -----
45. Santa Barbara -----	Fairly good -----	10	Good -----
46. Santa Clara, Farm -----	Good -----	3	Fair, inadequate -----
47. Santa Clara, Hospital -----	Good -----	26	Good -----
48. Santa Cruz -----	Good -----	7	Good -----
49. Shasta -----	Good -----	5	Fairly good -----
50. Sierra -----	Fair -----	4	Fairly good -----
51. Siskiyou -----	Good in most rooms -----	12	Fairly good -----
52. Solano -----	Good -----	3	Fair -----
53. Sonoma -----	Fair -----	11	Fairly good -----
54. Stanislaus -----	Good -----	8	Good -----
55. Sutter -----	Fair -----	1	Outside privy -----
56. Tehama -----	Good except in indigent building -----	4	Good -----
57. Trinity -----	Good -----	1	Fair -----
58. Tulare -----	Good -----	5	Good -----
59. Tuolumne -----	Good -----	4	Good -----
60. Ventura -----	Good in main building, poor in indigent ward -----	8	Good -----
61. Yolo -----	Windows not kept wide open -----	6	Double outside privy, others need repair -----
62. Yuba -----	Windows not kept wide open -----	9	Good -----



## HOSPITALS.

Bathing facilities				Isolation Ward
Tubs	Showers	Adequate	Cleanliness	
13	0	Yes	Good	Three tents and two cabins.
3	0	Yes	Good	None.
8	0	Yes	Good	Three rooms in cottage with kitchen, bath and toilet.
7	0	Yes	Good	None.
2	0	Hardly	Good	Small house with kitchen and bath.
7	0	Yes	Some dirty	Two-room cottage with toilet.
1 zinc	0	No	Can not keep clean	None.
3	0	Yes	Inside dirty	None.
13	4	Yes	Poor	Two cottages.
3	0	Yes	Good	None.
4	0	Barely	Good	Two-room cottage with bath, toilet and kitchen.
1	0	No	Poor	None.
7	0	Yes	Good	New building on opposite side of town.
5	0	Yes	Fair	None.
0	0	No	-----	None.
1	0	No	Fair	None.
25	6	Yes	Good	None.
20	5	Yes	Good	Fully equipped.
6	0	Yes	Fair	Shack, running water, stove and bed.
7	0	Yes	Good	Shack with bath.
3	0	Yes	Poor	Shack, no equipment.
3	0	Barely	Good	Shack.
6	0	Yes	Good	Shack.
1	0	Yes	Fair	None.
1	0	Yes	Good	Small house with only beds and stove.
1	0	Yes	Poor	None.
2	0	Fair	Good	Shack.
5	0	Yes	Bad in old building	None.
3	0	Barely	Fair	Two-room shack.
6	0	Yes	Good	None.
9	0	Yes	Good	Three-room house, six beds, kitchen, bath, toilet.
3	2	Yes	Good	None.
6	0	Hardly	Good	Two collapsible houses with toilet and bath.
17	0	Yes	Fair	Two small buildings, twenty rooms, beds only.
1	0	No	Good	Four rooms unequipped; shack.
7	0	No	Fair	Five-room cottage, toilet, bath, electric lights.
10	0	Barely	Good	Ward in main building.
11	6	Yes	Good	See isolation hospital.
15	2	Yes	Good	-----
11	8	Yes	Good	See isolation hospital.
40	-----	Yes	Good	Sent to isolation hospital.
25	0	Yes	Excellent	Two small buildings with bath and kitchen.
4	0	Barely	Good	Shack.
3	0	Hardly	Fair	Shack.
5	0	Yes	Good	Small house with kitchen and phone.
4	0	Yes	Fair	None.
16	0	Yes	Good	Cottage; ordinary furnishing; privies.
4	1	Yes	Good	Four rooms without special equipment.
3	0	No	Fair	-----
1	0	Yes	Poor	None.
5	1	Yes	Fairly good	Shack.
3	0	Barely	Good	Three-room house, kitchen and bath.
7	0	Yes	Fair	None.
6	0	Yes	Good	Very good; has kitchen, bath and phone.
1	0	No	Tin and hard to clean	Shack.
3	0	Barely	Good	Shack with bath.
1	0	No	Fair	Out of town.
3	0	Barely	Good	None.
3	0	Hardly	Good	None.
5	0	Not for indigents	Good	None.
4	0	Yes	Poor	Shack.
6	0	Yes	Fair	Use shack owned by city.

County	Insane ward	Tubercular ward
1. Alameda -----	None	Three frame buildings screened; very satisfactory
2. Amador -----	One cell	Ward on third floor; light and airy
3. Butte -----	One detention cell	Open shack for six patients
4. Calaveras -----	None	Screened cottage, five patients
5. Colusa -----	Padded cell in jail	None
6. Contra Costa -----	Separate building, 4 cells	Very poor shack
7. Del Norte -----	Two cells, one padded	None
8. El Dorado -----	None	None
9. Fresno -----	Four cells in county jail	Porch of each ward
10. Glenn -----	Padded cell	12 by 12 cottage, not open enough
11. Humboldt -----	Cell in basement	Two small cottages, good light and air
12. Inyo -----	None	None
13. Kern -----	None	Building in rear, accommodates ten
14. Kings -----	Room on second floor	Cottage for eight
15. Lake -----	None	None
16. Lassen -----	In jail	None
17. Los Angeles Farm -----	Detention building, 88 rooms	In hospital
18. Los Angeles Hospital -----	Detention building, 18 rooms	Three-story building, capacity 120
19. Madera -----		None
20. Marin -----	None	Three tent houses, 10 by 12
21. Mariposa -----	None	None
22. Mendocino -----	Three cells	10 by 12 tent
23. Merced -----	Small detention building	Tent house, 14 by 30
24. Merced Branch -----	None	None
25. Modoc -----	None	None
26. Mono -----	None	None
27. Monterey -----	None	Old but screened, one room, four beds
28. Napa -----	Two cells	None
29. Nevada -----	One cell	None
30. Orange -----	Three cells on second floor	Third floor and roof garden
31. Placer -----	Taken to county jail	Screened porch
32. Plumas -----	None	None
33. Riverside -----	Five-rm. detention bldg., yard	20 by 40 building, accommodates 14
34. Sacramento -----	Two padded cells	Two-story building, accommodates 25
35. San Benito -----	None	Good cottage for ten
36. San Bernardino -----	Fireproof building, 6 cells	Four tent houses, accommodate 30
37. San Diego -----	Ten cells in basement	Two wards on top floor, porches
38. San Francisco City and County -----	Special detention hospital	See tuberculosis hospital
39. San Francisco Isolation -----		See tuberculosis hospital
40. San Fran. Tuberculosis -----		Entire hospital
41. San Francisco Relief Home -----	Detention building and enclosed yard	See tuberculosis hospital
42. San Joaquin -----	None	Best in state, accommodates 42
43. San Luis Obispo -----	Two cells	Rooms in shack in rear
44. San Mateo -----	Padded cell in county jail	Two screened tents
45. Santa Barbara -----	Room in shed	Tent houses, open and clean
46. Santa Clara Farm -----	None	None
47. Santa Clara Hospital -----	Use private rooms	Very good pavilion
48. Santa Cruz -----	One detention rm., use Co. jail	Four-room cottage, not screened
49. Shasta -----	Use county jail	None
50. Sierra -----	None	None
51. Siskiyou -----	Use county jail	Tent house for two
52. Solano -----	None	None
53. Sonoma -----	One room	Screened porches
54. Stanislaus -----	Two cells in separate building	Very good accommodations for eight

## HOSPITALS.

Operating room	Food		Laundry
	No. of meals	How purchased	
Well equipped	3	Contract	Steam laundry
Small equipment	3	Contract	Hand washer; stationary tubs, etc.
Fair equipment; needs floor cover	Women 3. Men 2 and lunch	Contract	One hand washer, 6 stationary tubs
Fairly equipped	3	Contract	Electric washer, stationary tubs, etc.
Fairly equipped; needs sterilizers	2 and lunch	Contract	One hand washer, stationary tubs
Good	3	Contract	Washer, boiler, dryer, stationary tubs
None	3	Contract	Hand washer, stationary tubs
Not equipped	2	Contract	Electric washing machine, stationary tubs, etc.
Well equipped	3	Open market	Fairly complete
Limited equipment	3	Open market	Hand washer, stationary tubs
Fairly equipped	3	Contract	Washers, boiler, mangle, etc.
None	3 except Sunday	Open market	Very little equipment
Well equipped	3	Contract	Stationary tubs, gas plate and irons
Fairly equipped	3	Contract	One hand washer, 3 stationary tubs, stove and boiler
None	3	See remarks	None
None	3	Open market	Hand washer, tubs
Fairly equipped	3	Part on contract	Steam laundry
Two rooms fully equipped	3	Part on contract	Steam laundry
Not equipped	3	Open market	Electric washer, 3 stationary tubs
None	3	Contract	Not yet installed
None	2	See remarks	None
Small equipment	3	Contract	Small washers and stationary tubs
Fairly equipped	3	Open market	One hand washer, 3 stationary tubs
None	2	Contract	None
Very little equipment	3	Open market	Hand washer and tubs
None	2 and lunch	Open market	Tubs
Small equipment	3	Contract	Washer and wringers
Fairly equipped	2	Contract	Electric washers, stationary tubs
Fairly equipped	2	Contract	Fair steam laundry
Equipment not installed	3	Open market	Steam laundry to be installed
Fairly equipped	2 and lunch	Contract	Rotary washer and stationary tubs
Fairly equipped	2 and lunch	Contract	Washer, 3 stationary tubs
Well equipped	3	Contract	Steam laundry
Well equipped	3	Open market	Steam laundry
Fairly equipped	3	See remarks	Steam washer and wringer
Fairly well equipped	3	Monthly contract	Steam laundry, lacking driers
Well equipped	3	Meat on contract	Steam laundry
One main room and 2 small rooms	3	Contract	Use Relief Home laundry
None	3	Contract	Steam laundry
Small room, seldom used	3	Contract	None
At City and County Hospital	3	Contract	Steam laundry, fully equipped
Well equipped	3	Contract	Steam laundry
Small equipment	3	Contract	Hand washer, 2 stationary tubs
Small equipment	3	Contract	Two hand washers, 4 stationary tubs
None	3	Contract	None
None	3	Contract	Two hand washers, 16 stationary tubs
Two well equipped	3	Contract	Steam
Good equipment	2	Contract	Family laundry
Small equipment	2 and lunch	Contract	Stationary tubs, sterilizer
None	2 and lunch	Contract	Tubs
Lacks instruments and modern sterilizers	2	Contract	None
Very little equipment	2 and lunch	Contract	Stationary tubs, wash boilers
Good equipment	3	Contract	Steam laundry
Fairly equipped	3	Contract	Six stationary tubs, wash boilers

## COUNTY

County	Insane ward	Tubercular ward
55. Sutter -----	None	None
56. Tehama -----	Sep. bldg., 2 cells, 1 large rm.	Use insane ward
57. Trinity -----	None	None
58. Tulare -----	None	12 by 12 frame, unsatisfactory
59. Tuolumne -----	Two cells	None
60. Ventura -----	Detention building, very good	Good cottage for six patients
61. Yolo -----	Two padded cells in county jail	Unsatisfactory
62. Yuba -----	Two cells	18 by 20, fairly good

## HOSPITALS.

Operating room	Food		Laundry
	No. of meals	How purchased	
None	3	Open market	Hand washer and tubs
Fairly well equipped	2 and lunch	Contract	Electric washer, stationary tubs
Small equipment	3	Open market	Hand washer and tubs
None	3	Contract	Hand washer, tubs
Small equipment	3	Contract	Two sets tubs with 5 compartments each
Fairly equipped	3	See remarks	Electric washer and stationary tubs
Small equipment	2 and lunch	Meat on contract	Good equipment
Fairly equipped	2 and lunch	Contract	Stationary tubs



County	Beds		
	Kind	Mattress	Bedding
1. Alameda -----	Hospital and iron and wood	Moss	Complete
2. Amador -----	Iron	Wool	Complete
3. Butte -----	Iron	Excelsior	Only 1 sheet
4. Calaveras -----	Iron	Hair	Complete
5. Colusa -----	Iron	Straw tick	Complete
6. Contra Costa -----	Iron	Fiber filling, felt cover	Complete
7. Del Norte -----	Wooden and iron	Straw tick	Complete
8. El Dorado -----	Iron	Straw	No sheets
9. Fresno -----	Hospital and iron	Cotton and excelsior	Complete
10. Glenn -----	Iron	Cotton top and bottom	Complete
11. Humboldt -----	Iron	Excelsior and felt	Complete
12. Inyo -----	Cots	Hair	Comforts, some sheets
13. Kern -----	Hospital	Excelsior	Complete
14. Kings -----	Iron	Cotton	Complete
15. Lake -----	Wooden	Straw tick, or excelsior	Comforts
16. Lassen -----	Iron	Excelsior	Comforts, no sheets
17. Los Angeles— Farm -----	Iron	Cotton top and bottom	Complete
18. Los Angeles— Hospital -----	Hospital and iron	Cotton top and bottom	Complete
19. Madera -----	Iron	Excelsior	Complete
20. Marin -----	Hospital	Cotton	Complete
21. Mariposa -----	Iron and hospital	"Shoddy"	Comforts, no sheets
22. Mendocino -----	Iron	Cotton and excelsior	Complete
23. Merced -----	Iron	Cotton top and bottom	Complete
24. Merced—Branch -----	Iron	Straw tick	Comforts, no sheets
25. Modoc -----	Iron	"Shoddy"	Comforts, 1 sheet
26. Mono -----	Cots	Moss tick	Comforts, no sheets
27. Monterey -----	Iron cots	Excelsior and wool	Complete
28. Napa -----	Hospital	Excelsior	Complete
29. Nevada -----	Hospital and iron	Wool	Complete
30. Orange -----	Hospital and iron	Top and bottom cotton	Complete
31. Placer -----	Hospital and iron	Cotton or "shoddy"	Complete
32. Plumas -----	Iron	Cotton top and bottom	Comforts, no sheets
33. Riverside -----	Iron	Cotton top and bottom	Complete
34. Sacramento -----	Iron	Straw and hair floss	Complete
35. San Benito -----	Iron cots and wooden	"Shoddy"	Complete
36. San Bernardino -----	Hospital and iron	Excelsior or "shoddy"	Complete
37. San Diego -----	Hospital and iron	Moss	Complete
38. San Francisco— City and Co. -----	Hospital	-----	Complete
39. San Francisco— Isolation -----	Iron and hospital	Half hair and half excelsior	Complete
40. San Francisco— Tuberculosis -----	Hospital	-----	Complete
41. San Francisco— Relief Home -----	Iron	Moss	Complete, comforts
42. San Joaquin -----	Hospital and iron	Moss	Complete
43. San Luis Obispo -----	Iron	Straw tick or "shoddy"	Complete
44. San Mateo -----	Iron	Excelsior	1 sheet
45. Santa Barbara -----	Iron	Excelsior	Complete
46. Santa Clara— Farm -----	Iron	Cotton top and bottom	Comforts, some sheets
47. Santa Clara— Hospital -----	Hospital	Spanish moss	Complete
48. Santa Cruz -----	Iron cots	"Shoddy"	Complete
49. Shasta -----	Hospital and iron	Cotton	Comforts, no sheets
50. Sierra -----	Iron	Excelsior	No sheets
51. Siskiyou -----	Hospital and iron	Cotton or excelsior	Some pillow slips lacking
52. Solano -----	Iron	Straw tick	Complete
53. Sonoma -----	Iron	"Shoddy" wool	Complete
54. Stanislaus -----	Hospital and iron	Cotton top and bottom	Complete
55. Sutter -----	Iron	"Shoddy"	Comforts, no sheets
56. Tehama -----	Hospital and iron	Cotton top and bottom	Some sheets lacking
57. Trinity -----	Iron	Excelsior	Comforts, no sheets
58. Tulare -----	Iron	Cotton top and bottom	Some sheets
59. Tuolumne -----	Iron	Hair	No sheets
60. Ventura -----	Hospital and iron	Several kinds	Complete
61. Yolo -----	Iron	Excelsior	Complete
62. Yuba -----	Iron	"Shoddy"	1 sheet

## HOSPITALS.

Cleanliness of beds	Lockers	Number of inmates working	Recreation facilities
Fairly good	Some	26	Piano, cards.
Fairly good	None	10	Phonograph and cards.
Fairly good	None	20%	None.
Good	None	2	None.
Fairly good	None	5	None.
Fair	None	10	Two phonographs, cards.
Fair	None	Very few	None.
Good	None	12	None.
Good	Boxes, nearly 1 apiece	10	Cards.
Good	None	7	Cards.
Fair	None	50%	Piano, cards, checkers.
Fair	None	Very few	None.
Good	None	None	Cards.
Good	None	3	None.
Fair	None	0	None.
Poor	None	0	None.
Good	Some	50%	Cards.
Good	Some	0	Chess, checkers and cards.
Fairly good	None	50%	Cards.
Good	Individual	Nearly all	Cards.
Poor	None	2	None.
Fair	None	50%	Cards and music.
Good	None	12	Cards and music.
Poor	None	2	None.
Fair	None	1	None.
Fair	None	0	None.
Good	Some	10	None.
Good	None	25	None.
Fair	Closets	A few	Games and phonograph.
Good	None	A few	Recreation building, cards and music.
Fair	None	10	None.
Fair	None	Nearly all	Cards.
Good	Few	50% of custodial	None.
Fair	Lockers and baggage room	25	Cards and checkers.
Good	None	6	Cards and games.
Good	None	Very few	Cards.
Good	None	25	None.
Good	Individual	0	Convalescents go to Relief Home.
Good	Some	8 lepers	Lepers have moving pictures and pool table.
Good	Individual	40	None.
Good	Some	400	Moving pictures, pianola, vaudeville, cards.
Good	None	95% of custodial	Croquet, cards and garden plots.
Good	None	5	Cards.
Fair	None	25%	Cards and phonograph.
Good	None	25%	Graphophone.
Fair	None	60	Reading room, cards and checkers.
Very good	None	12	Cards, checkers.
Good	Some	10	Cards.
Fair	None	Very few	Library and cards.
Fair	None	33%	Sitting room.
Good	None	Very few	Reading room.
Good	None	10	None.
Good	Some	Nearly all	None.
Good	None	3	None.
Fair	None	10	None.
Good	None	Very few	None.
Fair	None	Nearly all	Recreation room.
Good	None	4	None.
Fair	None	4	None.
Fairly good	None	Almost none	None.
Fair	None	4	Cards.
Fair	None	10	Cards.

County	Reading
1. Alameda	Magazines, books from public library
2. Amador	Books and magazines
3. Butte	Magazines, papers and books
4. Calaveras	Papers and magazines
5. Colusa	Magazines
6. Contra Costa	Magazines, books and papers
7. Del Norte	Magazines and papers
8. El Dorado	Magazines and few books
9. Fresno	Magazines
10. Glenn	Magazines, books and papers
11. Humboldt	Daily papers, magazines and books
12. Inyo	Very little
13. Kern	Magazines and books
14. Kings	Magazines, books and papers
15. Lake	Daily papers and old magazines
16. Lassen	Magazines and papers
17. Los Angeles Farm	Library
18. Los Angeles Hospital	Good library
19. Madera	Magazines and books
20. Marin	Magazines and papers
21. Mariposa	Magazines
22. Mendocino	Magazines and papers
23. Merced	Books and library, papers and magazines
24. Merced Branch	Magazines
25. Modoc	Three daily papers, magazines
26. Mono	Magazines
27. Monterey	Magazines and papers
28. Napa	Library and daily papers
29. Nevada	Magazines and books
30. Orange	Magazines and papers
31. Placer	Magazines and papers
32. Plumas	Magazines and papers
33. Riverside	Magazines and papers
34. Sacramento	Magazines, papers and books
35. San Benito	Daily papers and magazines
36. San Bernardino	Library, magazines and papers
37. San Diego	Magazines, books and papers
38. San Francisco City and County	Magazines and books
39. San Francisco Isolation	Magazines and books
40. San Francisco Tuberculosis	Magazines, books and papers
41. San Francisco Relief Home	Magazines and books
42. San Joaquin	Books and magazines
43. San Luis Obispo	Magazines and papers
44. San Mateo	Magazines and books
45. Santa Barbara	Magazines and books
46. Santa Clara Farm	Magazines and books
47. Santa Clara Hospital	Books, magazines and papers
48. Santa Cruz	Magazines and papers
49. Shasta	Magazines, books and papers
50. Sierra	Magazines and papers
51. Siskiyou	Magazines and papers
52. Solano	Magazines and papers
53. Sonoma	Magazines
54. Stanislaus	Magazines, books and papers
55. Sutter	Magazines and books
56. Tehama	Magazines and papers
57. Trinity	Magazines and books
58. Tulare	Magazines and books
59. Tuolumne	Magazines, daily papers, few books
60. Ventura	Magazines and books
61. Yolo	Magazines and papers
62. Yuba	Magazines and books

## HOSPITALS.

Tobacco	Liquor	Religious services	Total employees	Nurses
Yes	No	Daily except Monday and Tuesday	62	14
Yes	To workers	None	6	0
Yes	No	Twice a month	7	1
Yes	To workers	Twice a week	6	0
Yes	No	Twice a month	6	0
Yes	No	None	12	4
Yes	No	Every Sunday	3	0
Yes	Occasionally	Every Sunday	3	0
Yes	No	Irregularly	22	7
Yes	No	Twice a month	4	2
Yes	No	Three times a week	8	1
Yes	No	None	3	0
Yes	No	Every Sunday	14	4
Yes	No	Twice a month	6	1
Yes	No	None	8	0
Yes	No	None	3	0
Yes	No	Twice every Sunday		
Yes	No	Chaplain employed	262	137
Yes	No	None	6	1
Yes	To some	Once or twice a month	5	0
Yes	No	None	1	0
Yes	No	Nearly every Sunday	7	2
Yes	No	Irregular	8	2
Yes	No	None	2	0
Yes	No	None	2	0
Yes	No	None	3	0
Yes	No	Every other Sunday	8	1
Yes	No	Every Sunday	8	2
Yes	No	Nearly every Sunday	7	2
Yes	No	Every Sunday in chapel	95	90
Yes	Irregularly	Irregularly	7	2
Yes	No	None	2	0
Yes	No	Every Sunday	20	10
Yes	No	Every Saturday and Sunday	33	20
Yes	No	Twice a month	3	2
Yes	No	Irregularly	36	18
Yes	No	Wednesday and Sunday	45	33
No	No	Every Sunday	160	79
No	No	None	38	10
No	No	Every Sunday	27	16
Yes	Yes	Four times a week	42	7
Yes	No	Weekly	45	16
Yes	No	Irregularly	7	0
Yes	To workers	Christian Endeavor in summer	7	1
Yes	To consumptives	Twice every Sunday	12	7
Yes	No	None	9	1
Yes	No	Every Sunday	27	20
Yes	No	Every Sunday	5	1
Yes	To some	Occasionally	7	1
Yes	No	Occasionally	2	0
Yes	Irregularly		12	3
Yes	No	Not often	7	2
Yes	No	Every Sunday	19	8
Yes	No	Every Sunday	9	2
Yes	No	No	82	0
Yes	No	No	8	3
Yes	Irregularly	No	3	0
Yes	No	Once a month	6	1
Yes	To some	No	5	0
Yes	No	No	82	82
Yes	To one only	Irregularly	8	1
Yes	To some workers	Irregularly	5	1



## COUNTY

County	Monthly payroll	Salary	
		Supt. or steward	Physician
1. Alameda	\$2,750 00	\$125 00	\$250 00
2. Amador	225 00	60 00	60 00
3. Butte	425 00	100 00	100 00
4. Calaveras	350 00	75 00	75 00
5. Colusa	295 00	75 00	75 00
6. Contra Costa	650 00	150 00	100 00
7. Del Norte		100 00	
8. El Dorado	235 00	60 00	60 00
9. Fresno	1,534 00		208 53 <sup>2</sup>
10. Glenn	0 <sup>8</sup>	65 00 <sup>10</sup>	
11. Humboldt	410 00	115 00	44 37
12. Inyo	220 00	120 00	50 00
13. Kern	852 50	112 50	100 00
14. Kings		75 00 <sup>11</sup>	66 67
15. Lake	0 <sup>8</sup>		30 00
16. Lassen	195 00	60 00	75 00
17. Los Angeles Farm	1,705 00	140 00	100 00
18. Los Angeles Hospital	10,000 00	165 00	300 00 <sup>2</sup>
19. Madera	360 00	75 00	100 00
20. Marin	205 00	80 00	50 00
21. Mariposa	50 00 <sup>5</sup>		50 00 <sup>13</sup>
22. Mendocino	300 00	55 00	75 00 <sup>2</sup>
23. Merced	475 00	100 00	50 00
24. Merced Branch	130 00		75 00 <sup>2</sup>
25. Modoc	60 00 <sup>8</sup>	0 <sup>8</sup>	50 00 <sup>2</sup>
26. Mono	90 00 <sup>8</sup>	0 <sup>8</sup>	75 00
27. Monterey	480 00	100 00	125 00
28. Napa		150 00	75 00
29. Nevada	480 00	100 00	125 00
30. Orange	322 50	75 00	112 00
31. Placer	420 00	100 00	100 00
32. Plumas	180 00	110 00 <sup>12</sup>	70 00
33. Riverside	730 00	150 00 <sup>11</sup>	100 00
34. Sacramento	2,000 00	125 00 <sup>4</sup>	250 00
35. San Benito	0 <sup>8</sup>	0 <sup>8</sup>	
36. San Bernardino	1,545 00	100 00	150 00
37. San Diego	1,577 00	150 00	200 00
38. San Francisco City and County	4,760 00	300 00	125 00
39. San Francisco Isolation	1,400 00		200 00
40. San Francisco Tuberculosis	1,875 00		150 00
41. San Francisco Relief Home	5,365 00	300 00	135 00
42. San Joaquin	1,672 00		200 00 <sup>2</sup>
43. San Luis Obispo	290 00	75 00	75 00
44. San Mateo	365 00	75 00	75 00
45. Santa Barbara	710 00	100 00	125 00
46. Santa Clara Farm	475 00	100 00	50 00
47. Santa Clara Hospital	1,200 00		250 00 <sup>2</sup>
48. Santa Cruz	320 00	95 00	50 00
49. Shasta	405 00	100 00	75 00
50. Sierra	165 00	95 00	80 00
51. Siskiyou	660 00	100 00	85 00 <sup>13</sup>
52. Solano	410 00	100 00	100 00
53. Sonoma	875 00	85 00 <sup>3</sup>	125 00
54. Stanislaus	535 00	100 00 <sup>11</sup>	100 00
55. Sutter	80 00 <sup>8</sup>	25 00 <sup>8</sup>	55 00
56. Tehama	295 00		100 00



## HOSPITALS.

Pay patients	Acres in farm	Acres in cultivation	Stock			
			Cows	Horses	Hogs	Poultry
None	125	50	49	3	30	1,600
\$13.00 per month	10	$\frac{1}{2}$	4	0	4	150
\$1.00 per day	80	18	3	3	20	0
None	40 <sup>5</sup>	30	7	1	12	320
\$20.00 per month; very few	38	31	7	2	3	100
\$10.00 a week in room, \$7.00 in ward	71 <sup>4</sup>	0	10	1	0	300
None	126	40	6	0	2	65
\$10.00 per month	7	2	0	0	8	100
\$7.50 to \$10.00 per week	80	60	18	4	0	2
None	20	18	0 <sup>s</sup>	0 <sup>s</sup>	0 <sup>s</sup>	0 <sup>s</sup>
\$12.00 to \$15.00 per month; very few	20	18	8	2	5	0
Practically none	60	60	5	2	15	150
None	6	1	0	0	0	0
None	51	28	2	3	7	70
None	0 <sup>s</sup>	0 <sup>s</sup>	0 <sup>s</sup>	0 <sup>s</sup>	0 <sup>s</sup>	0 <sup>s</sup>
None	47	---	0	0	0	0
\$10.00 to \$20.00 per month	377	370	117	23	217	500
A few, \$1.25 per day	---	---	0	5	0	0
A few, \$10.00 a month	40	35	5	1	12	100
A few, \$15.00 per month	98	45	15	2	8	350
None	40 <sup>5</sup>	2	0 <sup>s</sup>	0 <sup>s</sup>	0 <sup>s</sup>	0 <sup>s</sup>
A few, \$15.00 per month	125	35	6	0	4	170
\$1.50 per day in ward, \$2.00 in room	10	4	2	0	0	100
None	5	---	0 <sup>s</sup>	0 <sup>s</sup>	0 <sup>s</sup>	0 <sup>s</sup>
\$1.25 per day	10	8	0 <sup>s</sup>	0 <sup>s</sup>	0 <sup>s</sup>	0 <sup>s</sup>
\$1.00 per day	200	100	4	0 <sup>s</sup>	0 <sup>s</sup>	0 <sup>s</sup>
None	70	30	8	4	5	250
\$15.00 per month or \$1.00 per day	12	12	0	1	0	200
A few, \$20.00 per month and up	40	35	5	0	15	75
\$5.00 per week	72	67	3	3	10	0
\$5.00 per week	46	12	6	1	6	300
\$2.00 per day	21	4	2	1	0	30
Surgical cases, \$10.00 per week, others \$1.00 a day	70	60	14	4	3	150
None	38	Allexcept bldg. site	15	4	50	50
\$5.00 per week	24 <sup>15</sup>	22	0 <sup>s</sup>	0 <sup>s</sup>	0 <sup>s</sup>	0 <sup>s</sup>
\$10.00 in ward, \$15.00 in room	45	35	9	3	0	400
Very few, no rate	164	34	15	5	35	100
Very few, \$30.00 per month	---	---	---	---	---	---
\$3.00 a day	---	---	---	---	---	---
None	---	---	---	---	---	---
\$15.00 per month	100	30	61	28	175	550
Very few, \$1.00 a day	480	224	68	12	25	2,500
Very few, \$1.00 a day	50	23	3	3	0	100
None	140	60	10	3	11	600
\$15.00 per month	161 <sup>6</sup>	2	18	1	0	300
None	230 <sup>5</sup>	90	24	5	100	75
\$1.00 per day in ward, \$10.00 a week in room	38	20	23	5	6	500
None	13	9	4	0	5	300
None	91.4	60	7	4	13	300
None	2	1 $\frac{1}{2}$	1	0	2	30
\$15.00 per month	20	15	4	2	7	150
None	60	---	10	0	0	100
\$1.00 a day	132	75	7	4	20	0
None	19	12	9	2	3	100
20 cents per meal	8	5	0 <sup>s</sup>	0 <sup>s</sup>	0 <sup>s</sup>	0 <sup>s</sup>
\$10.00 a week in ward, \$3.00 a day in room	20 <sup>5</sup>	16	4	2	3	100

## COUNTY

County	Monthly payroll	Salary	
		Supt. or steward	Physician
57. Trinity -----	150 00	80 00	50 00
58. Tulare -----	280 00	75 00	75 00
59. Tuolumne -----	300 00	75 00	50 00
60. Ventura -----	0 <sup>8</sup>	0 <sup>8</sup>	
61. Yolo -----	380 00	85 00	100 00
62. Yuba -----	235 00	75 00	75 00

<sup>1</sup>Alpine and Imperial have no county hospitals.

<sup>2</sup>Physician and superintendent.

<sup>3</sup>Matron.

<sup>4</sup>Assistant superintendent.

<sup>5</sup>Approximate.

<sup>6</sup>Rebuilt.

<sup>7</sup>By "complete" is meant a bed made up with at least two sheets, a pillow and slips, and a blanket.

<sup>8</sup>See column labeled "remarks."

<sup>9</sup>More to be employed soon.

<sup>10</sup>He also receives \$15.00 per month per patient, out of which he buys food supplies and hires cook.

<sup>11</sup>Steward or superintendent and matron together receive this amount.

<sup>12</sup>Out of this the steward hires his cook.

<sup>13</sup>Physician furnishes medicines.

<sup>14</sup>Also rent 40 acres.

<sup>15</sup>Also rent 30 acres.

<sup>16</sup>Also own 327 acres which is leased.

## HOSPITALS.

Pay patients	Acres in farm	Acres in cultivation <sup>5</sup>	Cows	Stock			Poultry
				Horses	Hogs		
None .....	4	3 $\frac{1}{2}$	2	0	0		100
None .....	0 <sup>17</sup>	0	0	0	0		0
None .....	4	4	0	0	3		100
None .....	0 <sup>17</sup>	0	0 <sup>8</sup>	0 <sup>8</sup>	0 <sup>8</sup>		0 <sup>8</sup>
Very few, no rate .....	65	62	8	3	54		200
Very few, no rate .....	7 $\frac{1}{2}$	2 $\frac{1}{2}$	6	6	0		400

<sup>17</sup>Occupies one half of a city block.

## COUNTY HOSPITALS.

County	Farm accounting	Remarks
1. Alameda -----	Good -----	Plans being drawn for new almshouse on present site and new hospital in Oakland.
2. Amador -----	Fairly good -----	-----
3. Butte -----	Not detailed -----	Individual phone and linoleum promised.
4. Calaveras -----	Fairly good -----	Septic tank being installed; numerous improvements made.
5. Colusa -----	Not detailed -----	Should look forward to new structure in near future.
6. Contra Costa -----	Not detailed -----	New infirmary building being erected.
7. Del Norte -----	Not detailed -----	-----
8. El Dorado -----	None -----	-----
9. Fresno -----	Time book -----	-----
10. Glenn -----	None -----	Stock is property of superintendent; cooler and electric pump have been installed; financial system illegal.
11. Humboldt -----	General -----	-----
12. Inyo -----	None -----	Buildings painted and papered in 1913.
13. Kern -----	None -----	Tubercular ward being screened and tables have been supplied for the patients to eat from, as recommended by this Board.
14. Kings -----	None -----	Fair grounds are being used for hospital site and farm.
15. Lake -----	None -----	County contracts with H. C. Wilkinson to care for indigents at \$1 per day per capita.
16. Lassen -----	None -----	New site bought.
17. Los Angeles-- Farm -----	Complete system -----	Old buildings being rebuilt.
18. Los Angeles-- Hospital -----	None -----	New psychopathic building in course of construction.
19. Madera -----	Not detailed -----	-----
20. Marin -----	Not detailed -----	Just getting settled in new building; hospital cases being treated in a private hospital at County expense.
21. Mariposa -----	None -----	Contract system, cut from \$280 to \$255 per month; illegal financial system.
22. Mendocino -----	Practically none -----	-----
23. Merced -----	None -----	-----
24. Merced--Branch -----	None -----	Land, buildings and two cows owned by Miller & Lux; chickens by matron.
25. Modoc -----	None -----	Matron receives \$10 per month and 50 cents per day per patient, out of which she pays for food and half of wood and lights.
26. Mono -----	Not detailed -----	Superintendent receives \$21 per month per patient and owns horses, pigs and chickens; financial system illegal.
27. Monterey -----	None -----	\$15,000 in hospital fund devoted to roads.
28. Napa -----	None -----	Old building to be replaced.
29. Nevada -----	Fairly good -----	Septic tank, sterilizer and new toilets installed.
30. Orange -----	Not developed -----	-----
31. Placer -----	Not detailed -----	Improved operating room and water system; fruit trees set out; old building overhauled.
32. Plumas -----	None -----	-----
33. Riverside -----	Check is kept on milk.	-----
34. Sacramento -----	-----	Plans now being drawn for new hospital, old plant having been condemned for many years past.
35. San Benito -----	-----	Superintendent receives no salary but cares for patients by contract; each patient 20 cents per meal; financial system illegal.
36. San Bernardino -----	Not detailed -----	New plant is being agitated.
37. San Diego -----	Not detailed -----	-----
38. San Francisco-- City and Co. -----	-----	-----
39. San Francisco-- Isolation -----	-----	Municipal incinerator and manure in Ocean Shore
40. San Francisco-- Tuberculosis -----	-----	Railroad cars constitute nuisances.
41. San Francisco-- Relief Home -----	-----	-----
42. San Joaquin -----	Complete -----	One of best county hospitals in state.
43. San Luis Obispo -----	None -----	Some wards lighted by electricity; some have no artificial light.
44. San Mateo -----	Fairly good card system.	-----
45. Santa Barbara -----	Practically none -----	-----
46. Santa Clara-- Farm -----	None -----	Records very inaccurate; poor business methods.
47. Santa Clara-- Hospital -----	Accounts with dairy herd as a whole.	One of best county hospitals in state.

## COUNTY HOSPITALS—Continued.

County	Farm accounting	Remarks
48. Santa Cruz -----		
49. Shasta -----	Not detailed -----	Many improvements made.
50. Sierra -----	None -----	One man is steward, nurse, cook and farmer.
51. Siskiyou -----	Not detailed -----	New reservoir being built.
52. Solano -----	None -----	Some wards have no artificial light.
53. Sonoma -----	Not detailed -----	New floor and ceiling in indigent quarters; new lavatories being installed.
54. Stanislaus -----	Not detailed -----	
55. Sutter -----	None -----	Superintendent receives \$25 per month and 20 cents per meal per patient; he hires his own help and buys foodstuffs.
56. Tehama -----	Not detailed -----	Numerous improvements; main building overhauled.
57. Trinity -----	None -----	
58. Tulare -----	None -----	
59. Tuolumne -----		New women's ward is being agitated.
60. Ventura -----	None -----	Superintendent receives \$6 per week per patient; hires all employees except physician and buys food and fuel. This financial system will be changed and new hospital erected.
61. Yolo -----	Not detailed -----	Steam heating system being installed; septic tank to be installed.
62. Yuba -----	None -----	Trouble with contract because not specific enough. Merchants take advantage of this.



## COUNTY HOSPITALS.

County	Special needs
1. Alameda -----	Entire new plant, including separation of hospital and almshouse.
2. Amador -----	Screened covers for garbage cans.
3. Butte -----	Recreational facilities; linoleum for surgical building; individual telephone line.
4. Calaveras -----	
5. Colusa -----	Repairs to roof and porch; tubercular ward and recreational facilities.
6. Contra Costa -----	Recreational facilities; tubercular ward; mangle for laundry.
7. Del Norte -----	Entire new plant.
8. El Dorado -----	Nurse; removal of woodshed at rear of main building, which is a fire danger; more screening in kitchen; removal of Chinese building.
9. Fresno -----	Head nurse; new building to relieve overcrowding; recreational facilities; new barn farther removed from hospital.
10. Glenn -----	Change from semi-contract to straight salary basis; larger pipes and hydrants for fire protection.
11. Humboldt -----	More toilets, baths, fire extinguishers and recreational facilities.
12. Inyo -----	Fire protection, nurse, isolation ward.
13. Kern -----	Employment and recreation; farming garden; laundry equipment.
14. Kings -----	Septic tank; isolation building; recreational facilities.
15. Lake -----	A hospital and farm owned by the county with employees on straight salary basis.
16. Lassen -----	Trained nurse; entire new plant.
17. Los Angeles Farm -----	More recreational facilities.
18. Los Angeles Hospital -----	Full time of superintendent.
19. Madera -----	Rebuilding of barn farther from hospital; more screens; tubercular ward; new isolation building, recreational facilities.
20. Marin -----	Removal of old shack; another employee.
21. Mariposa -----	Change to salary basis; cesspool; repair plumbing; clean up; new bedding, washing machine, live stock; destroy vermin.
22. Mendocino -----	Tubercular and isolation building.
23. Merced -----	Removal of barn; new isolation building; better laundry equipment; garden.
24. Merced Branch -----	New building; another employee; regular nurse.
25. Modoc -----	Removal of outdoor privy; regular nurse; straight salary for matron; recreational facilities.
26. Mono -----	Straight salary for superintendent; new well; some system of sewage disposal.
27. Monterey -----	
28. Napa -----	Repair walls; modern sterilizers and cover on floor of operating room; removal of roller towels; recreational facilities.
29. Nevada -----	Plan and gradually erect entirely new group of buildings.
30. Orange -----	
31. Placer -----	Modern dairy barn; another nurse; recreational facilities.
32. Plumas -----	Trained nurse; sheets for beds.
33. Riverside -----	Bath house between detention and next cottage; recreational facilities.
34. Sacramento -----	Entire new plant, separating infirmary and hospital.
35. San Benito -----	Change to salary basis; new baths; provision for segregation of patients; office.
36. San Bernardino -----	New quarters for tubercular women and indigent men; new barns; drier for laundry; more recreational facilities.
37. San Diego -----	Removal of detention cells from basement; recreational facilities.
38. San Francisco City and County -----	
39. San Francisco Isolation -----	Great need for more nurses; more buildings to provide for more complete segregation; interne.
40. San Francisco Tuberculosis -----	
41. San Francisco Relief Home -----	
42. San Joaquin -----	More recreational facilities.
43. San Luis Obispo -----	Trained nurse; increase water supply; bath in rear building; new isolation and tubercular ward; better laundry recreational facilities.
44. San Mateo -----	Increase water supply; modern isolation building.
45. Santa Barbara -----	Entirely new plant located on farm.
46. Santa Clara Farm -----	Accurate record of inmates; strict account of expenses and productions; more toilets; lockers; tinting of walls; exclusion of flies.
47. Santa Clara Hospital -----	

## COUNTY HOSPITALS—Continued.

County	Special needs
48. Santa Cruz -----	New laundry; cement floor and whitewashing in dairy barn; screens in upper wards.
49. Shasta -----	More bathing and toilet facilities; washing machine; sheets on beds; orderly and gardener; overhauling of "pesthouse"; sanitary dairy barn.
50. Sierra -----	Another employee.
51. Siskiyou -----	Laundry; tubercular ward.
52. Solano -----	Entirely new plant.
53. Sonoma -----	New quarters for indigents; perhaps use present buildings for them and build new hospital in town; new dairy barn and isolation and detention wards.
54. Stanislaus -----	Washing machine; recreational facilities.
55. Sutter -----	Straight salary basis; sheets; new bathtubs and toilets; live stock; really need entire new plant.
56. Tehama -----	Fire plugs and hose; tubercular ward and women's ward; renovation of indigent quarters and isolation ward.
57. Trinity -----	More bathing and toilet facilities; improved sewage disposal.
58. Tulare -----	Operating room; improved laundry equipment; bathing and toilet facilities for cottages; recreational facilities.
59. Tuolumne -----	New women's ward; nurse.
60. Ventura -----	Change to salary basis; new plant, except tubercular and detention building.
61. Yolo -----	Overhauling of floors; better fire protection; more attention to cleanliness; removal of outside privy and adding of two inside toilets; new contagious and tubercular wards.
62. Yuba -----	More employees; sanitary sewage disposal; more laundry equipment; more specific contract for supplies.

## RELATION OF OFFICIALS AND THE GENERAL PUBLIC TO COUNTY HOSPITALS.

*Types of inmates.* The county hospitals of California were established to care for two groups of patients, hospital and custodial. The *hospital patients* should be persons needing medical or surgical attention, but unable to meet the expenses and without relatives able to pay. Some of these may be able to reimburse the county in part. Their case is discussed below under the head of "pay patients." The *custodial patients* should be residents of the respective counties who are permanently disabled and infirm and without income or other means of subsistence, or relatives able to support them.

*Legal requirements for admission* and support in a county hospital. The act of March 23, 1901 (Act 2631, General Laws), holds that no person may become a charge upon a county unless he has resided in that county for at least three months preceding. Neither is he eligible for free care if he have property or relatives able to support him. The hospital superintendent or such other officer as the supervisors may designate is required to investigate every application with reference to the above facts.

*Misuse of county hospitals.* A considerable number of these institutions do not have proper hospital facilities for the care of the sick and injured, thus failing to meet their first purpose. But the failure to meet their second purpose, namely, to provide a suitable home for the indigent and infirm, is due more to the receiving of persons who do not fulfill the legal requirements for admission. The receiving of "hospital bums" keeps away persons who should have the benefit of these institutions, for the "bums" are disagreeable companions to decent old people and they bring a certain opprobrium upon the hospital. Some county hospitals have come to be regarded as winter homes for casual laborers, retreats for vagrants and temporary asylums for inebriates. True, these last mentioned groups need care, but it should be provided elsewhere than in the county hospitals for two reasons: (1) The systems of management, including admission and dismissal in the hospitals, make it quite impossible to give unemployed laborers, vagrants, and inebriates the treatment they deserve and need; (2) These cause the two groups for whom the institutions were intended, to be neglected. The "bums" are frequently trouble-makers within the hospital and try to monopolize the staff's attention. But more significant than that is the fact that they have not the sympathy of the general public, while their presence in the county hospitals has occupied the public mind to the exclusion of the other patients, the legal inmates. The result has been neglected institutions.

*Neglect of county hospitals.* The presence of "hospital bums" seems to have been largely responsible for the disrepute into which many of our county hospitals have fallen. They had an opportunity to escape some of the opprobrium attached to almshouses and poor farms in older communities, but the opportunity has been lost. Many people regarding the inmates to be principally hoboës, drunks, and other disreputables, consider the county hospital as a necessary evil to be kept going as cheaply as possible. The taxpayers think of the immediate burden and public officials are influenced accordingly. Very few seem to realize that an institution half equipped and half maintained is in the long run most expensive. The willingness of political rivals to misrepresent wise expenditures as extravagance, and the ignorance of the public, combine with forgetfulness of the real function of the county hospital to make this institution inefficient and sometimes a positive disgrace. The most obvious symptoms of this situation are too small hospital funds, stupid postponement of repairs, limited and untrained staffs of employees, dissatisfied inmates and finally a disgusted public. The ultimate results are the spending of a sum of money—not too great, but out of proportion to results attained—and failure to serve the purpose for which our county hospitals were designed.

*Why should the public support the county hospitals?* This is a fair question for any citizen to raise and it deserves as clear and explicit an answer as can be made. In replying to it reference must be made again to the two groups for whose care the hospitals were established. Those who are sick or temporarily disabled, but who have a normal outlook for recovery, are economic and social assets to the community. It is cheaper and more satisfactory to all concerned for the community to bear the expense of restoring a productive workman to health than it is to support his family after he is disabled, either through public relief or private charity. It is far better to bring about the recovery of a mother than to permit her children to suffer neglect and perhaps find their way to the juvenile court. There are many such people, who are in no sense paupers, but who are unable to meet the expense of private hospital care. It is the part of wisdom for every county in the state to make adequate provision for these citizens.

There are two other types of hospital service which the county should render—emergency care and isolation of communicable diseases. No county can afford to be without a place where prompt medical and surgical attention can be given the victims of accidents. The proper isolation of contagious and infectious diseases is a safeguard of the public health and absolutely indispensable.



The reasons for supporting the indigent aged and infirm are somewhat different, yet equally valid. Whether misfortune or personal faults have brought a person to poverty and infirmity, the sympathy of twentieth century people will not permit the aged to suffer without any effort at relief. Putting ourselves in his place we can not endure the thought of helpless and unprotected old age. If the community is not organized to lend assistance, then individuals will offer aid. In either case the burden falls ultimately upon the community as a whole. Furthermore, the experience of several thousand years has taught us that promiscuous and unorganized charity is productive of a multitude of evils. It encourages pauperism and lays the public open to all sorts of imposition. Mere personal, indiscriminate charity costs more and accomplishes less than organized charity, of which institutional care is one type.

There are two ways in which the public may organize its relief work, either as a part of the governmental machinery, or as a private or semi-public society. In our larger cities, and in some of the counties, the private associated charities are caring for some of the aged and infirm. But, again, let it be emphasized that though these societies are private organizations, still the expense is finally borne by the people as a whole; so that there is no rivalry, but rather cooperation, between these agencies and the administrators of public poor relief. The work is divided in various ways, as may be seen in the chapter on county out-relief. But whatever may be the line of division in cases relieved in their own homes, it is generally agreed that persons who have not proper homes and who must be cared for in institutions should be supported by taxation. This is simply a matter of expediency and convenience. It is not an academic theory, but the result of practical experience. These, then, are the reasons for urging the public to give our county hospitals the backing necessary to make them thoroughly efficient in meeting these common needs of our communities.



## GENERAL CONDITIONS.

*Financial system.* From the preceding tabulation it may be seen that the hospitals of eight counties are financed in direct violation of subdivision 7, section 4041, Political Code, inasmuch as the care of patients is let by contract. Pay patients are received in thirty-four county hospitals at rates varying from \$10 per month to \$2 per day.

*Staff.* As a general thing there is a resident superintendent or steward and a non-resident physician. In fifteen counties the superintendent and physician is one and the same person, though in only five of these cases does he actually reside at or devote his whole time to the hospital. The average salary paid to county physicians is \$104, to superintendents \$100. Eighteen hospitals have no trained nurses. In one county the sole employee, aside from the physician who visits on call, is at once steward, nurse, cook and farmer.

*Physical equipment.* The average age of the county hospital buildings of California is twenty-two years. They represent many types of architecture, from old-fashioned farmhouses to modern hospital structures. The arrangement may be classed roughly as convenient in 33 and unsatisfactory in 29. Fire protection varies from none at all in 8 hospitals, inadequate protection in 13, and fairly good protection in 36, to 4 which are practically fireproof.

*Sanitation.* As to sewage disposal, 18 have connections with city sewer systems, 17 have septic tanks, 8 have cesspools, 8 run the sewage into a ditch or creek, 6 have private sewer systems, and 4 have no system at all. In forty-eight institutions the toilets are clean and in good repair. In fourteen considerable improvement should be made. Ten hospitals have the abominable outdoor privies. Bathing facilities are fairly satisfactory in 48 hospitals, but inadequate in 10, and dirty or out of repair in 5. Only 9 make use of shower baths. The general cleanliness has been rated as good in 21; fairly good in 30; good as conditions permit in 9, and poor in 2. Nearly all the hospitals are lighted by electricity; 5 use gas, 8 depend on lamps or candles. Steam heating is to be found in 24; hot water in 3; hot air in 4; stoves in 40. Ventilation was found to be reasonably good in 46 but poor in 16, chiefly because there is no provision for artificial circulation and because the windows are not kept open.

*Meals, beds and clothing.* In most of these institutions the inmates receive three meals a day, but in eleven they have "two and lunch," and in seven only two meals. Supplies are contracted monthly, semi-annually or annually, in forty-five counties, and bought in the open market in eleven. Most of the beds are ordinary iron frames, though a considerable number of institutions use iron hospital beds and there

are a very few wooden beds and cots. Mattresses are commonly "cotton top and bottom" with excelsior center. Some are filled with cotton, some with excelsior, some with moss, a few with hair, and a number with straw. In general they are in good condition. In most hospitals the beds are made with two sheets each, but 5 use only one sheet and 12 have no sheets at all. Cleanliness of bedding has been rated good in 32; fairly good in 14; fair in 16; and poor in 2. Only 9 hospitals provide lockers for the patients' clothing. Many wards are disfigured and rendered unsanitary by old clothes hanging on the wall. Most hospitals have a laundry equipment very similar to that of the ordinary family; 5 have none at all; and only 19 have really good laundries.

*Special cases.* In twenty counties there is no special place for the isolation of contagious or infectious diseases; in twenty there is only a miserable shack, popularly known as a "pesthouse;" and there are only 6 good isolation wards in the county hospitals of the state. Insane patients or persons charged with insanity are kept in padded cells in 6 hospitals, in unpadded cells in 15, in a special building in 10, in the county jail in 6 cases, and 22 counties have no provision whatever for the detention of such persons. Tuberculosis patients are fairly well provided for in 23 hospitals; have very poor quarters in 13, and no place whatever in 24. In 16 county hospitals there is no *operating room*; 13 have only small equipment, and only 14 are really well equipped.

*Work.* In a few counties nearly all of the indigents do some work, in others none are employed. The stages between these two extremes are as numerous as the institutions themselves.

*Recreational facilities* are notoriously lacking, San Francisco alone providing anything like adequate recreation for the old people. The reading material usually consists of back numbers of magazines and papers and discarded books which are donated by benevolent citizens. Tobacco is furnished to the men in all the institutions. Liquor is reserved for medical purposes only, except by thirteen superintendents who offer it sporadically as an incentive to work.

*Farm.* The largest county farm is in San Joaquin County and consists of 480 acres. Eighteen institutions have less than 10 acres. The average acreage is 60. All but 16 hospitals keep some cows; 24 have no horses; 25 keep no pigs, and 18 have no poultry. Farm accounting is absent or at least unsatisfactory in all but nine counties.

*Omissions from tabulations.* It will be noted that the above tabulation does not include any statement of per capita cost of maintenance. The reason for the omission is the fact that bases of computing per capita cost in the different institutions vary so greatly that any com-

parative statement which might be made at this time would be very unjust and misleading. Very few systems of accounting in our hospitals are comparable at present, and nearly all are deficient with reference to articles produced by the farm.

Again, the ratio of employees to inmates has purposely been omitted, because it is impossible to compute the number of persons and the time devoted directly to the care of the patients. The varying sizes of the farms, the presence in some institutions of nurses' training classes, and the division of given persons' time between agricultural and medical services make such a computation out of the question for the present.

Statements as to the quality and quantity of food have been avoided, because the time has been too short to make a study of the sixty dietaries.

Nothing has been said about the natural lighting, because with minor exceptions it is satisfactory.

#### General Suggestions and Recommendations.

*Farms.* Many counties do not appreciate the importance to the hospital of a farm including garden, dairy and poultry. Either they have no farm at all—as in Ventura, Tulare, Yuba, and other counties—or else they do not develop it. Sometimes there is need of putting down wells or buying water for irrigation. Frequently there is an insufficient number of employees, and sometimes the superintendent of the hospital must be farmer as well. In addition to being a good financial proposition, a farm in connection with a county hospital has some other more important advantages; it may provide fresh eggs, milk, butter and vegetables for the table; it may provide a way for disposing of kitchen refuse; it may furnish employment to some of the inmates. In addition to these advantages, another is to be seen in Orange County, which is developing its farm by the use of prison labor. The prisoners are glad to work outdoors and they can do heavy work which is beyond the limited strength of the indigents. A valuable hint for the management of county farms may be taken from Marin County, which is availing itself of the assistance of advisors from the College of Agriculture of the University of California.

*Isolation or contagious wards.* It is unnecessary to tell people that smallpox, typhoid fever, diphtheria, venereal diseases, cancer and tuberculosis are communicable, but unfortunately it is necessary to point out that the health of the community, as well as the recovery of the afflicted, require decent accommodations in periods of such sickness. In some counties there is no isolation ward or building at all; in most counties there is a miserable shack planted out by the barn, in the cemetery, or some equally unsatisfactory location. It is almost always cheerless and devoid of the comforts and conveniences of ordi-



nary life, not to mention the needs of the sick. Usually there is no inside toilet, no bath, no running water, no kitchen, no quarters for a nurse. The average isolation building is more like the cabin on some deserted claim than a part of a county hospital. This should never be. The fact that their disease is communicable is no reason for dumping these patients into a dingy, rat-infested shack. In some counties the supervisors and health officers are misled by the fact that the isolation building is rarely used, jumping to the conclusion that therefore it is hardly necessary. Any one who has seen a few of these holes, does not need to be told why they are not used. There are a great many cases of contagious and infectious disease abroad which require more effectual isolation than is possible in the home or boarding house. But they avoid the isolation building, which they call a "pesthouse," as they would the jail, and in the eyes of the community confinement in one is as disgraceful as in the other. It is the duty of every county to provide a decent, comfortable, even attractive place or places for the care of people who are afflicted with contagious and infectious diseases. Then health officers can afford to be much more rigid than now in the enforcement of quarantine. The best cases of isolation wards in the main hospitals are in Los Angeles and San Diego counties. One of the best outside isolation wards is in Stanislaus County. San Francisco has a separate isolation hospital. Among the best tuberculosis buildings are those in San Joaquin, San Francisco, Alameda, and Santa Clara counties.

*Ventilation.* Most county hospitals have plenty of windows to provide all the fresh air that is needed, but there are practically no systems of artificial ventilation and the windows are frequently closed. There are two solutions of the bad air problem—one is to install some system of ventilation which is outside the control of the patients; the other is to have some employee make frequent rounds to open the windows. The former is the better of the two and may consist of almost anything, from nailing the windows open to an elaborate system of ventilating flues and fans.

*Cleanliness.* Strange as it may seem, it is sometimes necessary to insist that cobwebs, dusty floors, dirty windows, soiled bedding, foul air, filthy toilets and unscrubbed bathtubs are not inevitable concomitants of institution life. If the superintendents whose hospitals are marked "fair," "unsatisfactory" or "dirty" would take it upon themselves to visit San Joaquin, Santa Clara, Riverside, Tehama, or other county hospitals which are labelled "clean," "good" or "excellent," they would discover for themselves that a high degree of cleanliness is possible even in frame buildings which are not new.

*The fly problem.* Most institutions are exerting themselves fairly well in the effort to keep flies out, but most of them fail to prevent flies

from breeding. Screens, flytraps and tanglefoot abound, but unfortunately so do manure piles, uncovered garbage cans, foul barns and improper sewage disposal. Dairy barns must be kept clean and sweet and at a proper distance from the hospital buildings or the flies can never be kept out. The same is true of pigpens and poultry yards.

*Fire protection.* Since many of the buildings are two-story frame structures this is a very important item. First of all, the area where smoking is permitted should be carefully restricted. Refuse should never be allowed to collect in or about the buildings. A good water pressure with fire plugs and hose ready for instant use are indispensable. In addition, a few chemical extinguishers are valuable safeguards. All wooden buildings more than one story high should have steel fire escapes with an angle of descent that will make them practicable for old people.

*Care of clothing.* Clothing should never be hung on the walls of a ward or room. The most satisfactory provision for clothes is the system of individual lockers in the Marin County Infirmary. Lockers should be ventilated and locked, and should be in the room in which patients sleep. For extra clothing there should be individual boxes, pigeonholes or drawers in a separate clothes room. Clothing sent to the laundry should be marked. The name of the patient, the number of his ward and bed or his admission number may be used for this purpose.

*Records.* In the classification of patients, each should be counted under one and one only of the following three heads: hospital pay, hospital charity, custodial. Many of the custodial patients require medical attention, but if the hospital is their home, rather than a place for temporary treatment of some specific ailment, this fact determines the class in which they should be counted. In addition to the register required by law, there are numerous other items which really ought to be kept. Marital relation and financial arrangements are perhaps the most important. These may be kept on cards, loose-leaf, or in a second book. Many of our hospitals do not keep sufficient records of farm produce raised or consumed. Los Angeles and San Joaquin have fairly complete systems of farm accounting which might well be studied by other counties.

*How the inmates spend the day.* In the majority of county hospitals the custodial patients spend most of the day loafing in their wards or rooms. Their well known aversion to fresh air, together with constant smoking, prevent proper ventilation. They lie on the beds part of the time and keep them mussed and dirty. Sometimes they smoke in bed and set fire to the house. The floors in such wards are usually dirty and all sorts of "junk" accumulates under the beds, in corners, and on the walls. Hence, for sanitary reasons, for protection against fire, ultimately for the comfort of the patients themselves, the wards should be closed



during the day and other places provided for work and recreation. A sitting room and porch should always be provided. In this room there should be a small library, reading and game tables and cuspidors. The walls should be decorated and the room kept neat and cheery. A phonograph will help to pass away many a weary hour and will be more valuable than a policeman in maintaining good discipline. Every man who is able to get about should have some task suited to his ability. This should be insisted upon by the superintendent and physician if necessary, but can usually be brought about by friendly persuasion. The economic result of all such work will perhaps be no greater than that of the one man who directs it, but it will prove an invaluable means of maintaining order and self-respect. If the old men can be made to feel that they are of some use, they will be happier and the superintendent's task will eventually be lightened instead of increased. The employment of custodial patients is to be seen at its best in San Joaquin, Trinity and San Francisco counties.

#### **Pay Patients.**

In June, 1914, letters were sent to all the superintendents and county physicians, asking their opinion, with reasons therefor, as to receiving pay patients in county hospitals. Of the twenty-eight superintendents who responded definitely on one side or the other, eighteen were opposed to pay patients and ten favored them, usually with certain qualifications. Among the physicians the feeling ran the other way, the vote being 13 to 7 in favor of pay patients.

The reasons urged against the scheme were as follows: (1) pay patients require more extra care than they pay for and hence are a financial burden to the county; this is specially true when some of them evade payment. In some counties the hospital equipment is so poor that officials have not the hardihood to charge for the accommodations. There is a feeling in these cases that the expense of equipping and maintaining a pay department would be too great; (2) the practice constitutes unfair competition with private hospitals, which have a precarious existence at best in small towns; (3) it tends to induce people to turn over their dependents to the county for a small consideration, thus shirking their proper responsibility; (4) it encourages persons who can afford private hospital care to make use of the county institution; (5) within the institution, it tempts the staff to neglect the indigent and gives rise to ill feeling and charges of favoritism. This is the most potent argument against pay patients and it is a very real one, for in most county hospitals it is impossible to segregate pay patients from charity patients.

The following extracts from letters state these objections more concretely:

I believe it unwise for the county hospital to receive pay patients as they expect more in return for their pay than they are entitled to, and I believe they will impose on the county by coming here when they can afford to go to private hospitals.

I believe the system is unwise. It leads to irregularities in the house and visiting staff, and then patients who pay usually expect and demand more than they have paid for.

As it is at the present, we have great trouble in controlling some of our old indigents; if we put pay patients with them there will be a constant cry of favoritism and ill feelings among the inmates, and there will be great difficulty in managing them. We have in the past taken a few pay patients and they have been a constant source of discord from the moment they arrived in the hospital.

I am very much opposed to keeping pay patients in a county hospital because you can not give them the care they would expect without having trouble with the other patients wanting the same care, and the majority of county farms are not so arranged as to keep such patients.

The hospital is not properly arranged for pay patients but we do receive a few pay patients, but it is impossible to have them away from the charitable patients.

On the other hand, it is argued:

(1) That pay patients are not a burden upon the county if properly handled, for in many cases it is necessary to accept the little they can pay or else care for them free of charge. It is admitted, however, that to make the plan a success there must be adequate investigation of each case.

(2) There are many people who are not paupers in any sense, yet are unable to pay the rates charged by private hospitals. To admit them to the county hospital for a nominal sum gives them such care as they need and also avoids the stigma of pauperism. However, in the interests of the discipline of the institution they should receive exactly the same care as charity patients. The *care* should be based on the *need* of the individual, the *charge* on his *ability to pay*.

(3) If there is a training class for nurses, this plan increases the variety of experience which they may have.

The following excerpts state this side of the case very clearly:

While the system of pay patients subjects the management to a certain amount of trouble and annoyance because there can be no fixed rate, the charges must be made to fit each individual case from a minimum to a maximum charge; this takes the time of some one and to avoid error, dissatisfaction and confusion it usually falls upon the superintendent, at least for final decision. I believe that when patients are charged, an investigator or social service worker should be employed to investigate all doubtful cases. We are employing such method at this institution and we find it quite necessary. The fact is that most cases that contribute something toward the hospital expense would have to be taken care of by the county anyhow, as they do not have sufficient means to pay other hospitals and for medical care in addition.

I am in favor of allowing people of moderate means to have this benefit of paying a reasonable fee whereby they would not feel that they were indigents. It should be impressed upon them, however, that they receive the same care, food and attention generally as all other patients.

In my belief, it would be a good idea for this reason—many of the working class who are without sufficient means to be cared for in other hospitals would go to a county hospital if they could be cared for at a moderate rate. As it is now they will not go for they feel they are real paupers, consequently they stay away and are neglected.

Private hospitals are carried on almost solely on a commercial basis, rates are high and can only be paid with any degree of comfort by the very well-to-do. The result is no hospital provision except for this class and the paupers or near-paupers. The great middle class, so to speak, must either be overcharged or pauperized.

With the proper facilities for handling private patients in the way of private or semi-private rooms or wards and with the guarantee that such rooms or wards will not be used by politicians for their friends to the exclusion of those people for whom such service is intended, I am heartily in favor of pay patients in the county hospitals. There are many people whose pride and self-respect forbid them the benefits of the present county institutions who would gladly pay a reasonable fee for hospital service. Modern hospital treatment has become so expensive that the ordinary working man can not afford to pay for it. The best service is therefore given only to the well-to-do and the extreme poor. Good service to the working classes shortens convalescence and reduces the death rate and consequently is of great economic value to the community.

A private hospital in a small place like this (Susanville) is a losing proposition even with the most careful management, as it is necessary to keep nurses and hired help on hand constantly whether there is business enough to justify it or not. We have tried it here unsuccessfully. At the same time there must be some place for strangers or those residing far from town to be taken in and cared for and some place where we can take an emergency case for operation, etc.

Whatever may be the resulting opinion concerning pay patients in county hospitals, it is difficult to escape the conviction that there must be a thorough system of investigation of all applicants for admission and impartial treatment of all inmates of county hospitals.

### COUNTY OUT-RELIEF.

Previous chapters of this section have presented the facts of institutional relief of the several counties. In most of the California counties, however, there is a system of public relief of the needy in their homes in addition to the institutional work. This aid to the needy outside of the county hospital or almshouse is what we mean by out-relief. The matter of public out-relief in the counties of California is one which, so far as this Board is aware, has never been carefully studied by any public or private agency. For this reason, the State Board of Charities and Corrections has during the past year started what is expected to develop into a state-wide survey of the public out-relief system.

The initial investigation into the county out-relief systems has been confined to a brief study of the methods of its administration in the counties of Contra Costa, Marin, Napa, Santa Clara, San Joaquin, San Mateo, Solano, and Yolo. A more detailed study of the subject has been made in four counties of the state—Alameda, Los Angeles, Sacramento and San Francisco. Brief statements regarding these are embodied in this report. It is planned at a later date to issue a bulletin which will include a detailed account of these surveys. In addition to



these individual county investigations, this Board has collected statistics regarding the amount expended for out-relief from most of the counties of the state.

Following is a brief description of the present status of public relief in the counties already investigated:

### **The Administration of Public Out-Relief.**

#### **Legal Sanction.**

Authority to administer public relief to the poor in their homes is given to the boards of county supervisors under section 4041 of the Political Code, amended by section 29*a*, chapter 329, Statutes 1913, which reads as follows:

The boards of supervisors in their respective counties shall have jurisdiction and power \* \* \* to provide for the care and maintenance of the indigent sick or dependent poor of the county and for such purposes to levy the necessary property or poll taxes or both.

The only other legislation bearing on the administration of out-relief is that of section 7 of the above act which forbids the care of the poor to be let out by contract to any person and that contained in chapter 636, Statutes 1901, which requires a legal residence of three months in the county before the individual is entitled to public relief. Since there are no specific statutes bearing on the detail of charity administration, each county has provided its own methods of doing this work and the out-relief systems of the several counties are therefore quite different.

#### **The Two Divisions of Outdoor Relief.**

Outdoor relief in California separates itself into two divisions which are based on the classes aided. These two divisions are (1) Adult Relief, and (2) Relief to Children. The distinction is important, inasmuch as some counties grant relief only to the latter class while other counties aid both. Furthermore, the methods of administering the two classes of relief differ. It becomes necessary, therefore, to describe the system of public charities under the two divisions mentioned above.

1. *Adult out-relief.* Adult relief is granted in all of the counties studied save two—San Francisco and Solano. In these latter counties the only form of county aid is that given to children. In San Francisco, however, there is available for relief purposes the money from two private bequests. This money, while not public money, is administered through the mayor's office and to this extent assumes a character of public relief.

The adult relief throughout most of the counties studied is in the form of a regular monthly allowance, either in groceries or in cash to the individuals whose names are on what is usually termed the "county indigent list." As this list is made up for the most part of old or disabled persons or both, who continue on it indefinitely, the relief is really a kind of old age pension.

The usual manner of making up the indigent list and the method of granting relief are about as follows: Application is made to the supervisors for assistance and the application is referred to the supervisor in whose district the applicant resides. It is customary to follow the recommendation of this supervisor, who may or may not investigate the application. If the aid is granted, the name is placed on the county list for a definite allowance each month, the name being continued on the list for a year, at the end of which time a new application must be made. The counties which follow the above described procedure are Marin, San Mateo, Napa, Yolo. It should be said that a slight modification of this plan is in effect in Napa County, where a committee consisting of two ministers is empowered to investigate all applications for relief in two supervisorial districts. The remainder of the county, however, is under the system above described.

Relief as thus administered is very unsatisfactory because of the fact that the investigation is inadequate and the cases are without supervision or any semblance of reconstructive work.

Modifications of the above method exist in the counties of Alameda, Contra Costa, Los Angeles, Santa Clara, San Joaquin and Sacramento. In all these counties, investigating agents have been appointed to handle the cases. In Alameda, Santa Clara, San Joaquin and Sacramento the cases are handled through the office of the Associated Charities. In Alameda and Santa Clara counties the Associated Charities is a regular private relief society which has assumed the added responsibility of the county relief work. In San Joaquin and Sacramento counties the Associated Charities is simply a public office for the administration of relief. In Los Angeles County a county charities office is maintained which handles all county cases, while in Contra Costa County these cases are subject to the investigation of the probation officer.

The character and amount of relief given varies. In Alameda, Santa Clara and Los Angeles counties, it is almost always in kind and rarely in cash. In the remainder of the counties, it may be either in cash or in kind. The amounts allowed range from \$5 to \$30 per month. In San Mateo County the amount given is always \$8 per month, either in cash or in groceries. Alameda and Santa Clara have attempted to set a standard of \$5 per month for one person or \$10 per month for two, but these rates are not rigidly adhered to. Contra Costa grants from \$15 to \$20 per month.

In all of the counties studied provision has been made for medical care of the needy sick in their own homes. This is done through the services of the county physician, who may be called upon in certain cases. In Alameda County the medical relief is especially well organized, the services of several clinics being devoted to this form of work.



2. *Relief to Children.* In all of the counties thus far investigated, county out-relief is given to children. In California children's relief assumes two forms, (1) that of court orders for children ineligible for state aid, and (2) state aid, or relief under the provisions of chapter 323 of the Statutes of 1913. This includes the so-called "widows' pensions." Of the children who receive county or state aid, some remain with their mothers, some are placed in other homes, and some are transferred to institutions.

(1) The usual procedure of granting relief in the cases of children who for some reason are ineligible for state aid is nearly the same as that described above in the case of the adults. Applications are made to the supervisors and these are investigated by the same agents as in the case of adult relief, except in Sacramento county, where the children's cases are handled by the deputy probation officer. The usual grant in children's cases of this type is \$11 per month in kind.

In Alameda County, however, neglected children, as under the present juvenile court law cases of this class are called, are handled through the Juvenile Court and the Associated Charities of Oakland, the Charity Organization Society of Berkeley or the Catholic Ladies' Aid Society. To secure county orders, which are always for cash, the child is taken into the court, declared neglected after investigation by one of the agents above named, and committed by the court to the agency which investigates the case on a county payment order, usually of \$11 per month. San Francisco County handles the neglected child in the same manner and commits to any one of three agencies which then makes all plans for the future of the child. Commitment may also be made to institutions. The study of institutional care, however, is not within the scope of this investigation. In Los Angeles County also it is necessary to procure a court order for the payment of county aid for children, the case being taken into the juvenile court and handled by the probation officer. Payment of the amount allowed by the court is made through the county charities office.

(2) The second type of children's aid is that authorized by the state under the provisions of chapter 323, Statutes 1913. It is available for needy orphans, half orphans and abandoned children under the age of 14 years who meet certain requirements of the law. The method of administering this "pension" is somewhat uniform in most of the counties of the state. The procedure is very similar to that of administering adult relief. Application is made to the supervisors upon blanks furnished by the State Board of Control. This application is turned over to the same investigating agents as are the other relief applications. The state will grant to accepted cases \$100 per annum for full orphans and \$75 per annum for half-orphans or abandoned children, and under the law, the county may grant an equal amount in

addition. This is paid in cash in the twelve counties studied, with the exception of Santa Clara and Los Angeles, where it is paid in kind. The checks are sent out monthly by the county auditors. The counties at the present time are paying the entire cost of the "pension" and collecting back the state's share. All children placed with their own mothers, as well as those in institutions, who are receiving state aid, are visited frequently by the children's agents of the State Board of Control, and no state aid is granted unless every provision of the law is complied with.

San Francisco County has established a "Widows' Pension Bureau," which handles only the half-orphan cases, all others being transferred to the juvenile court. Social service workers and a trained nurse are employed by the Bureau and every mother on the pension list is visited regularly. In this way, the San Francisco office is doing a great deal of constructive family work.

Alameda County handles the grant of state aid through a specially appointed agent, and like San Francisco maintains a very close supervision of the cases. In Los Angeles County the state aid to children is distributed through the County Charities Office, which undertakes to do the work of investigation and supervision.

#### **Cost of Out-Relief.**

The expenditures of the California counties for outside relief to indigents during the past fiscal year aggregate about \$600,000. No statistics showing the number of cases relieved are available for the state as a whole.

From the investigations of the public out-relief methods of California thus far made by this Board, there would seem to be no doubt that some revision of this work is necessary in most of the counties. Six of the counties studied have some form of organization whose special function it is to administer county relief. In the other counties, however, there is no such organization and as a result, the relief work of these counties is far below an acceptable standard. There is no economic waste greater than the waste of inadequate relief.

#### **Alameda County.**

County charity in Alameda County is administered chiefly through the office of the Oakland Associated Charities and the Berkeley Charity Organization Society. Both of these societies are private relief agencies and the county work which they handle is simply an additional amount of relief work which they have assumed for the community. The Oakland society, however, is the only official and salaried agent of the county. Initially, all county relief applicants were referred to this society for investigation, but as the applicants increased in number an arrangement was made whereby those applicants residing in Berkeley

and Albany should be handled by the Berkeley agency. For its work, the latter society receives no compensation. One other society has also been authorized to do some of the county out-relief work. This is the Catholic Ladies' Aid Society which has power to investigate and recommend aid in emergency cases. Neglected children are also committed to this agency for supervision and placing by order of the juvenile court.

The relief of adults in Alameda County assumes two chief forms—that of temporary or emergency relief and that of permanent or indigent aid. Emergency aid is either material aid, such as groceries or supplies or medical aid. No cash is granted by the county. Indigent aid is that which is sent to those who are on the regular indigent list and who receive a monthly county grocery order.

Children's aid is either that of state aid, supplemented by county aid in those cases which are eligible or of county aid in those cases which are ineligible for state aid. In the case of neglected children, the practice has arisen in this county of committing neglected children to either the Oakland or the Berkeley society, or the Catholic Ladies' Aid. These societies then assume the responsibility for the future care of the children until the expiration of the court order.

All county cases which pass through the Oakland or Berkeley office are thus dealt with on charity organization society principles. They are carefully investigated and supervised and much constructive work is accomplished by reason of this arrangement.

A study of the county records shows that a total of 1,833 cases were aided during the past year. These cases are divided about as follows:

Emergency -----	1,316 cases
Indigent -----	270 cases
State aid -----	159 cases
Children's -----	88 cases

The county books show a total relief expenditure of \$84,754.11, excluding the cost of administration. This amount segregated as follows:

Material relief -----	\$45,653 22
Cash (half-orphan and court order cases) -----	27,630 53
Medical relief -----	11,510 36

#### Los Angeles County.

The Los Angeles County Efficiency Bureau felt impelled to make a study of the county charities system at about at the same time this Board was conducting a series of studies of county out-relief. On learning of the activities of the state board in that field, the chairman of the Efficiency Bureau requested that the investigation of the Los Angeles County out-relief be made jointly and as a result an intensive study



of the work of the county charities office for the fiscal year ending June 30, 1914, especially of office methods and policies, was made.

Los Angeles is one of the few counties of the state which has established a county charities office on a scale more nearly approaching modern private relief agencies. The administration of county relief, both outdoor and institutional, is under the supervision of the superintendent of charities. The actual office management is in the hands of the inspector of charities, who has two office assistants and five investigators. The organization also includes a social worker at the county hospital.

It is the policy of the Charities Office to care for the cases requiring aid of a more permanent nature, referring emergency cases to private relief agencies, but during the past year the office has been forced to give more emergency assistance than formerly, owing to the temporary closing and reorganization of the private relief societies. Applicants for assistance must have been residents of the county for one year to be eligible for county aid. This rule is rather rigidly enforced except in cases of women with children who are in absolutely destitute circumstances. Relief is given only in kind, for all types of cases, including those receiving state aid. Cash is occasionally paid when the indigent needs other things than may be procured by the grocer. In such instances the grocery order is increased to cover the amount of cash granted and the grocer advances the money to the applicant. Cash is never given directly to an applicant except in rare emergency cases requiring immediate relief. As the County Charities Office handles no funds, the inspector advances this amount out of his own pocket and presents his claim for same at the end of the month. Indigents of the infirm or old-age type are cared for at the County Farm rather than on the outside, and a year's residence in the county is one of the requirements for admission. The state aid cases are given a rather more rigid investigation than the other types, and the county rarely supplements the amount allowed by the state.

A total of 1,908 cases were handled by the County Charities Office during the fiscal year studied. Of this number, 964 were given aid, 738 received no aid, and 206 were given some measure of service, involving, however, no financial assistance. This service was the referring of applicants to other societies, securing charity transportation rates, etc. The aided cases are classified as follows:

General relief cases.....	518
State aid cases .....	94
Transportation .....	102
County farm .....	195
County hospital .....	13
Ambulance .....	18
Burials .....	9
Miscellaneous .....	15

Of the 964 aided cases only those listed as general relief, state aid, transportation and miscellaneous represent the expenditure of funds by the County Charities Office. County farm, county hospital, ambulance and burials represent permits and service secured and state aid cases can properly be regarded as county cases in the matter of supervision only, as all but a few hundred dollars (\$467.53) of a total of \$13,248.73 advanced by the county was collected from the state.

The net amount disbursed for aid by the County Charities Office during the fiscal year was \$72,907.48. Of this amount \$29,280.40 represents board and care of children under the care of the Juvenile Court and in institutions. These cases are not included in the 1,908 cases studied, as they are not handled in the office in the sense of entailing any service, and they appear in the records in almost every instance only for monthly payments of board in compliance with court orders. Deduct, then, the item of \$29,280.40 from the total cost of relief, \$72,907.48, and balance, \$53,627.08, represents the aid given to the cases in the foregoing table of aided cases. The average amount per case for the fiscal year is something over \$80, which indicates that the purpose of relief given is palliative rather than constructive. The amount of assistance varies at the discretion of the inspector. From a study of the case records, it would appear that in many instances this relief is inadequate. In its anxiety to protect the county funds the charities office adopts the short-sighted policy of doling out just enough aid to preserve the applicant from absolute destitution, and no real work of family rehabilitation is done. This is possibly due to a long-standing policy for which the tradition of county aid and not this office particularly is responsible, but there is none the less here, as throughout the state, an expenditure of a large sum of money which brings no real return.

#### Sacramento County.

Public outdoor relief in Sacramento County is administered through the offices of the Associated Charities of Sacramento County, and through the juvenile court. It should be said, however, that there is no Associated Charities in Sacramento County in the sense in which that term is commonly used and by which is implied a private relief society. The Associated Charities is simply the county's investigating agent, who dispenses relief out of public funds and who has the title "Registrar of Charities."

The appointment of the county investigating agent dates back to January 8, 1907. Prior to that time outdoor relief was given directly by supervisors. The applications for aid, however, increased in number to such an extent that the supervisors were no longer able to in-



investigate each applicant and it became necessary to appoint an agent for this work.

The administration of all adult relief has thus been given over to the investigating agent. Adults are aided by means of county orders for groceries, merchandise, medicines and medical supplies, rents, transportation and occasionally by grants of cash. These orders vary in amount, depending upon the need as determined by the county agent. The bulk of the county cases are of the emergency type which receive county aid for a short period only. Only 13 cases are receiving permanent county aid at the time of this investigation.

Children's cases are relieved by the investigating agent working in conjunction with the juvenile court. All state aid cases are investigated and reported upon by the county agent. It is the policy of the county, however, not to supplement state aid except in a few instances. Where, however, it is desired to supplement state aid by county aid, it is necessary to secure a court order through the juvenile court in the same way as is done in cases of children who are ineligible for state aid. Only twelve children receiving state aid are receiving supplementary county relief. Those cases ineligible for state aid are assisted usually by means of court orders made by the judge of the juvenile court upon recommendation of the probation officers. The practice is to keep all court order cases under the supervision of the probation office rather than to place these with an intermediary agency, as is done in Alameda and San Francisco counties. At the time of this investigation there was a total of 92 cases under court orders. These cases were drawing regular monthly allowances in amounts from \$4 to \$11.

The investigation into the methods and technique of relief administration of the county agent showed these to be very crude and below the modern standard which should be maintained in this work. The investigator was able to find evidence of very little constructive social work or of any definite social policy in the administration of the county relief funds. From a study of the year's cases it would seem that a great deal of "passing on" is practiced in this county. Transportation cases for the year numbered 129 out of a total of approximately 500 cases. In only a small number of these cases was there evidence of careful investigation prior to granting transportation. The office methods and case records are unsatisfactory. Case records are entered in a ledger together with each item of relief. These records are very meager and do not give any adequate history of the case or its treatment.

The records of the Charity Office show that 520 cases were aided during the year ending June 30, 1914. The county auditor's books

show that a total of \$10,130.33 was spent for this relief, and that the money was divided among the following items:

Groceries and meats	\$3.197 77
Clothing	182 49
Drugs and supplies	293 77
Burials	2,714 45
Rent	1,529 50
Transportation	1,250 00
Miscellaneous supplies	962 35
	<hr/>
	\$10,130 33

In addition to the above expenditures, the amount of \$18,075.48 was spent in the care of children, which includes the cost of all court orders for the year. Temporary aid granted to the "army of the unemployed" amounted to \$585.35, thus bringing the total county expenditures for out-relief up to the sum of \$28,791.16.

#### San Francisco County.

San Francisco County has adopted the policy of granting no outdoor relief to adults. As a result of this policy, the relief of the needy in their homes in San Francisco falls upon private relief societies. The county does, however, provide relief for children and thus an investigation of public out-relief in the county is confined to children's relief. Children are relieved out of county funds either through the "Widows' Pension Bureau" or through the juvenile court. The Widows' Pension Bureau has been established to handle cases of half-orphans in which the father is dead and where the child is eligible under the law for state aid. All other children's cases of the county are handled through the juvenile court.

The Widows' Pension Bureau deals only with half-orphans under the age of 14 years. The cases are investigated by the agents of this bureau, which has in addition to its secretary, two investigators and a social service worker, who is a trained nurse. When careful investigation has been made, recommendation for aid is made to the supervisors. This recommendation is made upon the following basis so that it will be just in all cases: Ten dollars per capita per month has been set as a minimum amount upon which the family to be aided can maintain itself. This sum per capita multiplied by the number of members in the family is the minimum necessary to keep the family for one month; from this amount is subtracted any net income that is derived by reason of the work of any member of the family. The difference between this amount and the minimum amount set for the monthly maintenance is the sum to be made up by the state and county.

After the investigation the cases are turned over to the Children's Agency, the Catholic Humane Bureau, or the Eureka Benevolent Society, who do the work of distributing the monthly check and exercise

a general supervision over the cases. All cases are reinvestigated once every three months.

When a mother is placed on the pension list she is visited regularly by a member of the bureau, who is also a trained nurse. The city has been districted by the office and a visitor going through the district has a list of all private relief and charitable agencies in the district. In this way the bureau works very closely with the Associated Charities, the Tuberculosis Clinic and similar agencies, and does a great deal of constructive family social work.

For the fiscal year ending June 30, 1914, the county appropriated \$107,000 for the cases coming under the Widows' Pension Bureau. Of the amount expended for this form of relief approximately 60 per cent was refunded by the state.

Those children who are eligible for state aid, but who are not relieved by the Widows' Pension Bureau, are aided by the county and state through the juvenile court. These classes are three, namely, needy orphans, abandoned children, and half-orphans whose mothers are dead. The method of administering relief through the juvenile court is as follows: Upon investigation by the court officer, the needy child is declared neglected under the provisions of the juvenile court law and committed to an institution or to one of the three children's agencies mentioned above. In event of commitment to an institution, the county and state aid is paid to the institution authorities by the county treasurer. The child once committed passes out of the court's jurisdiction. The agency receiving the child is then responsible for placing it in a home. The investigation of the home is carried on by the agency and the money for the child's support is paid by the county to the court, which in turn pays it to the agency. For 1914 the supervisors passed an appropriation of \$178,000 for the maintenance of needy minors who pass through the juvenile court.

The foregoing report, while it has been merely a preliminary and meagre description of the methods in vogue in the twelve counties already studied, has served to show that there is real need of revision of methods in this department of county charities. When the survey now being made shall have been completed it is anticipated that the board will have at its command sufficient detailed information to warrant it in undertaking the reorganization of some of this work.

Plans are now under consideration by this board whereby the more specific facts concerning county charities will be compiled and issued in bulletin form in the not distant future.



## RECORDS.

In conclusion, the State Board of Charities and Corrections wishes to lay special emphasis upon the importance of keeping *full and accurate records* of inmates, expenses, products and certain other phases of these institutions. It is true that this will mean increasing the duties of some officials already heavily burdened. But the burden will not be increased so greatly as to offset the advantages to be derived from such records.

First of all, it is a *protection to the head of an institution or charities office* to be able to show in detail the disposition of each person in his care and keeping, the costs of maintaining his institution, and, in case there is a farm or some industry connected with it, the products of that farm or industry. These records are a guarantee of his honesty and a test of his efficiency. In order to defend himself, the jailer or hospital superintendent should keep another record. This should show the time and occasion of each case in which a prisoner or patient has had to be disciplined, together with the offender's name and any persons who witnessed either the offense or the punishment.

The second reason for keeping full and accurate records is that the sheriff, jailer, county physician, hospital superintendent and relief official are *public servants* and as such should be ready at proper intervals to *give an account* of their stewardship. The tax payers have a right to know where their money is going and what it is accomplishing.

The public, as well as the official, is interesting itself more and more in practical *tests of efficiency*, such as can be made by means of adequate records and *comparative studies*. They will decide in an impartial manner questions as to a man's ability and fitness to hold his position. They will make it possible to put county institutions on a business basis.

The records of each county hospital and jail should be sufficiently complete and accurate to form the basis for answering the following significant questions: *Is the cost of maintenance higher than it should be*, or is it too low for good service? A comparison of carefully computed per capitas, for different types of inmates and different expenses, is one part of the solution. The other is a study of the quality of articles used and help employed. *In what respects is the management failing to exercise proper economy?* For example, it is more than likely that some counties are paying too much for the feeding of their prisoners, while others are not paying enough. A record of food supplies used and their costs would make possible a fair and impartial judgment. As it is, we are compelled to do a certain amount of guessing. Again, it may appear that certain counties are paying too much for blankets, while others are buying so cheaply as to preclude the pos-

sibility of securing blankets that are durable. *How can the farm be made more profitable?* A Babcock milk test and a record of milk given will discover cows which are not paying for their keep. A balancing of feed and labor against eggs and chickens killed for the table will betray the unprofitable poultry yard. *Where are the inmates coming from and why are they there?* From records such as these questions suggest, the people of any county can find out how many nonresidents they are supporting in their hospital or jail or by out-relief. They can also learn some of the causes of poverty and crime and thereby take intelligent steps to prevent these evils in their community. *What becomes of persons who are passed out of our county institutions?* Such records as this question implies would refute or prove the charges sometimes made that men have been thrown into jail and later released without ever appearing in court. They would also show the number of persons cured in the hospitals, those who die there, those whose care is assumed by relatives, and those who leave for some trivial or arbitrary reason. The above are questions which any citizen has a right to ask, and to which every citizen ought to demand an answer. But at present the records are so inadequate as to make it impossible to answer them with accuracy. This is why we cannot publish statistical tables on the county institutions of the state with a guarantee of correctness, nor can we always answer with assurance the question frequently asked by hospital superintendents, jailers and relief officials: "What is the next step"?

The state law requires county hospitals and jails to keep records of inmates in books prescribed by the State Board of Charities and Corrections (Chap. 338, Stats. 1913). The board has prepared a record form, but many of these registers are so kept as to furnish doubtful information. Only nine counties have any real system of farm accounting. Not a few superintendents and sheriffs are unable to state what it is costing to maintain their institutions. True, these financial records are kept somewhere, but too often they are scattered through a number of different offices, and their compilation into a single statement is a matter of some difficulty.

One trouble which may seem rather petty, but which nevertheless vitiates many reports, is incorrect numerical calculation. The making of mistakes is not so serious as the failure to check over all computations in order to discover and correct the mistakes. This should always be done. The use of an adding machine and various checks in this office locate a good many errors, but unfortunately most of the additions which come to us are preceded by other additions which do not appear in the report blanks and whose correctness is sometimes open to suspicion. A large number of the reports that are sent in by county institutions to the Board have to be sent back for correction and doubtless many errors escape unnoticed.



The following is an extreme case, but a genuine one, and the difficulties involved are so typical that it is worth citing. Mr. ——— is at the head of one of the public institutions in a large and prosperous county. In his record of inmates it appears that there were 154 on July 1, 1913. During July it reports 14 received and 23 passed out, with 150 remaining on hand the first of August. During August 21 were received, 12 passed out, and 166 remained in the institution. In December his day book shows 13 passed out, while his monthly report accounts for only 4. At the close of the fiscal year his books failed to account for 22 inmates. The following letter from this same man may give a further clue to the situation:

"State of California

Board of Charities and Corrections

in regards to your Leter about your Report i Dont No Nothing about it for i sent it to you and you said you sent it back to me for correcting and i Never Received it and i dont no What to due about it yours Truly"

In the interests of the sheriffs, jailers, superintendents, physicians and stewards, in the interests of the people who pay the bills, and in the interests of the unfortunates who must be cared for, the State Board of Charities and Corrections asks the cooperation of all concerned in establishing and keeping a complete and accurate set of records in every county jail and county hospital, and of all other charitable and correctional work carried on by each county.

## CHILD WELFARE WORK.

### STANDARDS FOR CHILDREN'S INSTITUTIONS.

The regulating of home-finding societies, boarding homes for children and maternity hospitals is a new work in this state. Hence it has been found advisable to proceed experimentally, gradually working out standards for these institutions rather than setting hard and fast rules for their government. More experience and a larger staff are necessary before we can fix and enforce minimum requirements for societies and persons engaged in child-caring work. We have, however, gone far enough to gain some very definite ideas and to become confident of the importance of certain general requirements. These appear below as standards for child-placing agencies, orphanages, and boarding homes, respectively. The so-called rules and regulations for maternity hospitals are also regarded by us as standards for our guidance in the licensing of these institutions and for the aid and direction of persons engaged in the care of maternity patients.

**STANDARDS FOR CHILD-PLACING AGENCIES.**

1. Each society should be incorporated; should have a board of directors made up of persons generally recognized as responsible citizens and willing to do active work for the society and representing the religious faiths of the children cared for; should have a case committee which would undertake to direct the policies concerning the placement of children; should have a superintendent who, on the whole, should not collect his own salary, but devote his time to the organization and conduct of the work.

2. Each society should have a regularly established home, or its equivalent, for the care of children received until such time as they are placed out.

3. All child-placing societies should have uniform records, to be furnished by this board after conference with the several agencies doing state work.

4. Each child-placing society should furnish to the State Board of Charities and Corrections monthly reports of visitations made; these to be certified to by the superintendent.

5. Each society should have at least one visitor to each fifty children placed in free homes or boarded out, and should make such arrangements in collaboration with this Board as should keep both the society and the Board informed of the expenditure of time and money necessary for adequate supervision.

6. No child should be finally placed for adoption until it has been in the home under the supervision of the child-placing agency for at least six months, and, on the whole, it is preferable that a year should elapse before final papers of adoption are granted.

7. Each society should make such arrangements as would show that it is not aiding in the illegitimate disposal of children either by deliberately weakening parental responsibility on the one hand or encouraging illegitimacy on the other.

**STANDARDS FOR ORPHANAGES.**

1. *The building* shall meet the legal requirements of the county in which the institution is located, as to construction, material, safety, lighting, ventilation and plumbing. The upkeep, and particularly the housekeeping, shall conform to the average of the institutions of like character in this state.

2. *The health of the children* shall be guarded:

- (a) Through a dietary conforming at least to the minimum standard supplied by this office.
- (b) Through examination of each child by a competent physician, before admission.
- (c) Through regular visitation or examination by a doctor or licensed nurse.
- (d) Through enforcement of vaccination and quarantine requirements.
- (e) Through proper care of the teeth, by providing tooth brushes for each child, and periodic visits by a dentist.
- (f) Through provision for the isolation and special care of the sick.
- (g) Through regular and systematic bathing.
- (h) A separate bed to be provided for each child except in case of emergency.

3. *The clothing of the children* shall be clean, neat, and seasonable, and of a design, quantity and quality to develop the self-respect of the child.

4. *Education and recreation.*

- (a) The education should conform with the requirements of the state and all teachers of the regular curriculum shall be duly licensed.
- (b) Children shall receive moral and religious instruction, provided that no child shall be required to attend religious services or to receive religious instruction in a faith different from that of its parents or guardian.
- (c) A library of books suitable for the use of the child shall be provided and shall be regularly accessible to the children.
- (d) Playgrounds and playrooms, properly equipped with apparatus, games and toys shall be provided, and it shall be the duty of some one officer of the institution to supervise and encourage play activities.

5. *The supervision.* The superintendent shall be a person of such character and capacity as shall guarantee to the children control and companionship and to the Board and state responsible management of the institution and its inmates.

6. *The governing board* must be responsible persons who feel a definite interest in the work and give personal attention to it. Board members failing to attend three successive meetings, without good excuse, should be dropped and replaced by persons who are able to give more time to the problems of the institution.

7. *Accounting.* All the accounts shall be kept in conformity with the methods regularly prescribed by the State Board of Control. All records of movement of population and other details concerning the inmates shall be kept according to the blanks prescribed by the State Board of Charities and Corrections.

#### STANDARDS FOR BOARDING HOMES FOR CHILDREN.

*General.* Children shall be given an opportunity to attend Sunday-school or church of the religious faith of their parents. Children under 14 years should have no routine work other than school tasks, but there is no objection to their having some simple duties in the home, provided these are not too routinized. Children should have an opportunity to play. Adequate play space should be provided both out of doors and indoors. Where there are more than twenty children, it would be well to provide a supervisor for play hours. Proper medical supervision shall be guaranteed to each child.

*Environment.* The home shall not be in a factory or commercial district and shall be within a reasonable distance of a school.

*Household.* In a family home the amount contributed for the support of the children boarded shall not be the sole source of income for the family group. For the purpose of these rules, a family home shall be construed to mean one in which less than ten children are boarded. There shall be no male adult boarders.

*Housing.* The home shall conform in building and maintenance to the sanitary ordinances of the city or county and shall have a permit from a local board of health or health officer. Special attention shall be given to the size, ventilation, and lighting of the room in which the children are to sleep. There shall be a minimum of 500 cubic feet of air space for each child. Each child must have a separate bed.

*Dietary.* The dietary shall be up to the standard set by the State Board of Charities and Corrections.

*Disposition of children.* The children shall be returned to parent or relative, or if placed out into a home for adoption, notice of such placement shall be given to the State Board of Charities and Corrections and adoption shall be had only through one of the licensed child-placing agencies. There must be no advertising of adoption.

*References.* Where there are over twenty children, the place shall be incorporated with a board of directors of at least seven members, at least four of whom shall be residents of the city or town in which the home is situated. The meetings of the board of directors shall be held at the institution. There should be a superintendent who should not be required to collect funds, but devote his time to the organization and



conduct of the work of caring for the children. The family home shall have a list of at least five reputable citizens as references.

*Records.* In other than family homes, records shall be kept showing the name, sex, parentage, religion, date of reception, date of discharge, and disposition of each child; also a health record of each child. Such homes shall report annually to the State Board of Charities and Corrections, which report shall contain a statement of the financial conditions, receipts and expenditures, movement of population, etc. This report is not required of homes that are under the immediate supervision of one of the licensed child-placing agencies of the state. In such case, the agency shall report on behalf of the home.

*Changes.* Any change of address or management must be reported to this office promptly. Failure to do this means forfeiture of license.

### **Rules and Regulations Adopted by the State Board of Charities and Corrections for the Government of Maternity Hospitals.**

(In accordance with chapter 69, Statutes 1913.)

#### **Physical Equipment.**

1. All rooms and wards shall be outside rooms and the window space shall not be less than one fifth of the floor space.

2. The rooms and wards shall be of sufficient size to allow not less than 1,000 cubic feet air space for each adult patient and 500 cubic feet air space for each infant kept therein; also 100 square feet floor space for each bed.

3. The heating of all rooms shall be of sanitary type.

4. The flooring and walls shall be in condition and of a character to permit of easy cleaning. All parts of a maternity hospital shall be kept in a cleanly condition.

5. The plumbing and draining or other arrangements for the disposal of excreta and household waste shall be in accordance with the best sanitary practice, subject to the approval of the State Board of Charities and Corrections, and in accordance with the rules and regulations of the local board of health or city ordinance. The water supply shall be pure.

6. A confinement room properly equipped shall be provided. Dressings and medicines for emergencies, clean bedding, body linen and towels shall be kept on hand in sufficient quantity. Means for sterilizing instruments shall be provided and a properly trapped and vented basin supplied with running water for washing the hands.

7. Provision for the isolation of contagious diseases must be made.

8. Sanitary accommodations for thorough bathing of patients and infants must be made part of the equipment of the institution.

9. Fire protection shall meet the approval of the State Board of Charities and Corrections, and shall be in accordance with the rules and regulations of the local fire commission or city ordinance.

10. There shall be a separate bed for each infant.

#### **Care of Patients.**

1. In each labor case, at the time of expected delivery, a legally qualified physician shall be promptly notified and shall be present and in attendance at the time of birth.

2. *Prevention of ophthalmia neonatorum.* Attention is called to Act 2160 of the General Laws, which requires the reporting of reddened or inflamed eyes of an infant to a legally qualified physician of the city in which the parents of the infant reside. Further, the eyes of all new born infants shall be thoroughly washed immediately after birth with 2 per cent nitrate of silver, or other approved solution equally efficacious, and during the first few days cleansed daily with saturated boric acid solution.



3. After the birth of the child a legally qualified physician shall be in charge of the care of the mother and child, and shall superintend all after treatment.

4. If the child is kept in the hospital and is not breast-fed by the mother, the feeding and selection of food shall be under the direction of a legally qualified physician. If a wet nurse is provided, she shall meet with the approval of the physician. In every case where the mother is a proper subject she shall be urged to nurse her child. Under no circumstances will the use of nursing bottles which can not be readily and thoroughly washed be permitted (such as long-tubed nursing bottles). All nursing bottles and nipples must be boiled at least once a day and individual nipples must be provided for each child.

#### **Disposal of Child.**

1. Attention is called to chapter 92, Statutes 1913, in accordance with which a child not retained by the mother must be legally relinquished before it can be adopted. This relinquishment must be expressed in writing, signed and acknowledged before an officer authorized to take acknowledgments, or before the secretary of one of the organizations named in the following section.

2. Attention is called to chapter 569, Statutes 1911, providing for the supervision and control by the State Board of Charities and Corrections of the placing of dependent children into homes, which makes it a misdemeanor for any person, association or society to engage in the work of placing children into homes without a permit from the State Board of Charities and Corrections. The following agencies have such permits:

Children's Home Society, 2414 Griffith avenue, Los Angeles.

Children's Home Society, Grove and Russell streets, Berkeley.

Catholic Humane Bureau, 1112 Market street, San Francisco.

Children's Agency of the Associated Charities, San Francisco.

Native Sons and Daughters Central Committee on Homeless Children, San Francisco.

Oakland Associated Charities, 512 Broadway, Oakland.

3. Each licensee shall use due diligence to prevent the abandonment of children, which is, according to sections 270, 271 and 271a of the Penal Code, a penal offense.

4. A licensee shall not be permitted to advertise that he will procure the adoption of children, or to hold out inducements to mothers to part with their offspring.

#### **Records.**

1. Every licensee must keep a register wherein he shall enter the name and address of every maternity patient, the date of admission and discharge of every such patient, the name and sex of every child born or boarded on the premises, the date of every such birth, the legitimacy or illegitimacy of every child, the name and residence of the father, the date of removal of the child, the name and address of the person taking away the child, and, if, relinquished by the mother, the date of relinquishment, the name and address of the person to whom the child is relinquished, and the reasons therefor; and if adopted, the date of adoption, the name of the person signing the consent to adoption, and the name and address of the person adopting the child. Every admission, discharge, birth, death, relinquishment or adoption must be recorded in the register within forty-eight hours after its occurrence.

2. A semiannual report, which shall be an exact transcript of this register, shall be made to the State Board of Charities and Corrections, 1007 Phelan Building, San Francisco, January 1st and July 1st of each year.

3. Each licensee shall use due diligence to prevent deception by a patient as to her identity and shall not receive any person who refuses to give the required information, unless the case is one of emergency. If a patient does not give the necessary information before the fourth day after her delivery, the licensee shall forthwith notify the State Board of Charities and Corrections.

4. All births and deaths must be reported promptly to the local authorities by the attending physician. (See Political Code, section 3077.)

**Inspection.**

The proprietor or person in charge of a maternity hospital shall give the inspectors of the State Board of Charities and Corrections all reasonable information and shall afford them every facility for examining the records, inspecting the premises, and seeing the inmates.

**Granting and Revoking License.**

1. Application for license must be made on blank furnished by the State Board of Charities and Corrections.

2. Every applicant must have the approval of the local board of health or health officer.

3. Every licensee shall frame his license and post it in a conspicuous place in the office or room of his establishment in which his patients are received.

4. The license is the property of the State Board of Charities and Corrections and subject to return on demand.

5. Any neglect or evasion of these rules, or any collusion for their subversion, shall constitute sufficient cause for revocation of the license.

(Adopted March 5, 1914.)

**Child-Placing Agencies.**

*An act providing for the supervision and control by the State Board of Charities and Corrections of the placing of dependent children into homes and for the supervision of all societies or organizations engaged in such work and known as children's home finding societies.*

(Approved April 24, 1911.)

*The people of the State of California, represented in Senate and Assembly, do enact as follows:*

SECTION 1. It shall hereafter be unlawful for any organization, society or persons to engage in the work of placing dependent children into homes in this state without first obtaining a permit therefor, duly executed in writing, from the State Board of Charities and Corrections.

SEC. 2. The said State Board of Charities and Corrections may investigate, or cause to be investigated, the books, records, and methods of such organizations, societies, or persons, and the disposition of the children coming into their custody; and it may make such rules and regulations as it may deem best for the government and regulation of such societies or persons, and may require such reports as it may desire.

SEC. 3. The said State Board of Charities and Corrections is hereby authorized and empowered to withdraw and cancel any permit to engage in the work of placing children into homes for any failure to observe the rules and regulations established for their government, or the failure to report as required, or for any failure on their part to perform their work as required by the best interests of the state, but no permit shall be canceled or withdrawn without due notice and hearing.

SEC. 4. It is hereby made a misdemeanor for any person or persons, either as individuals or officers of any association or society, to engage in the work of placing children into homes, or the soliciting of funds therefor, in this state without a permit duly executed in writing by the State Board of Charities and Corrections, authorizing said persons or such association or society to engage therein, or to engage in such work after any permit has been canceled.

SEC. 5. This act shall not be construed as applying to any regularly established orphan home or any officer or official thereof acting for or on behalf of such home receiving aid from the state for the care of orphans, half orphans or abandoned children in any effort such institution or its officers may make to procure the adoption into homes or any officer or official thereof acting for or on behalf of such home of any such children.

SEC. 6. This act shall take effect immediately.

### INTERPRETATION OF THE CHILD-PLACING LAW.

This law is not altogether clear in its wording and such varied interpretations have been placed upon it that the opinion of the Attorney General was requested. His reply was in part as follows:

To provide a home imports far more than the placing of children in homes to board, and, as I have construed the act as one to regulate home-finding, it can not be concluded that persons or societies engaged in finding boarding places for dependent children must be licensed according to the provisions of the act. However, if a person or a society procures the adoption of a child for whom he has theretofore provided merely a place to board, such person or such society comes within the purview of the statute and must show compliance therewith.

Thus it appears that children may be placed into homes either temporarily or permanently by courts of competent jurisdiction, by orphanages receiving state aid and by societies licensed by the State Board of Charities and Corrections. Children may be boarded out without a license, but if the person or association so boarding them out later procures their adoption, it comes under the provisions of this statute. The latter provision would seem practically to annul the exception, for nearly every society that is engaged in the work of boarding out children has some cases of adoption. Having found the home and often signing the consent to adoption, it may be said to have procured the adoption, although this was by no means the primary intention. This law should be so amended as to clarify this situation.

### SOCIETIES LICENSED TO PLACE CHILDREN INTO HOMES.

Of the following societies only two have as their principal work the finding of permanent homes for dependent children. These are the Children's Home Society and the Native Sons and Native Daughters' Central Committee on Homeless Children. The other six board out children, some of whom are subsequently adopted, or else do regular home-finding as one feature of their general activities:

(1) Associated Charities of Oakland, Mrs. Frances B. Lemon, secretary, City Hall, Oakland. This society boards out children committed to it by the juvenile court of Alameda County, and in case of adoption the secretary signs the consent to adoption.

(2) Catholic Humane Bureau, Rev. P. L. Ryan, general director, 995 Market street, San Francisco. The bureau receives children from the Juvenile Court and the Widows' Pension Bureau of San Francisco. Most of these children are not placed for adoption.

(3) Catholic Ladies' Aid Society of Alameda County, Mrs. W. T. Morton, secretary, 2854 Birch Court, Oakland. This society receives children from the juvenile court of Alameda county and places them in private boarding homes. Where the children are eligible for adoption, their case is referred to one of the regular home-finding societies.

(4) Children's Agency of the Associated Charities of San Francisco, Miss Katharine C. Felton, general secretary, 1500 Jackson street, San



Francisco. This agency engages primarily in the temporary boarding out of children and is gradually transferring its cases for adoption and free placement to the Native Sons and Native Daughters' Central Committee on Homeless Children.

(5) Children's Home Society of California, Julius A. Brown, state superintendent, 2414 Griffith avenue, Los Angeles, and 1921 Russell street, South Berkeley. This society maintains two receiving homes for children awaiting placement. The children are placed with a view to adoption.

(6) Eureka Benevolent Society, Meyer H. Levy, secretary, 436 O'Farrell street, San Francisco. This is one of the constituent societies of the Hebrew Board of Relief of San Francisco.

(7) Los Angeles Humane Society for Children, Nancy E. Winch, secretary-manager, 629 California Building, corner Second and Broadway, Los Angeles. Home-finding is only a small part of the work of this society.

(8) Native Sons and Native Daughters' Central Committee, Miss Mary E. Brusie, secretary, 855 Phelan Building, San Francisco. This organization places children with a view to adoption.

### Boarding Homes for Children.

*An act to provide for the licensing, inspecting and regulating of maternity hospitals or lying-in asylums, and institutions, boarding houses and homes for the reception and care of children, by the State Board of Charities and Corrections, and providing a penalty for the violation of the provisions of this act.*

(Approved April 23, 1913. In effect August 10, 1913.)

*The people of the State of California do enact as follows:*

SECTION 1. No person, association, or corporation shall hereafter maintain or conduct in this state any maternity hospital or lying-in asylum where females may be received, cared for or treated during pregnancy, or during or after delivery; or any institution, boarding house, home or other place conducted as a place for the reception and care of children, without first obtaining a license or permit therefor, in writing, from the state board of charities and corrections, such permit or license once issued to continue until revoked for cause after a hearing.

SEC. 2. The state board of charities and corrections is hereby authorized to issue licenses or permits to persons or associations to conduct maternity hospitals, lying-in asylums, or homes for children, as provided in section one of this act, and to prescribe the conditions upon which such licenses or permits shall be granted, and such rules and regulations as it may deem best for the government and regulation of maternity hospitals, lying-in asylums and institutions, boarding houses, or homes for the reception and care of children, and said board is further authorized, by one or more of its members, secretary, or duly authorized representative, to inspect and report upon the conditions prevailing in all such institutions.

SEC. 3. Any person who maintains or conducts, or assists in maintaining or conducting as manager or officer, any maternity hospital, lying-in asylum, or any institution, boarding house, home or other place conducted as a place for the reception and care of children, or who keeps at any such place any child under the age of twelve years, not his relative, apprentice or ward, without first having obtained a license or permit therefor in writing, as provided in section one of this act, shall be punished upon conviction by imprisonment in the county jail for not more than one year, or by a fine not to exceed five hundred dollars, or both a fine and imprisonment may be imposed at the discretion of the court.

*An act to create a state board of charities and corrections, prescribing its duties and powers, and appropriating money therefor, approved March 25, 1903, as amended by act approved May 1, 1911.*

SEC. 5. The board is hereby empowered and authorized, and it shall be its duty as a whole, or by committee, or by its secretary, to investigate, examine, and make reports upon all institutions or persons receiving any state aid for the care of orphan, half-orphan, abandoned or dependent children, and may prescribe forms of record thereof to be kept, and require reports thereof.

### CLASSIFICATION.

The first of the above quoted laws requires that all institutions or homes for the care of children under the age of twelve years must obtain a license from the State Board of Charities and Corrections. For convenience they have been classified in three main groups.

(1) By "orphanage" is meant an institution receiving state aid for the care of orphans, half-orphans, or neglected children. All such institutions, with the exception of orphan homes maintained by counties, must have a license, but the county orphanages are subject to the supervision of the State Board of Charities and Corrections. Boarding schools and other institutions whose purpose is educational rather than to provide a home for children are, according to the opinion of the attorney-general, exempt from the provisions of chapter 69, Statutes of 1913.

(2) By "children's home" is meant a place for the care of ten or more children under twelve years of age, but without state aid.

(3) By "family home" is meant the home of any person who keeps from one to ten children under twelve years of age, who are not his or her relatives, apprentices or wards. A strict interpretation of this law would seem to bring within its purview all persons who receive children from charity organizations and other bodies doing boarding-out work, and also persons who receive children from the home-finding societies before adoption. However, this was not the intent of the law, and it should be so amended as to overcome this difficulty, and also to harmonize with the law governing home-finding societies.

*Policy of the board.* It has been the policy of this board to encourage people to secure children from one of the licensed child-placing agencies, rather than through advertisements or other means. However, for the present licenses have not been refused because of advertising or receiving children from other sources than the agencies. In such cases the decision has depended on the sanitary conditions of the home, character of the foster mother, economic conditions, and the license or approval of the local board of health or health officer. Only a small number of homes already under the supervision of the licensed home-finding societies have been visited in the enforcement of chapter 69, Statutes 1913, for the reasons that those societies are believed to be more responsible than the separate homes, and that the staff of the State Board of Charities and



Corrections has been kept busy investigating other family homes for children. As a matter of fact, this arrangement seems to have been intended by the advocate of the law, but its wording is not clear on this point. This is the difficulty referred to above.

### List of Licensed Orphanages.

1. *Albertinum, The.* Ukiah.  
Founded 1903. Incorporated 1904. Auspices, Dominican Sisters. Sister M. Hedwig, superior. Receives boys between ages of 3 and 10. Half-orphans \$5.00 to \$10.00 per month; boarders \$15.00. Also receives dependent boys from juvenile court.
2. *Boys' and Girls' Aid Society, The.* San Francisco.  
Founded and incorporated 1874. Geo. C. Perkins, president of board of trustees. Geo. C. Turner, superintendent. Receives boys between ages of 8 and 17. Charges up to \$17.50 per month. Receives both dependents and delinquents from juvenile court.
3. *Boys' and Girls' Aid Society.* South Pasadena.  
Founded and incorporated 1888. J. L. Starr, president of board of trustees. Receives boys and girls between the ages of 2 and 14. Charges half-orphans \$6.00 per month; boarders \$15.00.
4. *Boys' and Girls' Industrial Home and Farm.* Lytton Springs.  
Founded and incorporated 1899. Formerly Golden Gate Orphanage. Auspices, Salvation Army. Thos. Estill, president of board of directors. Major and Mrs. C. W. Bourne, superintendents. Receives boys and girls up to age of 13. Charges \$12.00 per month and clothes whenever possible. Receives both dependents and delinquents from juvenile court.
5. *Church Home for Children of the Protestant Episcopal Church in the Diocese of Los Angeles, The.* Los Angeles.  
Founded and incorporated 1913. Rev. R. L. Windsor, president of board of directors. Deaconess Evelyn Wile, superintendent. No set entrance requirements.
6. *Fred Finch Orphanage.* Oakland.  
Founded 1891. Incorporated 1901. Auspices, Methodist Episcopal Church. Jos. F. Forderer, president of board of directors. John W. Hagan, superintendent. Receives boys and girls between ages of 5 and 14. Receives both dependents and delinquents from the juvenile court.
7. *Good Templars' Home for Orphans.* Vallejo.  
Founded 1869. Incorporated 1897. Mrs. L. H. Kellogg, president board of directors. A. W. Bell, superintendent. Receives children between ages of 18 months and 14 years. Charges according to circumstances. Receives dependents from juvenile court.
8. *Grass Valley Orphan Asylum.* Grass Valley.  
Founded 1863. Incorporated 1875. Auspices, Sisters of Mercy. Sister M. Stanislaus in charge. Receives boys and girls between ages of 2 and 14. Charges \$5.00 to \$10.00 per month. Receives dependents from juvenile court.
9. *Home of the Guardian Angel.* Los Angeles.  
Founded 1895. Auspices, Sisters of Mercy. Sister M. Philomena in charge. Receives boys and girls between the ages of 3 and 14. Receives dependents from juvenile court.
10. *I. O. O. F. (Odd Fellows) Orphans' Home of California.* Gilroy.  
Founded 1897. Ada Madison, president of board of trustees. Mrs. Susie J. Harris, matron. Receives only orphans of deceased members of the order, under 14 years of age.

11. *Jewish Orphans' Home of Southern California.* Huntington Park.  
Founded 1907. Incorporated 1908. John Kahn, president of board of directors. Dr. Sigmund Frey, superintendent. Receives boys and girls between the ages of 3 and 12. Receives dependents from juvenile court.
12. *Ladies' Relief Society of Oakland.* Oakland.  
Founded 1870. Incorporated 1872. Protestant. Miss Matilda Brown, president of board of directors. Mrs. C. C. Case, matron. Receives boys and girls up to the age of 12. Receives dependents from the juvenile court.
13. *Los Angeles Orphan Asylum.* Los Angeles.  
Founded 1856. Incorporated 1869. Auspices, Sisters of Charity. Sister Cecilia in charge. Receives girls between ages of 2 and 14 years.
14. *Los Angeles Orphans' Home.* Los Angeles.  
Founded and incorporated 1880. Mrs. Theo. A. Eisen, president of board of directors. Mrs. Mary Matthews, superintendent. Receives boys and girls between ages of 2 and 14. Charges up to \$15.00 per month. Receives dependents from juvenile court.
15. *Maria Kip Orphanage.* San Francisco.  
Incorporated 1908. Auspices, Protestant Episcopal Church. Rt. Rev. Wm. Ford Nichols, president of board of trustees. Receives girls between ages of 2 and 12. Charges up to \$12.00 per month. Receives dependent girls from juvenile court.
16. *Masonic Homes of California.* San Gabriel.  
Wm. S. Wells, president of board of trustees. E. B. Spencer, managing trustee. Mrs. Alexander, matron. Receives dependent children of Masons of California lodges.
17. *McKinley Industrial Home.* Gardena.  
Founded 1900. Incorporated 1902. M. H. Whittier, president of executive committee. O. D. Conrey, superintendent. Receives boys between the ages of 6 and 14. Charges up to \$12.50. Receives dependent boys from juvenile court.
18. *McKinley Orphanage.* San Francisco  
Auspices, Methodist Episcopal Church. Founded and incorporated 1897. Receives boys and girls between the ages of 4 and 14.
19. *Mt. St. Joseph's Infant Orphan Asylum.* San Francisco.  
Founded 1852. Incorporated 1858. Auspices, Sisters of Charity of St. Vincent de Paul. Sister Mary Caine, superintendent. Receives boys and girls up to age of 7. Receives dependents from juvenile court.
20. *Pacific Hebrew Orphan Asylum and Home Society.* San Francisco.  
Founded and incorporated 1871. Judge M. C. Sloss, president of board of trustees. Dr. Samuel Langer, superintendent. Receives boys and girls between the ages of 4 and 12.
21. *Pajaro Valley Orphan Asylum.* Watsonville.  
Also known as St. Francis Orphan Asylum. Founded 1869. Auspices, Franciscan Fathers. Bishop Thos. J. Conaty, head of board of directors. Rev. Florian Zettel, director. Receives boys between ages of 7 and 16. Charges \$11.00 per month. Receives dependents and delinquents from juvenile court.
22. *Pasadena Children's Training Society.* Pasadena.  
Founded and incorporated 1902. Mrs. F. F. Rowland, president of board of directors. Miss Emma M. Conley, matron.
23. *Presbyterian Orphanage and Farm.* San Anselmo.  
Founded and incorporated 1895. Mrs. L. A. Kelley, president of board of directors. Rev. Frederick A. Doane, superintendent. Receives boys and girls between the ages of 3 and 13. Receives dependents from juvenile court.

24. *Regina Celi Orphan Asylum.* Los Angeles.  
Founded 1905. Incorporated 1914. Auspices, Missionary Sisters of the Sacred Heart of Jesus. Sister Angela Botti, president of board of directors. Receives girls between the ages of 2 and 14. Receives dependent girls from juvenile court.
25. *Roman Catholic Orphan Asylum.* San Francisco.  
Founded 1852. Incorporated 1858. Auspices, Sisters of Charity. Sister Helena McGhan in charge. Receives girls between the ages of 6 and 14. Charges up to \$11.00 per month. Receives dependent girls from juvenile court.
26. *Sacramento Orphanage and Farm.* Sacramento.  
Founded and incorporated 1867. Mrs. Douglas A. Lindley, president of board of managers. Mrs. J. Kenney, matron. Receives boys and girls without any age limit. Receives dependents and delinquents from juvenile court.
27. *San Diego Children's Home Association.* San Diego.  
Founded 1887. Incorporated 1907. Mrs. E. Thalen, president of board of directors. Mrs. Genevieve B. Miles, superintendent. Receives boys and girls between the ages of 3 and 14. Charges \$12.50 per month when parents are able to pay. Receives dependents from juvenile court.
28. *San Francisco Ladies' Protection and Relief Society.* San Francisco.  
Founded 1853. Incorporated 1854. Miss A. W. Beaver, president of board of managers. Receives boys between the ages of 3 and 10; girls 3 to 13. Receives dependents from juvenile court.
29. *San Francisco Nursery for Homeless Children.* San Francisco.  
Founded 1888. Incorporated 1892. Mrs. C. E. Grunsky, president of board of lady managers. Mrs. M. E. Coltmen, matron. Receives children between ages of 1 and 14. Charges up to \$12.50 per month. Receives dependents and delinquents from juvenile court.
30. *San Francisco Protestant Orphan Asylum Society.* San Francisco.  
Founded 1851. Incorporated 1862. Mrs. F. G. Sanborn, president of board of managers. Mrs. Nellie Miller, matron. Receives boys and girls between the ages of 2 and 14. Receives dependents from juvenile court.
31. *San Jose Home of Benevolence.* San Jose.  
Founded 1876. Incorporated 1879. Auspices, Ladies' Benevolent Society. Mrs. L. T. McKee, president of board of directors. Miss Ella Frantz, matron. Receives orphans and half-orphans of both sexes between the ages of 1 and 14.
32. *St. Catherine's Orphan Asylum.* Anaheim.  
Founded 1894. Auspices Dominican Sisters. Sister M. Hyacintha, superior. Receives boys between ages of 2 and 14. Charges \$10.00 to \$15.00 for boarders. Receives dependent and delinquent boys from juvenile court.
33. *St. Catherine's Orphan Asylum.* San Bernardino.  
Founded about 1879. Auspices, Sisters of the Immaculate Heart. Mother Raphael in charge. Receives girls only.
34. *St. Mary's Orphanage.* Mission San Jose.  
Founded 1894 as The Josephinum. Incorporated 1910. Auspices, Dominican Sisters. Receives girls between ages of 3 and 12. Charges up to \$15.00 per month. Receives dependent and delinquent girls from juvenile court.
35. *St. Vincent's Roman Catholic Orphan Asylum of San Francisco for Boys.*  
Founded 1855. Incorporated 1893. Rev. P. W. Riordan, president of board of directors. Brother Paul, superintendent and manager. Receives boys up to 14 years of age. Charges \$12.00 to \$15.00 per month. Receives dependent and delinquent boys from juvenile court.



36. *St. Vincent's Institution.* Santa Barbara.

Founded 1858. Incorporated 1887. Auspices, Sisters of Charity. Sister Cecilia McCoon in charge. Receives girls from 1½ to 16 years of age. Charges according to ability to pay. Receives dependent and delinquent girls from juvenile court.

37. *Santa Cruz Female Orphan Asylum.* Santa Cruz.

Also known as Holy Cross School. Founded 1862. Incorporated 1865. Auspices, Sisters of Charity. Sister Catharine Norton in charge. Receives girls between ages of 4 and 16. Receives dependent girls from juvenile court.

38. *West Oakland Home.* Oakland.

Founded and incorporated 1887. Miss Grace L. Trevor, president of board of directors. Receives boys and girls up to 14 years of age. Charges according to ability to pay. Receives dependents from juvenile court.

39. *Youths' Directory.* San Francisco.

Founded 1874. Incorporated 1887. Auspices, Catholic Church. Rev. P. W. Riordan, president of board of directors. Rev. D. O. Crowley, in charge. Receives boys between the ages of 7 and 15.

## List of Licensed Children's Homes.

City	Name and address of home	Superintendent
Lordsburg -----	David and Margaret Home for Children -----	Miss Flora Rice.
Los Angeles -----	Maud B. Booth Home for Children, 1511 West Twenty-third street -----	Mrs. J. M. Ray.
Los Angeles -----	Convent of the Good Shepherd, 1312 Arlington street -----	Sister Mary.
Mayfield -----	Maud B. Booth Home -----	Mrs. Walter Duncan.
Oakland -----	Beulah Home, 5205 Harrison avenue -----	Mrs. E. Taner.
Oakland -----	Crouch's Infant Shelter, 2011 Thirty-eighth avenue -----	Mrs. Ina Crouch.
Pasadena -----	Pasadena Day Nursery, 88 Worcester street -----	
Sacramento -----	Home of the Merciful Savior, 3410 J street -----	Mrs. F. J. Hindson.
Sacramento -----	Stanford Lathrop Memorial Home, 800 N street -----	
San Francisco -----	Infants' Shelter, 1025 Shotwell street -----	Mrs. Kate Vagedes.
Stockton -----	Children's Home of Stockton, 430 North Pilgrim street -----	Miss Patterson.

## List of Licensed Family Homes.

NOTE.—Figures in parenthesis indicate number of children that may be boarded.

City	Name of Home	Address
Oceano Station -----	Haleyon Sanatorium, Dr. W. H. Dowd (6) -----	Oceano Station, Cal.
Oakland -----	Mrs. A. Brown (10) -----	2924 San Pablo avenue
Oakland -----	Mrs. P. De Laite (8) -----	4012 Penniman avenue
Oakland -----	Mrs. A. Kempf (10) -----	830 East Eighteenth street
Piedmont -----	Pearl E. Hayden (10) -----	23 Fairview street
San Francisco -----	Mrs. Thomas Allen (1) -----	2318 Twenty-second avenue
San Francisco -----	Mrs. Ella Brownlie (2) -----	527 Twenty-fourth avenue
San Francisco -----	Boarding Home for Children -----	737 Buena Vista avenue
San Francisco -----	Mrs. Ed. Burton (4) -----	714 Silliman avenue
San Francisco -----	Mrs. W. Cuzens (2) -----	2438 Anza street
San Francisco -----	Mrs. Paul Franke (6) -----	2474 Bush street
San Francisco -----	Mrs. W. Hanley (1) -----	1432 Ellis street
San Francisco -----	Mrs. M. Hempler (8) -----	319 Moscow street
San Francisco -----	Mrs. H. Hoffman (1) -----	3869 Twenty-third street
San Francisco -----	Mrs. Geo. Johnson -----	312 Bartlett street
San Francisco -----	Mrs. Mary Kahler (2) -----	579 Castro street
San Francisco -----	Mrs. Kate Kay (5) -----	2272 Howard street
San Francisco -----	Mrs. Laura Lage (2) -----	202 Twenty-third avenue
San Francisco -----	Mrs. M. E. Morris (2) -----	630 Palmetto avenue
San Francisco -----	Mrs. F. L. Nightingale (4) -----	232½ Diamond street
San Francisco -----	Mrs. Ruth Preston (2) -----	3418 Eighteenth street
San Francisco -----	Mrs. Kate Riley (2) -----	319 Second avenue
San Francisco -----	Mrs. R. C. Routledge (1) -----	1259 Octavia street
San Francisco -----	Mrs. J. J. Sherwood (2) -----	40 Liebig street
San Francisco -----	Mrs. Emily Thal (6) -----	1319 Grove street
San Francisco -----	Annie Wadsworth (1) -----	293 Jersey street
San Francisco -----	Mrs. Mary T. Weissand (4) -----	356 Twenty-sixth avenue
San Mateo -----	Elsie M. Curtis (4) -----	313 South F street

## MATERNITY HOSPITALS, MATERNITY DEPARTMENTS AND MATERNITY HOMES.

Chapter 69 of the Statutes of 1913 (Stats. 1913, page 73) is an act to provide for the licensing, inspecting and regulating of maternity hospitals or lying-in asylums, and institutions, boarding houses and homes for the reception and care of children.

Section 1 of the act provides that no person, association or corporation shall thereafter maintain or conduct in this State any maternity hospital or lying-in asylum where females may be received, cared for or treated during pregnancy, or during or after delivery, without first obtaining a license or permit therefor in writing from the State Board of Charities and Corrections.

It would appear from a reading of this section that the act was intended to operate against hospitals conducted primarily for the purposes above mentioned, but section 3 of the act provides that any person who maintains or conducts or assists in maintaining or conducting any such institution or "who keeps at any such place any child under the age of twelve years not his relative, apprentice or ward," without first obtaining a license, is guilty of a violation of the act and subject to be punished as therein provided.

Though the portion of the act above quoted is not particularly set forth in the title of the act, it is so closely related to the general subject-matter of the act as specified in the title that it is undoubtedly germane to such subject and is properly a portion of the act. It will be seen that in the language above quoted the act attempts to prohibit any person from keeping a child under the age of twelve years at any maternity hospital, lying-in asylum, or any institution, boarding house, home or other place conducted as a place for the reception and care of children, and though the reception and treatment of maternity cases in a general hospital may be merely incidental to the general purpose for which the hospital is conducted and maintained, if such a hospital desires to receive such patients and treat such cases it is first necessary that it comply with the provisions of this act.

The above opinion of the Attorney General, rendered March 28, 1914, makes it clear that the act of April 23, 1913, applies not only to lying-in homes and maternity hospitals in the strict sense of the word, but also to all hospitals and private homes which receive and care for maternity patients. The law was purposely drawn in this general form in order to prevent institutions and persons of doubtful character from escaping its provisions. Its enforcement is working no hardship on the general hospitals, though it does increase the work of the State Board of Charities and Corrections. However, this wide application is making it easier to set reasonable standards and to test the efficiency and social necessity of the maternity homes. The original reasons for passing the maternity hospital law are so fully set forth in the Fifth Biennial Report of this Board (pages 40-41), that further comment is unnecessary at this point.



## (a) Maternity Hospitals Licensed.

City	Name and address of institution	Superintendent
Alameda	Tennant Maternity Home, 1716 Chestnut Street	Mrs. J. W. Tennant.
Alturas	Mrs. J. M. Jensen	
Fresno	Fresno Maternity Hospital, 204 Van Ness Avenue.	Miss Edna Hossfall.
Lomita Park	Dr. Juilly's Sanatorium	Dr. Geo. H. Juilly.
Los Angeles	Mrs. Emilia H. Weishaar's Maternity Home, 222 Miles Street.	
Los Angeles	Private Maternity Hospital, 1234 West Thirti-ninth Street.	Mrs. Edna B. Jordan.
Los Angeles	Los Angeles Maternity Home, 414 East Fifty-seventh Street.	M. A. McKenzie.
Los Angeles	Mrs. Harriet G. Cunningham, 1357 Valencia Street.	
Oakland	St. Francis Maternity Sanatorium, 628 Hobart Street.	Mrs. A. L. Ely.
Oakland	Oakland Maternity Hospital, 157 Grand Avenue	Maude G. Barnes.
Sacramento	Sacramento Maternity Home, 1818 N Street.	Misses C. and A. Keber.
Sacramento	Igo Sanitarium, 1525 L Street.	Dr. Louise M. Igo.
Sacramento	Cypress Avenue Maternity Home, 4009 Cypress Avenue.	Mrs. Rosa E. Sinclair.
San Diego	Mrs. J. W. Duquette, 3916 University Boulevard	
San Francisco	Koerber's Sanitarium, 200 Duboce Avenue.	Dr. Lily L. Koerber.
San Francisco	Cosmopolitan Home, 457 Oak Street.	Meta Lassen, Christina Jacobsen.
Stockton	Ricker's Sanitarium, 1629 East Washington Street.	Mrs. Katharine Ricker.
Ukiah	Langland Hospital, corner Spring and Stephen-son Streets.	Clora O. Langland.

## (b) General Hospitals Licensed to Care for Maternity Cases.

City	Name and address of institution	Superintendent
Alameda	Alameda Sanatorium, 2054 Clinton Avenue.	Kate Creedon.
Alameda	Broad Lawn Sanitarium, 2029 Central Avenue.	Mrs. A. M. S. Gregson.
Bakersfield	Mercy Hospital	Sister M. Gertrude.
Bakersfield	San Joaquin Hospital	
Berkeley	Alta Bates Sanatorium, Webster and Regent Streets.	Alta A. M. Bates.
Berkeley	El Reposo Sanitarium, 2222 Chapel Street.	Dr. A. J. Sanderson.
Berkeley	Roosevelt Hospital, 2001 Dwight Way.	L. C. Shingle.
Cedarville	W. D. Coates' Sanatorium	
Cloverdale	Cloverdale General Hospital, corner West and Third Streets.	Mrs. A. B. Ornbaum.
Dinuba	Dinuba Sanitarium	W. D. George.
Dunsmuir	Dunsmuir Hospital	Dr. E. J. Cornish.
El Centro	St. Thomas' Hospital	Sister Mary Amita.
Exeter	Saylin & Mix Hospital	
Fresno	Burnett Sanatorium, 2911 Fresno Street.	D. H. Trowbridge.
Fresno	Sample Sanatorium, Fortheamp and Mildreda Streets.	O. E. Thompson.
Fullerton	Fullerton Hospital	
Grass Valley	Grass Valley Surgical Hospital, 218 Church Street.	H. Grace Franklin.
Grass Valley	W. C. Jones Memorial Hospital, South Church Street.	Dr. Carl P. Jones.
Healdsburg	Seawall's Sanatorium, 117 North Street.	Dr. J. Walter Seawall.
Hollister	Hazel Hawkins Memorial Hospital.	Dorothy C. Drew.
Huntington Park	Dr. Preston's Home Hospital.	Dr. W. A. Preston.
Los Angeles	Angeles Hospital, Trinity and East Twentieth Street.	
Los Angeles	California Hospital, 1414 South Hope Street.	Walter Lindly.
Los Angeles	Clara Barton Hospital, 447 South Olive Street	H. P. Barton.
Los Angeles	German Hospital Association, 453 South Soto Street.	Carl Entermann.

## (b) General Hospitals Licensed to Care for Maternity Cases—Continued.

City	Name and address of institution	Superintendent
Los Angeles	Hospital of the Good Samaritan, corner Orange and Witmer Streets.	A. O. Darcy.
Los Angeles	Methodist Hospital, 2826 South Hope Street.	Charlotte Armstrong.
Los Angeles	Pacific Hospital, 1319 South Grand Avenue.	Dr. M. M. Lewis.
Los Angeles	Vermont Hospital (Inc.), 2709 South Vermont Avenue.	Geo. T. Renaker.
Los Angeles	Victoria Hospital, 1001 East Twenty-ninth Street.	Maude V. Broddy.
Los Angeles	Westlake Hospital, Inc., 818 Security Building	P. M. Welbourn.
McCloud	McCloud Hospital	Dr. Robt. T. Legge.
Marysville	Rideout Memorial Hospital, Fifth and E Streets.	Fannie E. Southern.
Marysville	Saint Francis Cooperative Hospital, Thirteenth and G Streets.	Dr. L. L. Thompson.
Merced	Merced Sanatorium, 336 Twenty-first Street.	Edna Boling.
Modesto	Evans Hospital, Tenth and L Streets.	
Modesto	Modesto Sanitarium	B. F. Surrhyne, M.D.
Monterey	Dr. McAulay's Sanatorium, 451 Main Street.	Dr. Martin M. McAulay.
Nevada City	Nevada Sanatorium, Coyote Street.	Elizabeth McD. Watson.
Novato	Novato Sanatorium	Dr. C. H. Anderson, Mrs. M. A. Scown.
Oakland	Aeropolis, Twenth-fourth Avenue and East Twenty-sixth Street.	Miss Ida M. Sanderson.
Oakland	East Bay Sanatorium, 3113 Telegraph Avenue.	Mary I. Hall.
Oakland	Fabiola Hospital, Moss Avenue and Broadway	Emelie M. Chabot, Pres.
Oakland	Oakland Central Hospital, 410 Twenty-eighth Street.	Miss Ada Carthy.
Oakland	Providence Hospital, Twenty-sixth and Broadway.	Sister Mary Nazareth.
Oakland	Samuel Merritt Hospital, Hawthorne and Webster Streets.	Dr. Theo. Olmsted.
Palo Alto	Peninsula Hospital	
Petaluma	Petaluma General Hospital, corner Sixth and I Streets.	Mrs. Elsa Little.
Placerville	Reckers, Dr. W. A. and Rantz, Dr. S. H. Co.	
Placerville	Dr. J. T. Wrenn	
Redding	St. Caroline Sanitarium, 202 Pine Street.	Dr. F. Stable.
Richmond	Craven Hospital, Tenth and Clinton Streets.	Mrs. H. W. Scharkopp.
Riverside	Riverside Hospital	Mary J. Currie.
Sacramento	White Hospital, Twenty-eighth and J Streets.	Dr. J. L. White.
Sacramento	Mater Misericordae, Twenty-third and R Streets.	Sister M. Aloysius.
Salinas	Jim Bardin Hospital, Main and John Streets.	Miss D. L. Cressen.
San Bernardino	Ramona Hospital, Fourth and Arrowhead Avenue.	R. E. Swing, Mgr.
San Diego	Agnew Sanitarium, Fifth and Beech Streets.	W. L. Rohrer.
San Diego	St. Joseph's Hospital, Sixth and University Avenue.	Sister M. Cummings.
San Francisco	Ward Sanatorium, 1195 Bush Street.	Dr. Florence N. Ward.
San Francisco	Adler Sanatorium, 1500 Broadway.	A. A. Adler, Pres.
San Francisco	Children's Hospital (Alexander Maternity Cottage), 3700 California Street.	J. H. Dunbar, Sec'y.
San Francisco	Buena Vista Sanatorium, 21 Buena Vista Avenue.	Dr. S. F. Long.
San Francisco	German Hospital	Werner Roehl.
San Francisco	Hahnemann Hospital, 3698 California Street.	O. T. Maguire.
San Francisco	Lane Hospital, Clay and Webster Streets.	Dr. Geo. B. Somers.
San Francisco	Mary's Help Hospital, 145 Guerrero Street.	Sister Angela.
San Francisco	Mount Zion Hospital, Post and Scott Streets.	Dr. R. G. Brodrick.
San Francisco	St. Luke's Hospital, Twenty-seventh and Valencia Streets.	W. R. Dorr, M.D.
San Francisco	St. Francis Hospital, Bush and Hyde Streets.	
San Francisco	St. Winifred's Hospital, 1065 Sutter Street.	Dr. Winslow Anderson.
San Francisco	Trinity Hospital, 1500 Page Street.	Phillip Collischen, M.D.
San Francisco	University of California Hospital, Second and Parnassus Avenues.	
San Luis Obispo	Pacific Hospital	Dr. H. W. Jones.
San Luis Obispo	San Luis Sanitarium, 1170 Marsh Street.	W. M. Stover, M.D.
San Rafael	Cottage Hospital, 20 Nye Street.	Mrs. L. M. McCauley.

**(b) General Hospitals Licensed to Care for Maternity Cases—Continued.**

City	Name and address of institution	Superintendent
Santa Ana -----	Santa Ana Hospital, 538 East Washington Avenue.	C. D. Ball.
Santa Barbara -----	Cottage Hospital, Third Avenue -----	Miss Mary Hurdley.
Santa Barbara -----	St. Francis Hospital, Arrellega Street -----	Sisters of St. Francis.
Santa Cruz -----	Hanly Hospital, 32 Cliff Drive -----	Bessie McHugh.
Santa Cruz -----	Mission Hill Sanatorium, 8 Potrero Street -----	Mrs. Rady Hollenback.
Santa Rosa -----	Katherine Hospital, 905 McDonald Avenue -----	Miss S. D. Hatch.
Santa Rosa -----	Mary Jesse Hospital (Inc.), 815 Fifth Street -----	Dr. J. W. Jesse.
Santa Rosa -----	Santa Rosa Hospital, 741 Humboldt Street -----	Miss Marian Hill.
Seabright -----	Seabright Sanatorium -----	H. A. Fase.
Sebastopol -----	Sebastopol Sanatorium, Morris Avenue -----	Blanche M. Parsons.
Stockton -----	Dameron Hospital, Magnolia and Lincoln Streets.	Dr. J. D. Dameron.
Stockton -----	St. Joseph's Home, North California Street -----	Sister Mary Carmelita.
Tulare -----	San Joaquin Hospital -----	Louise Anderson, R. N.
Tulare -----	Tulare Hospital, 134 North L Street -----	Katherine Stacy.
Turlock -----	Dr. Cheney's Sanatorium, 200 Lander Avenue -----	Dr. Florence V. Cheney.
Tuolumne -----	Reid Sanatorium -----	Dr. E. H. Reid.
Ukiah -----	Malpas' Hospital, 215 Oak Street -----	Dr. Ida Lathrop-Malpas.
Ventura -----	Elizabeth Bard Memorial Hospital, 609 Fir Street.	Margaret F. Waller.
Watsonville -----	Bellevue Hospital, 517 Main Street -----	Nellie Davidson.
Watsonville -----	Watsonville Hospital -----	Bessie E. Silliman.
Woodland -----	Woodland Sanatorium, Third and Cross Streets.	Florence Boyce.
Yreka -----	Mt. Shasta Hospital, corner Oregon and Yama Streets.	Dr. Jones.

**(c) Rescue Homes Licensed to Care for Maternity Cases.**

City	Name and address of institution	Superintendent
Los Angeles -----	Salvation Army Rescue and Maternity Home (Truelove Home), 2670 North Griffin Avenue.	M. Louise Coggeshall.
Los Angeles -----	Florence Crittenton Home, 1632 Santee Street.	Flora M. Freeman.
Oakland -----	Salvation Army Rescue and Maternity Home, 5205 Harrison Avenue (Beulah).	Mrs. Elizabeth Tanner.
San Francisco -----	Florence Crittenton Home, 376 Twentieth Avenue.	Mrs. Maud S. Lenon.

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## STATISTICAL TABLES.

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TABLE 1.

Appropriations made for state institutions for the sixty-fifth and sixty-sixth fiscal year.

*San Quentin State Prison—*

Salaries .....	\$150,000 00
Printing, etc. ....	1,000 00

*Folsom State Prison—*

Support .....	\$264,000 00
Salaries .....	195,000 00
Printing, etc. ....	2,000 00
Support .....	5,000 00
Livestock .....	3,000 00
Farm buildings .....	7,000 00
Repairs and improvements .....	23,500 00
Cell buildings and wall .....	135,000 00
Laundry .....	12,000 00
Shop buildings .....	33,060 00

*Board of Prison Directors—*

Parole work .....	\$30,000 00
Printing .....	500 00

*Preston School of Industry—*

Support .....	\$275,000 00
Salaries .....	156,000 00
Cottages .....	23,000 00
Repairs and improvements .....	18,100 00
Hospital .....	12,000 00
Special machinery and equipment .....	6,900 00
Wing to trades building .....	12,000 00

*Whittier State School—*

Support .....	\$105,000 00
Salaries .....	90,000 00
Repairs, equipment and improvements .....	50,000 00

*California School for Girls—*

Establishment, site and buildings .....	\$200,000 00
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*Stockton State Hospital—*

Support .....	\$406,620 00
Salaries .....	325,060 00
Reflooring main buildings .....	15,000 00
Elevator for female building .....	6,000 00
Heating system for male department .....	15,000 00
Construction and equipment of Ward 25 .....	58,000 00
Dairy herd .....	12,000 00
Improving street .....	1,500 00
Dairy buildings .....	20,000 00

*Napa State Hospital—*

Support .....	\$378,750 00
Salaries .....	309,760 00
Remodeling north pay cottage .....	10,000 00
Laundry .....	25,000 00
Steam boilers .....	7,000 00
Cottages, living and dining rooms .....	25,000 00
Reconstruction of steam heating system .....	20,000 00
Bakery, kitchen and dining room equipment .....	12,500 00
Farm dormitories and sheds .....	10,000 00
Dairy buildings .....	20,000 00
Electrical rewiring .....	15,300 00
Reclamation of low lands .....	10,000 00

*Agnews State Hospital—*

Support .....	\$321,060 00
Salaries .....	223,060 00
Cottage for female working patients .....	60,000 00
Nurses' home .....	50,000 00
Wiring and piping conduit .....	30,000 00

*Mendocino State Hospital—*

Support .....	\$239,600 00
Salaries .....	185,460 00
Completion of dam and reservoir .....	12,500 00
Gas plant .....	10,000 00



TABLE 1—Continued.

Appropriations made for state institutions for the sixty-fifth and sixty-sixth fiscal year.

*Southern California State Hospital—*

Support .....	\$450,975 00
Salaries .....	259,040 00
Four patients' cottages .....	100,000 00
Laundry .....	20,000 00
Reservoir .....	5,000 00
Water stock .....	10,000 00

*New State Hospital—*

Site, water rights and buildings .....	\$250,000 00
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*Sonoma State Home—*

Support .....	\$237,710 00
Salaries .....	198,820 00
Extension of water system .....	10,000 00
Septic tanks, etc. ....	5,500 00
Dormitory for female employees .....	5,000 00
Nursery for males .....	19,000 00
Cottage for epileptics .....	19,000 00
Quarters for farm hands .....	2,000 00
Deficiency pavilion .....	1,824 02

*Folsom State Hospital—*

Support .....	\$12,000 00
Salaries .....	12,000 00

*Lunacy Commission—*

Salaries .....	\$36,000 00
Traveling and office expenses .....	5,000 00
Printing .....	6,000 00

*Industrial Home for Adult Blind—*

Support .....	\$38,000 00
Salaries .....	25,000 00
Printing, etc. ....	500 00
Dormitory .....	50,000 00
New floors in shops .....	1,500 00

TABLE 2—STATE INSTITUTIONS.

Cost of maintenance for the sixty-fourth year.

Institution	Salaries	Support	Ordinary repairs	Total
San Quentin State Prison.....	\$113,063 62	\$245,651 49	\$3,082 43	\$361,797 54
Folsom State Prison.....	74,536 04	100,440 82	178 59	175,155 45
Total, state prisons.....	\$187,599 66	\$346,092 31	\$3,261 02	\$536,952 99
Preston School of Industry.....	\$58,632 83	\$91,085 93	\$5,049 02	\$154,767 78
Whittier State School.....	60,562 36	76,176 35	5,181 89	141,920 60
Total, industrial schools.....	\$119,195 19	\$167,262 28	\$10,230 91	\$296,688 38
Stockton State Hospital.....	\$138,947 36	\$166,968 85	\$22,675 96	\$328,592 17
Napa State Hospital.....	153,222 39	182,360 24	16,094 15	351,676 78
Agnews State Hospital.....	102,939 55	130,685 16	3,632 30	237,257 01
Mendocino State Hospital.....	81,148 34	100,662 80	6,289 51	188,100 75
Southern California State Hospital.....	116,287 64	177,620 83	14,707 28	308,615 75
Total, state hospitals.....	\$592,545 28	\$758,297 98	\$63,399 20	\$1,414,242 46
Sonoma State Home.....	\$89,614 54	\$105,588 12	\$11,251 19	\$206,453 85
Industrial Home for Adult Blind.....	11,887 05	16,287 31	1,061 61	29,235 97
Institution for Deaf and Blind.....	48,235 12	27,982 65	2,041 24	78,259 01
Grand total .....	\$1,049,076 84	\$1,421,510 65	\$91,245 17	\$2,561,832 66

TABLE 3—STATE INSTITUTIONS.  
Cost of maintenance for the sixty-fifth fiscal year.

Institution	Salaries	Support	Ordinary repairs	Total
San Quentin State Prison.....	\$77,558 34	\$303,332 18	\$3,478 88	\$384,369 40
Folsom State Prison.....	93,800 00 <sup>1</sup>	120,105 53		213,905 53
Total, state prisons.....	\$171,358 34	\$423,437 71	\$3,478 88	\$598,274 93
Preston School of Industry.....	\$55,207 00	\$84,672 02	\$9,919 10	\$149,798 12
Whittier State School.....	46,551 42	57,967 11	2,296 49	106,815 02
California School for Girls.....	6,591 49	8,367 33		14,958 82
Total, industrial schools.....	\$108,349 91	\$151,006 46	\$12,215 59	\$271,571 96
Stockton State Hospital.....	\$158,194 93	\$205,717 77	\$28,567 73	\$392,480 43
Napa State Hospital.....	167,498 05	189,117 51		356,615 56
Agnews State Hospital.....	124,716 95	123,871 47	867 62	249,456 04
Mendocino State Hospital.....	88,309 61	109,047 55	7,898 73	205,255 89
Southern California State Hospital.....	140,763 48	218,035 01	14,074 41	372,872 90
Total, state hospitals.....	\$679,483 02	\$845,789 31	\$51,408 49	\$1,576,680 82
Sonoma State Home.....	Failed to report			
Industrial Home for Adult Blind.....	\$12,112 40	\$18,277 42	\$389 40	\$30,779 22
Incomplete totals.....	\$971,303 67	\$1,438,510 90	\$67,492 36	\$2,477,296 93

<sup>1</sup>Approximate.

TABLE 4—STATE INSTITUTIONS.  
Contingent fund.

	Fiscal year	Receipts	Disbursements
San Quentin Fund.....	Sixty-fourth	\$120,716 22	\$64,156 12
San Quentin Fund.....	Sixty-fifth	205,952 73	357,735 75
Folsom Prison Fund.....	Sixty-fourth	11,945 41	10,205 15
Folsom Prison Fund.....	Sixty-fifth	13,801 77	8,324 59
Agnews Hospital Contingent Fund.....	Sixty-fourth	34,955 31	36,282 40
Agnews Hospital Contingent Fund.....	Sixty-fifth	45,166 56	41,740 32
Mendocino Hospital Contingent Fund.....	Sixty-fourth	17,315 33	8,493 06
Mendocino Hospital Contingent Fund.....	Sixty-fifth	16,206 12	10,432 27
Napa Hospital Contingent Fund.....	Sixty-fourth	47,333 66	51,946 89
Napa Hospital Contingent Fund.....	Sixty-fifth	59,100 49	52,057 61
Stockton Hospital Contingent Fund.....	Sixty-fourth	29,075 11	25,780 07
Stockton Hospital Contingent Fund.....	Sixty-fifth	28,800 73	28,905 60
Southern California Hospital Contingent Fund.....	Sixty-fourth	62,147 92	72,826 40
Southern California Hospital Contingent Fund.....	Sixty-fifth	51,909 32	45,581 34
Sonoma State Home Contingent Fund.....	Sixty-fourth	14,564 43	11,386 14
Sonoma State Home Contingent Fund.....	Sixty-fifth	18,077 77	16,391 25
Preston School Contingent Fund.....	Sixty-fourth	3,099 64	2,046 47
Preston School Contingent Fund.....	Sixty-fifth	3,627 52	2,246 63
Whittier School Contingent Fund.....	Sixty-fourth	10,843 41	12,158 54
Whittier School Contingent Fund.....	Sixty-fifth	12,843 26	3,848 41
Home for Adult Blind Contingent Fund.....	Sixty-fourth	22,778 88	18,268 32
Home for Adult Blind Contingent Fund.....	Sixty-fifth	22,039 95	19,711 67

TABLE 5—STATE INSTITUTIONS.  
Daily average number of inmates for the past eleven years.

Institution	1903 and 1904	1904 and 1905	1905 and 1906	1906 and 1907	1907 and 1908	1908 and 1909	1909 and 1910	1910 and 1911	1911 and 1912	1912 and 1913	1913 and 1914
San Quentin State Prison.....	1,485	1,510	1,544	1,570	1,620	1,730	1,803	1,906	1,803	1,902	1,960
Folsom State Prison.....	820	989	1,062	1,024	992	1,014	1,016	1,029	1,153	1,119	1,149
Total, state prisons.....	2,315	2,499	2,606	2,594	2,612	2,744	2,938	2,935	3,046	3,021	3,139
Preston School of Industry.....	116	163	203	209	202	361	393	391	391	406	510
Whittier State School.....	300	325	304	279	300	340	363	358	306	240	135
California School for Girls.....											34
Total, industrial schools.....	416	488	507	488	502	701	756	749	697	646	609
Stockton State Hospital.....	1,644	1,667	1,729	1,836	1,849	1,907	1,956	2,029	2,149	2,178	2,130
Napa State Hospital.....	1,471	1,482	1,505	1,592	1,690	1,802	1,850	1,913	2,029	2,059	2,023
Agnews State Hospital.....	1,034	1,045	1,005	752	718	706	694	738	861	1,020	1,320
Mendocino State Hospital.....	623	650	676	716	780	885	871	931	1,002	1,024	1,037
Southern California State Hospital.....	739	823	850	925	996	1,123	1,297	1,391	1,617	1,812	1,988
Total, state hospitals.....	5,511	5,667	5,765	5,821	6,033	6,373	6,668	7,002	7,658	8,093	8,498
Sonoma State Home.....	520	535	565	596	655	723	807	884	936	969	1,026
Industrial Home for the Adult Blind.....	129	112	110	106	110	110	110	113	110	107	113
Grand totals.....	8,891	9,301	9,563	9,605	10,002	10,651	11,250	11,683	12,447	12,836	10,675

TABLE 6—STATE INSTITUTIONS.  
Movement of Population, Year Ending June 30, 1913.

Institution	Number of inmates present July 1, 1912	Number temporarily absent July 1, 1912	Number received during year	Number passed out during year	Number present June 30, 1913	Number temporarily absent June 30, 1913	Daily average number present during year	Average number officers and employees during year
San Quentin State Prison	1,937	429	881	889	1,929	534	1,902.0	*122
Folsom State Prison	1,163	183	423	461	1,125	279	1,119.6	*30
Preston School of Industry	370	349	451	295	526	368	406.0	95
Whittier State School	285	356	283	434	134	338	240.0	68
Stockton State Hospital	2,178	294	804	798	2,184	332	2,178.0	255
Napa State Hospital	2,034	169	840	786	2,083	210	2,059.0	254
Agnews State Hospital	950	75	618	424	1,144	96	1,020.0	160
Mendocino State Hospital	1,011	77	465	426	1,050	9	1,024.1	125
Southern California State Hospital	1,718	157	1,399	1,188	1,929	220	1,812.0	191
Sonoma State Home	946	19	139	135	1,010	34	969.8	152
Industrial Home for Adult Blind	107	6	15	15	107	6	107.0	34
Grand totals	12,699	2,114	6,378	5,851	13,226	2,446	12,837.5	1,541

\*Five members Board of Prison Directors counted twice, except in grand total.

TABLE 7—STATE INSTITUTIONS.  
Movement of Population, Year Ending June 30, 1914.

Institution	Number present July 1, 1913	Number temporarily absent July 1, 1913	Number received during year	Number passed out during year	Number present June 30, 1914	Number temporarily absent June 30, 1914	Daily average number present during year	Average number officers and employees during year
San Quentin State Prison	1,929	534	1,078	798	2,299	573	1,890	130
Folsom State Prison <sup>2</sup>	1,125	192	426	400	1,151	256	1,149	91
Totals, state prisons	3,054	726	1,504	1,198	3,450	829	3,139	221
Preston School of Industry	596	368	382	408	540	329	510	88
Whittier State School	134	338	145	330	142	172	135	60
California School for Girls <sup>1</sup>	0	0	130	36	46	57	34	28
Totals, reform schools	690	706	657	774	687	558	679	176
Stockton State Hospital	2,188	353	1,128	1,189	2,127	411	2,130	263
Napa State Hospital	2,090	210	778	803	2,065	198	2,023	248
Agnews State Hospital	1,144	96	812	573	1,388	59	1,320	197
Mendocino State Hospital	1,051	9	373	350	1,060	14	1,037	133
Southern California State Hospital	1,929	220	1,469	1,305	2,083	74	1,988	239
Totals, state hospitals	8,402	880	4,560	4,220	8,718	760	8,498	1,083
Sonoma State Home	1,010	34	133	198	1,036	32	1,026	162
Industrial Home for Adult Blind	107	6	16	14	109	6	108	31
Grand totals	13,233	2,362	6,890	6,314	13,999	2,180	13,450	1,673

<sup>1</sup>Organized January 12, 1914.

<sup>2</sup>Prison figures do not check.



TABLE 8.

Counties. Population 1910, Jail and Hospital Population, Cost of Maintenance of Jails, Hospitals and Out-Relief for Last Two Fiscal Years.

1912-1913											1913-1914										
County	Population of county, 1910	1912-1913			1913-1914			Support of indigents	Hospital population <sup>1</sup>	Jail population <sup>1</sup>	Cost of maintenance, county hospital	Cost of maintenance, county jail	Support of indigents	Hospital population <sup>1</sup>	Jail population <sup>1</sup>	Cost of maintenance, county hospital	Cost of maintenance, county jail	Support of indigents			
Alameda	246,131	2,350	827	\$111,397 63	\$26,564 10	\$93,493 95	2,646	890	\$118,632 54	\$28,314 62	\$87,194 11										
Alpine	309					120 00		2			120 00										
Amador	9,086	125	31	7,409 00	340 85	2,550 00	103	67	7,925 00	628 75	2,675 00										
Butte	27,301	302	514	17,730 47	6,719 87	16,957 00	308	279	20,173 92	13											
Calaveras	9,171	122	40	11,228 03	600 64	3,564 51	135	33	10,566 09	358 60	2,989 99										
Colusa	7,732	141	62	9,104 38	910 75	4,853 33	136	42	8,451 73	466 65	6,004 00										
Contra Costa	31,674	526	368	21,117 87	5,027 15	17,512 80	540	139	24,719 33	5,580 30	18,570 05										
Del Norte	2,417	23	31	2,007 95	1,318 37	107 75	32	14	2,210 30	1,558 87	528 35										
El Dorado	7,492	110	41	9,338 20	229 50	4,383 48	124	14	128,979 17	386 00	4,273 20										
Fresno	75,657	1,453	3,831	65,687 97	15,194 40	17,277 39	1,527	4,813	65,908 41	16,115 68											
Glenn	7,172	126	82	7,668 95	1,332 07	2,996 25	109	50	11,697 78	1,345 26	5,345 85										
Humboldt	33,857	201	180	2,759 39	17,402 55	17,402 55	217	208	16,390 12	4,752 02	23,727 63										
Imperial	13,591		493	4,207 95		114,044 64		711		2,214 77	1,848 66										
Inyo	6,974	30	29	3,249 75	85 98	456 55	19	18													
Kern	37,715	758	1,483	19,064 87	12,429 41	6,536 83	547	1,726	33,015 53	10,215 98											
Kings	16,230	118	178	8,502 48	2,149 85	5,730 73	112	250	8,259 74	2,589 32	6,448 16										
Lake	5,526	11	6	2,094 17	40 75	257 55	17	14	2,684 83	169 15	365 16										
Lassen	4,802	34	65	5,565 00	1,285 33	1,708 25	64	88	6,005 00	1,950 20	2,127 98										
Los Angeles	504,131	210,174	3,164	237,645 38	49,357 83	72,274 29	211,426	3,805	243,741 53	48,926 93	91,203 74										
Madera	8,368	165	368	10,532 47	3,329 84	6,754 62	144	1,025	12,196 56	3,481 53	7,312 99										
Marin	25,114	69	265	8,257 48	1,805 73	4,897 00	702	277	10,989 50	2,712 40	7,283 99										
Mariposa	3,956	25	5	4,076 50		651 90	27	10	4,106 50	545 65	786 90										
Mendocino	23,929	195	205	12,241 92	6,197 43	6,255 03	222	227	13,202 69	7,201 11	9,669 35										
Merced	15,148	3220	424	319,396 42	4,212 92	6,443 38	8396	599	19,915 44	5,341 84	9,376 89										
Modoc	6,191	40	67	3,883 95	424 50	1,523 25	8	65	3,655 13	510 65	3,210 12										
Mono	2,042	13	36	2,172 75	310 25	440 25	14	19		451 55											
Monterey	24,146	141	462	11,529 49	2,964 12	24,058 18	104	378	12,199 67	3,420 72	12										
Napa	19,800	177	240	12,752 72	1,222 25	8,645 25	204	398	8,678 90	1,500 20	12										
Nevada	14,955	161	57	14,782 21	1,617 14	2,976 62	153	82	13,369 73	1,966 60	12										
Orange	34,436	131	843	5,597 74	12,067 99	24,969 45	8199	985	32,338 72	13,341 07	26,636 58										
Placer	18,237	417	522	20,876 28	3,500 90	13,854 47	439	478	19,575 91	3,512 60	12										
Plumas	5,259	88	42	8,549 74	344 75	2,363 30	123	29		429 75											
Riverside	34,696	370	233	19,386 99	2,123 82	18,357 34	338	442	24,546 21	2,727 23	18,419 96										
Sacramento	67,806	2,779	1,509	62,235 36	22,561 00	10,392 95	2,972	1,328	66,162 37	17,272 22	9,653 83										

San Benito	8,041	77	88	9,212 63	619 40	2,534 59	73	123	10,270 30	490 30	2,472 50
San Bernardino	56,706	1,823	1,098	66,984 67	15,680 89	24,987 85	1,191	1,216	52,205 11	21,610 40	32,430 75
San Diego	61,665	1,341	897	59,004 39	16,900 77	20,559 26	1,316	1,118	62,030 01	23,886 10	32,947 30
San Francisco	416,912	45,549	2,865	4319,465 90	88,490 09	10	45,728	3,433	337,875 15	80,781 36	10
San Joaquin	50,731	1,490	1,358	61,474 27	9,311 49	14,608 56	1,072	1,499	63,918 39	12	12
San Luis Obispo	19,383	164	544	7,722 41	2,573 51	12,859 18	162	403	25,410 09	2,975 35	12
San Mateo	26,385	134	309	19,803 31	2,303 00	6,579 95	149	378	26,176 80	5,743 76	12
Santa Barbara	27,738	241	322	23,363 36	4,869 82	20,306 70	260	407	28,419 30	5,723 55	22,703 42
Santa Clara	88,539	51,252	734	81,775 75	5,087 35	22,869 25	51,386	1,028	14,095 73	2,949 05	32,977 07
Santa Cruz	26,140	222	343	14,398 45	3,244 85	9,629 05	216	321	11,415 83	4,941 00	10,352 19
Shasta	18,920	158	110	20,231 93	1,303 79	4,170 00	170	154	4,318 67	2,617 35	964 16
Sierra	4,098	26	6	4,268 98	96 60	705 55	37	11	1,384 40	14,870 20	12
Siskiyou	18,801	151	120	17,722 29	2,273 15	15,010 00	159	101	18,966 18	6,980 15	12
Solano	27,559	235	394	14,983 92	11,392 29	1,577 90	205	458	13,875 54	12	12
Sonoma	48,394	382	634	34,446 68	5,258 00	23,153 38	540	611	512,487 04	2,519 02	8,358 51
Stanislaus	22,522	363	543	512,182 47	51,970 11	62,249 55	427	1,111	5,193 20	119 95	1,556 90
Sutter	6,398	78	53	4,744 80	147 85	1,213 80	92	33	7,389 66	124 00	12
Tehama	11,401	155	60	1,169 13	11,239 06	5,814 10	30	5	10,381 57	12	6
Trinity	3,301	29	4	7,707 48	41 45	15,830 37	212	504	13,473 51	18,209 88	12
Tulare	85,440	166	443	9,261 17	4,068 62	3,215 87	96	33	2,843 70	1,698 05	9,849 22
Tuolumne	9,979	104	41	6,099 01	905 07	7,926 95	219	426	9,590 60	4,262 33	4,839 97
Ventura	18,347	167	381	12,844 85	3,224 31	3,291 11	157	145	9,698 90		150 00
Yolo	13,926	140	231	8,560 57	2,705 95	3,477 25	282	206			
Yuba	10,042	195	137	9,751 14	2,493 67						
Incomplete totals	2,377,549	35,737	28,416	\$1,743,945 61	\$389,726 82	\$907,378 55	38,250	33,391	\$1,811,066 00	\$368,651 69	\$533,627 56

<sup>1</sup>Total population for the year.

<sup>2</sup>Includes Los Angeles Farm and Los Angeles Hospital.

<sup>3</sup>Includes Merced Hospital and Merced Branch Hospital.

<sup>4</sup>Includes San Francisco Relief Home and San Francisco City and County Hospitals.

<sup>5</sup>Includes Santa Clara Farm and Santa Clara Hospital.

<sup>6</sup>Figures included in maintenance for County Hospital.

<sup>7</sup>Includes Almshouse only. Hospital patients cared for in private hospital. No report on number.

<sup>8</sup>Incomplete.

<sup>9</sup>No figure available.

<sup>10</sup>San Francisco County grants no out-relief except for children. Following are the expenditures for children's relief: 1913, paid to orphanages, \$73,683.17;

1914, \$85,194.61; 1913, paid to three children's agencies, \$104,288.30; 1914, \$104,166.43. In addition to the above relief, the county has granted widows' pensions

since December, 1913, as follows: Total expenditures, \$40,561.25; total refund, \$1,762.50; charged against state (not yet refunded), \$27,265.63; cost to county,

as indicated above, \$11,583.12.

<sup>11</sup>Includes money paid to private hospital. No county hospital maintained.

<sup>12</sup>Failed to report either to the State Board of Charities and Corrections or to the State Controller.

TABLE 9—COUNTY JAILS.  
Population December 31, 1912.

Counties	Awaiting trial			Serving sentence			Sentenced to			All others		Total
	Men	Women	Children	Men	Women	Children	State prison	Reform school	Children	Men	Women	
Alameda	40	2		33	2		2	1				80
Alpine												
Amador												
Butte	6			17								23
Calaveras	3	1					1					5
Columbia	2			2								4
Contra Costa	5			15								20
Del Norte										1		1
El Dorado												
Fresno	23			37								60
Glenn	2			6								8
Humboldt	1			9			1				1	12
Imperial	9			2						1		12
Inyo							5			2		7
Kern	26			60						5		91
Kings				10								10
Lake												
Lassen	2			1								3
Los Angeles	197	3	3	62								265
Madera				13								13
Mariposa												
Marin	2			12			1	1				16
Mendocino	4			48			8		4	15	1	80
Merced				10								10
Modoc												
Mono												
Monterey	7		1	10			1			2		21
Napa	1			5								6
Nevada				5								5
Orange	14			41						1		56
Placer	2			22			1			1		26
Plumas				3								3
Riverside	8			12	1							21
Sacramento	18			96	7		33	1	15			170
San Benito	1			3						1		5
San Bernardino	23			54	1							78
San Diego	30			39			1					70
San Francisco	74	1		175	24		6					280
San Joaquin	17			46			2					65
San Luis Obispo	17			11								28
San Mateo	2			4								6
Santa Barbara	5			15						1		21
Santa Clara	11			45								56
Santa Cruz	6			9			2			1		18
Shasta	1			3								4
Sierra												
Siskiyou	2			7								9
Solano	3			14			1					18
Sonoma	4			10	1		1					16
Stanislaus	3			4			6					13
Sutter												
Tehama				5								5
Trinity												
Tulare	9			14						1		24
Tuolumne				2								2
Ventura	5			6						2		13
Yolo	2			22								24
Yuba	3			9								12
Totals	590	7	4	1,028	36		72	3	19	34	2	1,795

TABLE 10—COUNTY JAILS.

Population June 30, 1913.

Counties	Awaiting trial			Serving sentence			Sentenced to			All others		Total
	Men	Women	Children	Men	Women	Children	State prison	Reform school	Children	Men	Women	
Alameda	34	1		43	2		4					84
Alpine												
Amador	1											1
Butte	3		1	21								25
Calaveras												
Colusa	1			8			1		2			12
Contra Costa	5			25			9		1			40
Del Norte	2											2
El Dorado												
Fresno	15			34	3							52
Glenn	2			2			2			1		7
Humboldt	5			6								11
Imperial	4			10	2							16
Inyo				3								3
Kern	27	1		25								53
Kings	1	1		6								8
Lake												
Lassen	5			2						1		8
Los Angeles	144	15	7	92								258
Madera	1			10								11
Mariposa												
Marin	2			12								14
Mendocino	2			8		1				1		12
Merced	2			13								15
Modoc										1		1
Mono												
Mono Branch												
Monterey	5			5			4					14
Napa	7			4								11
Nevada	8	1										9
Orange	16			34								50
Placer	3			17								20
Plumas	2											2
Riverside	4			5								9
Sacramento	7			104	8					9		128
San Benito				5								5
San Bernardino	14			74	1		1					90
San Diego	18	4		41	3							66
San Francisco	73			204	17		10					304
San Joaquin	12	1		44	1		1					59
San Luis Obispo	3	1		8								12
San Mateo	10			3								13
Santa Barbara	1			12	2							15
Santa Clara	9			23								32
Santa Cruz	1			10					2			13
Shasta	6			3								9
Sierra	2											2
Siskiyou	5			5								10
Solano	7			14						1		22
Sonoma	5			6								11
Stanislaus	2			8								10
Sutter	1											1
Tehama				4								4
Trinity												
Tuolumne	1											1
Tulare	5			3								8
Ventura	5			5								10
Yolo				11								11
Yuba	3			11						1		15
Totals	491	25	8	983	39	1	32		5	15		1,599



TABLE 11—COUNTY JAILS.

Population December 31, 1913.

Counties	Awaiting trial			Serving sentence			Sentenced to			All others		Total
							State prison		Reform school			
	Men	Women	Children	Men	Women	Children	Men	Women	Children	Men	Women	
Alameda	51	3	3	41	3		4					105
Alpine												5
Amador	5											19
Butte	6	1		12								3
Calaveras	1			1						1		3
Colusa				3								3
Contra Costa	7			28			1					36
Del Norte										2		2
El Dorado												
Fresno	40	1		47			1			1		90
Glenn	2						3			2		7
Humboldt	3	1		18	1			1		1	1	26
Imperial	15	1		26					1	1		44
Inyo												
Kern	19	2		38								59
Kings	3			11								14
Lake												
Lassen	2			1								3
Los Angeles	140	5	7	91	2		2		1	2		250
Madera	5			15			1					21
Marin	6			8								14
Mariposa												
Mendocino	4			6						2		12
Merced	7			13								20
Modoc	2			2					1			5
Mono												
Monterey	8			6			4					18
Napa	3			9			1					13
Nevada				2								2
Orange	16			85	3				1			105
Placer	6			17								23
Plumas												
Riverside	7			12								19
Sacramento	25			102	3		38		6			174
San Benito				3								3
San Bernardino	20		1	57	1							79
San Diego	36	2	1	61	1		2		1	2		106
San Francisco	132	3		318	22		9	1				485
San Joaquin	41	1		51	3		1			2		99
San Luis Obispo	9			13								22
San Mateo	5			7			1			2		15
Santa Barbara	2			23	3							28
Santa Clara	16	1		53			1			1		72
Santa Cruz	3	1		5								9
Shasta	7			7			1					15
Sierra												
Siskiyou	1			3			1					5
Solano	4			36							1	41
Sonoma	8			13	1		3					25
Stanislaus	11			12								23
Sutter												
Tehama	1			6			1		1			9
Trinity	1											1
Tulare	9			3								12
Tuolumne				3								3
Ventura	3			5								8
Yolo	2			16								18
Yuba	5			21								26
Totals	699	22	12	1,310	43		75	2	12	19	2	2,196



TABLE 12—COUNTY JAILS.

Population June 30, 1914.

County	Awaiting trial			Serving sentence			Sentenced to			All others		Total
	Men	Women	Children	Men	Women	Children	State prison	Reform school	Children	Men	Women	
Alameda	27			57	1		6	1				92
Alpine												
Amador	3			1								4
Butte			1	13			1					15
Calaveras												
Colusa	2											2
Contra Costa	7			14								21
Del Norte				1								1
El Dorado	1											1
Fresno	17			26								43
Glenn	3			1								4
Humboldt	2			10			1				1	14
Imperial	4			14								18
Inyo												
Kern	16			33						1		50
Kings	4			13								17
Lake												
Lassen	3			2								5
Los Angeles	141	3		128	2		3			3		280
Madera	2			13								15
Mariposa												
Marin	3			4						1		8
Mendocino	2			17			1			1		21
Merced	1			14						1		16
Modoc				2								2
Monterey	1			8			3					12
Napa	2			5			2					9
Nevada	1											1
Orange	16	1		24	1							42
Placer	5			22						1		28
Plumas	4			3								7
Riverside	3			13	3							19
Sacramento	19		1	174	13		35		13	1		276
San Benito												
San Bernardino	14			88	3							105
San Diego	27	2	1	48	2		1					81
San Francisco	95	5		206	22		12	2				342
San Joaquin	20			31	2							53
San Luis Obispo				11						1		12
San Mateo	1			4								5
Santa Barbara				21	1							22
Santa Clara	7			39	1		2					49
Santa Cruz	4			11	1		1					17
Shasta	3			9								12
Sierra												
Siskiyou	2			3								5
Solano	5			11	1					1		18
Sonoma	5			23	1		2			1		32
Stanislaus	9			8								17
Sutter	1											1
Tehama	1			5								6
Trinity				1						1		2
Tuolumne	5											5
Tulare	6						1		1	1		9
Ventura	4			4								8
Yolo	3			3								6
Yuba				21			2					23
Totals	501	11	3	1,159	54		72	4	14	14	1	1,833

TABLE 13—COUNTY JAILS.  
Movement of population June 30, 1912, to June 30, 1913.

County	In jail June 30, 1912	Received during year	Total for year	Sent to state prison	Sent to reform school	Served sentence in jail	Not indicted	Released on habeas corpus	Released on probation	Acquitted	Escaped	Died	Insane, sent to state hospital	Otherwise passed out	Total passed out	In jail June 30, 1913
Alameda	92	735	827	175	33	141	14	1	102	37		1	6	293	743	81
Alpine	None															
Amador	2	29	31	2	1	5	9		2	1			2	7	30	1
Butte	32	482	514	21	14	410			10			1	21	12	489	25
Calaveras	4	36	40	5		13	8		2				7	5	40	
Colusa	4	58	62	6		12			8	3			5	16	50	12
Contra Costa	14	354	368	9	1	156			4	1			4	150	328	40
Del Norte	2	29	31	3	1	10	4		4	1		1	3	2	29	2
El Dorado	41		41			18	3		1	5			12	2	41	
Fresno	53	3,778	3,831	36	12	963	91		24	2,085	20		59	489	3,779	52
Glenn	8	74	82	6		25		1	1	21			6	11	75	7
Humboldt	6	174	180	10	3	55	52		1	7			34	7	169	11
Imperial	14	479	493	14	3	156	141	1	16	14	3		4	125	477	16
Inyo	4	25	29	5		8	2		2	1			3	5	26	8
Kern	53	1,430	1,483	21	1	245	886	7	19	6	14	2	24	155	1,430	53
Kings	7	171	178	3		46			1	1			12	108	170	8
Lake		6	6		2								3		6	
Lassen	3	62	65	2		24	7		5	4			5	10	57	8
Los Angeles	200	2,904	3,104	225	117	1,140	30	15	90	825		2		462	2,906	258
Madera	8	360	368	3		125			2	5	2		4	216	357	11
Mariposa	1	4	5						1					4	5	
Marin	8	257	265	4		110	10		3	5			6	113	251	14
Mendocino	5	200	205	15	5	117	26		3	3			10	14	193	12
Merced	10	412	422	2		108	265		4		1	1	16	10	407	15
Modoc		67	67	7	3	8			4		1		6	38	67	
Mono		13	13			7			1					5	13	
Mono Branch	2	21	23			5	10			1				7	23	
Monterey	24	438	462	7	5	141	1		5	2	3	1	20	263	448	14
Napa	9	231	240	2		110			87	4			24	2	229	11
Nevada	4	53	57	3	1	9				2		1	9	23	48	9
Orange	39	804	843	23	10	343	70	2	91	103	4		41	106	793	30
Placer	15	507	522	13	3	368	78		5	1			11	23	502	20
Plumas		42	42	6		7	10		4	3				5	40	2

	9	254	233	5	81	55	6	2	2	31	24	224	9
Riverside	127	1,382	1,500	22	26	622	22	2	2	108	545	1,381	198
Sacramento	1	87	88	56	1	59	2			3	18	83	5
San Benito	63	1,035	1,098	31	13	646	91	5	6	16	167	1,068	94
San Bernardino	82	815	897	30	20	240	43	3	74	19	352	881	465
San Diego	284	2,581	2,865	189	15	1,677	71	170	91	5	315	2,556	240
San Francisco	60	1,298	1,558	61	2	919	197	5	3	5	104	1,299	59
San Joaquin	10	534	544	3	2	506	2			16	3	522	12
San Luis Obispo	11	298	309	6	7	175	29	1	8	7	6	286	13
San Mateo	15	307	322	7		196	43	1	9	14	34	397	15
Santa Barbara	54	680	734	31	3	220	189	1	15	66	146	702	32
Santa Clara	19	324	343	18	2	168	15	1	13	21	89	330	13
Santa Cruz	8	102	110	1	1	16	46	1	3	18	14	161	9
Shasta				2			1			1		4	2
Sierra		6	6	2									
Siskiyou	11	109	120	7		39	17		4	19	13	110	10
Solano	22	372	394	17	4	298	19	2	5	30	5	372	22
Sonoma	11	623	634	14	1	255	76		3	32	210	623	11
Stanislaus	18	525	543	7		56			2	467	533	525	10
Sutter			53	4		3	22		1	4	18	52	1
Tehama	12	48	60	5		43	2		1	3	2	56	4
Trinity	1	3	4						1	1	2	4	
Tuolumne	2	39	41	3		12				1	25	40	1
Tulare	14	429	443	20	7	89	1	8	2	12	305	435	8
Ventura	9	372	381	16	4	57	17			18	250	371	10
Yolo	10	221	231	14	2	166	12	2	8	9	5	220	11
Yuba	17	120	137	15	2	58	3	3	2	5	36	122	15
Totals	1,553	26,863	28,416	1,191	332	11,597	2,558	115	963	3,341	5,812	26,813	1,635

TABLE 14—COUNTY JAILS.  
Movement of population, year ending June 30, 1914.

County	In Jail July 1, 1913	Received during year	Total for year	Sent to state prison	Sent to reform school	Served sentence in jail	Not indicted	Released on habeas corpus	Released on probation	Acquitted	Escaped	Died	Insane, sent to state hospital	Otherwise passed out	Total passed out	In jail June 30, 1914
Alameda	84	806	890	99	39	167	21	6	95	26	3	1	1	340	798	92
Alpine		2							1					1	2	
Amador	1	66	67	4		8	13		4	4			10	20	63	4
Butte	25	254	279	17	2	158			8		3		19	55	264	15
Calaveras		33	33	3		5	7		1	2			12	3	33	
Colusa	12	30	42	5	3	10			6				2	14	40	2
Contra Costa	39	100	139	5					5	1			2	105	118	21
Del Norte	2	42	44	9		15	6	4	5				1	2	43	1
El Dorado		14	14			7	2		3	1					13	1
Fresno	52	4,761	4,813	42	17	981		3	73	3,157	19	1	81	396	4,770	43
Glenn		43	50	1		15	12		2	4			7	5	46	4
Humboldt	11	197	208	17		115	14		4	3			29	12	194	14
Inyo	3	15	18	1	1	1	2		4				3	5	18	
Imperial	16	695	711	39	5	87	207		13	11	7	1	13	310	693	18
Kern	52	1,674	1,726	29	5	190	1,002		36	3	8		30	373	1,676	50
Kings	8	242	250	7	6	55			3	10			5	147	233	17
Lake		14	14	2	1	3				1			7		14	
Lassen	8	80	88	8		19	9		3	6			4	34	83	5
Los Angeles	258	3,697	3,865	283	88	443	527	4	291	169	4	4	22	1,750	3,585	280
Madera	11	1,014	1,025	6		708			3	2	2		13	276	1,010	15
Marin	8	269	277	7	2	168			11	13		1	21	46	269	8
Mariposa		10	10				6						4		10	
Mendocino	12	215	227	12	1	133			8	2		1	18	31	206	21
Merced	15	584	599	9	2	157	380		4	1	3		12	15	583	16
Modoc	1	64	65	4	29	10			6				5	9	63	2
Mono		19	19			1	2							16	19	
Monterey	14	364	378	7	6	89	17		15	3	1	2	17	209	366	12
Napa	11	387	398	11	2	104			210	25			33	4	389	9
Nevada	9	73	82	6	1	25			1	3		1	10	34	81	1
Orange	50	935	985	15	4	503	56	1	129	90	8		25	112	943	42
Placer	20	458	478	19	1	401	23	1					5		450	28
Plumas	2	27	29	3					5	1					22	7
Riverside	9	433	442	39	6	156			4	1		1	60	156	423	19

Sacramento	128	1,200	1,328	92	27	464	193	5	16	9	2	91	347	1,246	82
San Benito	5	118	123	---	1	50	---	---	1	---	1	3	67	123	---
San Bernardino	90	1,120	1,210	27	4	766	84	---	46	6	7	9	126	1,105	105
San Diego	66	1,052	1,118	53	21	323	48	3	41	20	2	---	326	1,037	81
San Francisco	81	3,120	3,433	297	21	1,842	---	11	218	67	22	5	677	3,091	342
San Joaquin	59	1,440	1,499	135	2	215	---	---	---	---	1	1	1,002	1,446	53
San Luis Obispo	12	391	403	6	2	109	---	3	2	---	---	8	261	391	12
San Mateo	13	365	378	5	1	185	20	---	21	114	---	9	18	373	5
Santa Barbara	15	392	407	10	1	269	3	1	6	---	7	---	73	385	22
Santa Clara	36	992	1,028	23	1	237	116	1	3	6	1	1	535	979	49
Santa Cruz	13	306	321	13	3	197	---	---	15	---	1	1	57	304	17
Shasta	9	145	154	10	---	25	22	---	11	2	1	1	52	142	12
Sierra	2	9	11	---	---	3	---	---	---	2	---	5	1	11	---
Siskiyou	10	91	101	13	3	34	16	---	---	1	1	---	17	96	5
Solano	25	433	458	8	3	328	---	---	42	2	6	1	34	440	18
Sonoma	11	600	611	17	6	350	---	---	20	5	---	34	137	579	32
Stanislaus	10	1,101	1,111	8	2	62	---	1	12	10	3	---	983	1,094	17
Sutter	1	32	33	4	---	2	11	---	3	---	---	1	14	32	1
Tehama	4	54	58	4	1	30	5	---	3	---	1	5	3	52	6
Trinity	---	5	5	---	---	---	---	---	1	---	---	2	---	3	2
Tulare	8	496	504	13	3	75	29	---	12	---	---	11	352	495	9
Tuolumne	1	52	53	---	---	13	---	---	3	---	---	---	27	48	5
Ventura	10	416	426	20	1	49	---	---	18	10	4	---	301	418	8
Yolo	11	134	145	6	3	78	21	---	14	---	---	14	3	139	6
Yuba	15	191	206	17	3	64	2	1	13	9	3	1	60	183	23
Totals	1,607	31,784	33,391	1,405	330	10,494	2,877	45	1,482	3,805	116	29	846	31,732	1,659



TABLE 15—COST OF MAINTENANCE OF COUNTY JAILS.  
Fiscal year ending June 30, 1913.

County	Board*	Clothing*	Tobacco*	Ordinary repairs	Other expenses	Salaries†	Total	Permanent improvements
Alameda	\$4,254 84	\$444 38		\$714 18	\$4,970 70	\$16,200 00	\$26,564 10	
Alpine								
Amador	202 75	13 65		34 45			340 85	
Butte							Failed to report	
Calaveras							Failed to report	
Colusa	583 60	567 11			327 15		910 75	
Contra Costa	2,761 84	80 00	\$50 30	167 07	1,608 20		5,027 15	
Del Norte	700 00		2 50		7 00	314 00	1,318 37	
El Dorado	227 00						229 50	
Fresno	7,414 05	580 35			1,800 00	5,400 00	15,194 40	\$85,222 63
Glenn	1,202 25	149 82					1,352 07	
Humboldt	1,751 00			166 84	841 75		2,759 59	
Imperial							Failed to report	
Inyo							Failed to report	
Kern	8,679 41			150 00		3,600 00	12,429 41	
Kings	1,243 85	6 00				900 00	2,149 85	
Lake	11 50						40 75	
Lassen				28 50	75		Failed to report	
Los Angeles								
Madera *	18,711 48	2,371 60	232 78	981 79	6,134 62	20,925 56	49,357 83	
Marin	1,909 60	190 00	10 00	58 37	981 87	180 00	3,329 84	
Mariposa							Failed to report	
Mendocino	1,979 49	47 40	8 75	3 25	158 58	3,999 96	6,197 43	
Merced	2,363 65	344 20		82 98	177 69	1,245 00	4,212 92	
Modoc	336 55	39 40	4 80	43 85			424 50	
Mono	56 25	4 00	1 00			240 00	301 25	
Monterey	2,000 96	447 26		105 50	411 40		2,964 12	250 25
Napa	1,046 50	25 75		150 00			1,222 25	
Nevada							Failed to report	
Orange	6,809 85	223 30		244 06	1,810 78	2,980 00	12,067 99	14,609 47
Placer	2,876 00	346 40	14 50	84 00		180 00	3,500 90	
Plumas							344 75	
Riverside	1,275 35	26 85		56 15	765 17		2,133 52	
Sacramento	14,283 51	256 90			2,787 82	3,960 00	22,591 60	1,303 67
San Benito	462 40	25 00	12 00		130 00		619 40	
San Bernardino							Failed to report	
San Diego	8,919 69			942 90	2,050 10	4,988 08	16,900 77	77,572 04

San Francisco	33,845 61	3,361 37	482 96	50 00	7,959 15	42,600 00	88,499 09	Failed to report
San Joaquin							Failed to report	
San Luis Obispo							Failed to report	
San Mateo		35 00		15 00	50 00	100 00	2,393 00	33 00
Santa Barbara	2,103 00	173 70			1,935 62		4,899 82	1,118 00
Santa Clara	3,460 50	297 05		686 30	2,094 70		5,087 35	
Santa Cruz	2,069 30	203 00		47 00	492 00		3,244 85	
Shasta	2,459 90	33 25	41 75			212 00	1,393 59	
Sierra	1,122 54		26 00				96 00	
Siskiyou	96 00						2,273 15	
Solano	2,242 90	11 05	19 20				Failed to report	
Sonoma	3,181 00	459 59	61 25	118 32	682 94	755 00	5,258 00	
Stanislaus	1,894 75	86 96	47 65	25 75	8 00		1,570 11	
Stutter	120 60		1 75		25 50		147 85	
Tehama							Failed to report	
Trinity	30 40	2 85	1 20	4 50	2 50		41 45	
Tulare							Failed to report	
Tuolumne							Failed to report	
Ventura	2,159 50	91 05	27 25	296 99	679 52		3,294 31	
Yolo	2,577 20	153 00	65 15				2,795 95	
Yuba	2,419 67			84 00			2,493 07	

\*Refers to amounts spent to furnish these to prisoners and includes kitchen help.  
 †Exclusive of kitchen help.

TABLE 16—COST OF MAINTENANCE OF COUNTY JAILS.  
Fiscal year ending June 30, 1914.

County	Board*	Clothing*	Tobacco*	Ordinary repairs	Other expenses	Salaries†	Total	Permanent improvements
Alameda	\$4,452 17	\$301 65		\$792 11	\$4,168 69	\$18,400 00	\$28,314 62	
Alpine	472 00			6 75		150 00	628 75	Failed to report
Anaador							Failed to report	Failed to report
Butte							466 65	Failed to report
Calaveras							Failed to report	Failed to report
Colusa	324 40				142 25		Failed to report	Failed to report
Contra Costa							386 00	Failed to report
Del Norte							16,115 48	Failed to report
El Dorado	379 50	2 50	\$4 00			5,400 00	1,345 26	Failed to report
Fresno	7,801 10	506 58		500 33	1,817 47		4,752 02	Failed to report
Gleam	1,236 83	97 35	11 05	79 49	1,820 03		Failed to report	Failed to report
Humboldt	2,852 50						Failed to report	Failed to report
Imperial							Failed to report	Failed to report
Inyo							Failed to report	Failed to report
Kern	7,528 59	20 00		150 00		3,600 00	10,215 98	Failed to report
Kings	1,397 32	7 00		85 00		1,100 00	2,589 32	Failed to report
Lake	162 65	3 50			3 00		169 15	Failed to report
Lassen							Failed to report	Failed to report
Los Angeles	22,220 80	2,219 28	233 82	3,397 07	4,825 96	15,780 00	48,926 93	Failed to report
Madera	2,378 05	180 10	12 00	180 48	550 90	180 00	3,481 53	Failed to report
Marin							Failed to report	Failed to report
Marijosa							Failed to report	Failed to report
Mendocino	2,924 25	107 25	36 30	43 73	149 62	3,999 96	7,261 11	Failed to report
Merced	3,215 95	603 49		76 80	130 60	1,215 00	5,341 84	Failed to report
Modoc	481 85	23 80	5 00				510 65	Failed to report
Mono	71 00	7 25	3 00		130 30	240 00	451 55	Failed to report
Monterey							Failed to report	Failed to report
Napa	354 10	30 50		175 60			1,560 20	Failed to report
Nevada							Failed to report	Failed to report
Orange	7,188 84	438 77		361 31	1,762 15	3,560 00	13,341 07	Failed to report
Placer	3,013 12	248 50	18 00	53 00		180 00	3,512 60	Failed to report
Plumas	420 75						420 75	Failed to report
Riverside	1,847 75	24 05		239 87	613 56		2,725 23	Failed to report
Sacramento							Failed to report	Failed to report
San Benito	456 80	20 00	13 50				490 30	Failed to report
San Bernardino							Failed to report	Failed to report
San Diego	11,028 66	247 40		1,174 38	1,327 13	10,108 53	23,886 10	Failed to report

San Francisco	30,439 34	4,905 00	545 03	75 00	0,111 70	42,000 00	80,781 36	Failed to report	71 80
San Joaquin	2,401 00	23 45		4 85	547 35		2,975 35	Failed to report	32 95
San Luis Obispo	2,373 75	50 00		25 00	100 00		2,566 75	Failed to report	35 00
San Mateo	3,710 18	190 00		227 02	1,615 96		5,743 76	Failed to report	
Santa Barbara	2,307 40	433 15		179 50	2,783 80		5,723 55	Failed to report	
Santa Clara	2,004 00	140 25	34 05	123 00	408 75		2,800 05	Failed to report	
Santa Cruz	1,902 85	38 50	27 00	4 00		585 00	2,617 35	Failed to report	
Shasta	301 00	10 00					371 00	Failed to report	
Sierra	1,323 50	8 05	62 25				1,381 40	Failed to report	
Siskiyou							0,980 13	Failed to report	
Solano	3,245 05	324 70	58 15	194 14	1,509 61	1,567 89	2,519 02	Failed to report	
Sonoma	2,300 97	83 95	51 30	76 55	6 25		119 95	Failed to report	
Stanislaus	111 20	4 75	1 50		2 50		124 90	Failed to report	
Sutter								Failed to report	
Tehama								Failed to report	
Trinity	90 85	17 70	2 35	3 50	4 50			Failed to report	
Tulare								Failed to report	
Tuolumne	1,916 15	151 20	38 40	351 50	336 45		2,843 70	Failed to report	
Ventura	1,470 20	152 35	75 50				1,698 05	Failed to report	
Yolo	2,951 20	189 61	21 61	301 20	738 72		4,202 33	Failed to report	
Yuba								Failed to report	

\*Refers to amounts spent to furnish these to prisoners and includes kitchen help.  
†Exclusive of kitchen help.







TABLE 18—COUNTY HOSPITALS.  
Population June 30, 1913.

County	Hospital				Custodial								Totals		Grand total
	Pay patients		Charity patients		Under 5 years		5 to 16 years		16 to 50 years		50 to 60 years		Over 60 years		
	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	
Alameda			122	66			45	10	44	11	140	45	351	132	483
Amador							2		1		25	1	28	1	29
Butte	1		16						8	2	30	3	35	5	60
Calaveras	4	2	9						1		26	4	40	6	46
Colusa			13	3											16
Contra Costa	5	1	26	8			1		3		9		22	3	25
Del Norte			1								24	6	59	15	74
El Dorado	1		4				1	1	1		10	1	12	1	13
Fresno	3	1	94	46			1	1	20		49		57	1	58
Glenn			13	1					1		33	8	151	56	207
Humboldt	1	2							6	2	7	1	21	2	23
Inyo											58	12	66	16	82
Kern			32	2					3		8	1	8	1	9
Kings											20		55	2	57
Lake								1	5		6		12		12
Lassen								1			4		5		5
Los Angeles Farm									2		8		10		10
Los Angeles Hospital								15	31	15	204	26	250	47	297
Madera	4	2	437	170			15	1	9	3	13	7	478	183	661
Marin			7	5			1		3		15	1	26	6	32
Mariposa								2	2	3	24	1	29	5	34
Mendocino	3		7	1					2		11		13		13
Merced	3	2	6		1		2	3	5	4	40		58	4	62
Merced Branch			5				1		4				14	2	16
Modoc									2		3		10		10
Mono											11	1	11	1	12
Monterey			6						1		8		9		9
Napa			7	2			2		5		25		38		38
Nevada							1	1			41	7	52	10	62
Orange	1		9	1			3	1	5	2	32	2	50	6	56
Placer							3			1	6		9	1	10
Plumas	4						16	3	14	2	41	5	71	10	81
							1		1		15		21		21

Riverside	4	5	17	3		1			60	3	33	5	16	3	37	14	51
Sacramento			95	26									21	11	210	42	232
San Benito	1	1	4	1					6	1	3		16	3	30	6	36
San Bernardino	2	2	68	16					4	2	6	1	23	1	105	22	127
San Diego			77	17	2				13	1	14	2	61	14	167	34	201
San Francisco			266	84											266	84	350
Home for Aged									80	31	145	71	708	234	928	386	1,261
San Joaquin			92	16	2	1			12		14	3	18	10	139	29	168
San Luis Obispo	1			1							17	1	10		28	2	30
San Mateo									2	2	7		32		41	2	43
Santa Barbara			5						7		7	1	27	13	46	14	60
Santa Clara	3	7	67	22						4	2	2	20	33	92	68	169
Santa Clara Farm									54		30		70		154		154
Santa Cruz		2			1				1	2	5	1	69	7	77	13	90
Shasta			11	1							1		39		52	1	53
Sierra									1		1		14		16		16
Siskiyou			2								4		46	4	52	4	58
Solano	1		8						4		4	1	21	11	38	12	50
Sonoma			39	10							6		41	6	87	16	103
Stanislaus			14	2	1	1				1			20	1	36	7	42
Sutter			8										8		18		18
Tehama	1		8						1		1		20	1	34	2	36
Trinity											3	1	14		15		15
Tuolumne			3						3		1	2	13		20	2	22
Tulare			10						4		2	1	13		29	1	30
Ventura			4	1					1				9	2	14	3	17
Yolo			4									1	19	3	24	4	28
Yuba	1		28	1						3	5		4		38	4	42
Totals	44	27	1,644	506	7	1	12	3	366	78	498	134	2,313	480	4,884	1,288	6,122



San Benito	1	1	10	2	13					1				18	3	22	30	5	35
San Bernardino	1	1	141	22	165									39	1	52	191	25	217
San Diego	3		89	14	106					14	3			56	12	94	169	31	200
San Francisco Hospital			283	74	357												283	74	357
San Francisco Home for Aged																	943	326	1,269
San Joaquin	1	1	177	29	208	1	1	1						769	237	1,269	222	40	262
San Luis Obispo			13	1	14					2	1			17		19	32	1	33
San Mateo										9	2			33		52	50	2	52
Santa Barbara			11	2	13					3				31	14	60	57	16	73
Santa Clara Hospital	5	5	74	9	93					3	5			12	23	52	98	47	145
Santa Clara Farm			193		193					40				90		160	193	169	253
Santa Cruz		1	1		2					3	2			43	4	63	52	13	65
Shasta																			
Sierra	1		6	1	7					6				38	1	45	50	2	52
Siskiyou										1				18	1	20	20	1	21
Solano	1		10	3	14					4	1			45	4	55	60	5	65
Sonoma			10	6						1				20	11	37	36	15	51
Stanislaus			31	6	37									59	5	66	92	11	103
Sutter			25	3	28					4				25		33	57	4	61
Tehama			22	1	23					6				14		23	44	2	46
Trinity	1	2	16		19					1				20	1	24	40	3	43
Tulare														16		16	16		16
Tuolumne										5				25		30	30		30
Ventura			14	1	15					6	1			14		23	22	1	23
Yolo														15	2	18	30	3	33
Yuba			29	3	32					5	1			19	3	28	24	4	28
										9				16		26	54	4	58
Totals	48	18	2,363	512	2,642	21	8	10	5	316	76	490	113	2,672	504	4,215	5,760	1,397	7,157





Plumas*	14	16	16	14	2	39	46	46
Riverside	1	3	8	1	3	9	10	15
Sacramento								46
San Benito	1	2	81	27	95	81	27	211
San Bernardino	1	3	60	1	21	3	1	25
San Diego	1	3	75	16	32	61	11	127
San Francisco								177
Hospital								
Relief Home								
San Luis Obispo								
San Joaquin	1	1	144	21	1	145	22	39
San Mateo								258
Santa Barbara								48
Santa Clara	1		12	7	32	14	38	45
Farm								21
Hospital	7	3	85	18	80	92	21	105
Santa Cruz								155
Shasta								8
Sierra								43
Siskiyou								1
Solano	1	2	12	2	39	5	12	4
Sonoma	1	3	26	6	20	12	11	6
Stanislaus								73
Sutter								19
Tehama	10	32	39	6	17	2	22	4
Trinity								7
Tulare								14
Tuolumne*								14
Ventura	1		9					19
Yolo								34
Yuba								32
Totals	79	67	2,032	568	3	3	3	31
								26
								46
								6,899

\*This report does not agree with report of movement of population.

TABLE 21—COUNTY HOSPITALS.  
Movement of population for fiscal year ending June 30, 1913.

Countries	Number inmates July 1, 1912	Number received during year	Total for year	Discharged	Runaways	Died	Sent to state institutions	Sent to other counties	Sent out of state	Total passed out	Number inmates June 30, 1913
Alameda	487	1,863	2,350	1,585		282				1,867	483
Amador	37	88	125	71		20	5			96	29
Butte	56	246	302	207		33		1	1	242	60
Calaveras	43	79	122	57	2	15	2			76	46
Colusa	26	115	141	105	1	9		1		116	25
Contra Costa	70	456	526	399		53				432	74
Del Norte	9	14	23	8		1	1			10	13
El Dorado	51	59	110	35		16	1			52	58
Fresno	190	1,263	1,453	1,084		153	6	1	2	1,246	207
Glenn	20	106	126	88		11		3	1	103	23
Humboldt	86	115	201	90		27	2			119	82
Inyo	12	18	30	10		11				21	9
Kern	51	707	758	643		58				701	57
Kings	14	104	118	85		21				106	12
Lake	5	6	11	5			1			6	5
Lassen	11	23	34	21		3				24	10
Los Angeles Farm	263	372	635	321		17				338	297
Los Angeles Hospital	555	8,984	9,539	7,121		1,046	689	5	37	8,878	661
Madera	33	132	165	103		19	4	6	1	133	82
Marin	33	36	69	23		11	1			35	34
Mariposa	13	12	25	11		1				13	13
Mendocino	57	138	195	84		32	2	15		133	62
Merced	14	126	140	101		14	9			124	16
Merced Branch	5	75	80	70						70	10
Modoc	7	33	40	25		2				28	12
Mono	9	4	13	2		1		1		4	9
Monterey	38	103	141	82		20	1			103	38
Napa	55	122	177	89	2	15	6	3		115	62
Nevada	61	100	161	69	5	31				105	56
Orange	14	117	131	98		18	3	3	2	121	10
Placer	70	347	417	277		55		1		336	81
Plumas	19	69	88	52		15				67	21
Riverside	44	326	370	262	2	44	4	4	3	319	51
Sacramento	217	2,562	2,779	2,285		242				2,527	252
San Benito	24	53	77	33		8				41	36
San Bernardino	152	1,171	1,323	1,004	5	126	36	23	2	1,146	127
San Diego	191	1,150	1,341	917	3	147	54	16	3	1,140	201

San Francisco	325	3,290	3,625	2,721	42	493	19	---	---	---	3,275	359
San Francisco Home for Aged	1,283	631	1,924	400	25	224	11	---	---	---	669	1,264
San Joaquin	186	1,304	1,490	1,184	---	138	---	---	---	---	1,322	168
San Luis Obispo	30	134	164	113	---	21	---	---	---	---	134	30
San Mateo	37	97	134	68	2	20	1	---	---	---	91	43
Santa Barbara	68	173	241	100	33	30	17	---	---	---	181	60
Santa Clara Farm	160	90	270	90	---	16	---	---	---	1	96	154
Santa Clara Hospital	139	863	1,002	686	---	146	---	---	---	---	842	160
Santa Cruz	80	142	222	114	---	18	---	---	---	---	132	90
Shasta	42	116	158	82	---	20	3	---	---	---	105	53
Sierra	13	13	26	8	---	2	---	---	---	---	10	16
Siskiyou	56	95	151	64	---	29	1	---	---	1	95	56
Solano	53	182	235	148	---	35	2	---	---	---	185	50
Sonoma	110	272	382	208	2	69	---	---	---	---	279	103
Stanislaus	43	320	363	284	---	25	11	---	---	---	320	43
Sutter	12	66	78	56	---	4	---	---	---	---	60	18
Tehama	35	120	155	98	---	16	---	---	---	---	119	36
Trinity	16	13	29	11	---	3	5	---	---	---	14	15
Tulare	26	140	166	124	---	12	---	---	---	---	136	30
Tuolumne	40	64	104	33	---	35	7	---	---	1	82	22
Ventura	25	142	167	125	---	24	---	---	---	1	130	17
Yolo	27	113	140	87	11	9	3	---	---	---	112	28
Yuba	45	150	195	132	---	18	1	---	---	---	153	42
Totals	5,903	29,884	35,737	24,458	135	3,984	866	116	56	---	29,615	6,122

TABLE 22—COUNTY HOSPITALS.

Movement of population July 1, 1913, to June 30, 1914.

Counties	No. of inmates July 1, 1913.	No. received dur- ing year.	Total for year.	Discharged.	Runaways.	Died.	Sent to state institutions.	Sent to other counties.	Sent out of state.	Total passed out.	No. of inmates June 30, 1914.
Alameda	483	2,163	2,646	1,756		279				2,035	611
Amador	29	74	103	49	3	13	1			66	37
Butte	60	248	308	213		34				247	61
Calaveras	46	89	135	54	3	28	1			86	49
Colusa	25	111	136	97		13		2		112	24
Contra Costa	74	466	540	414		52				466	74
Del Norte	13	19	32	11		2	1	1		15	17
El Dorado	58	66	124	45		23	3			71	53
Fresno	207	1,320	1,527	1,169		148	6	2		1,325	202
Glenn	23	86	109	76		10				86	23
Humboldt	82	135	217	98		40				138	79
Inyo	9	10	19	4		3	1			8	11
Kern	57	490	547	436		54				490	57
Kings	10	102	112	85	1	13	2	1	1	103	9
Lake	5	12	17	8		4				12	5
Lassen	10	54	64	40		9	1		2	52	12
Los Angeles Farm	297	445	742	332		16				348	334
Los Angeles Hospital	661	10,023	10,664	8,080		1,095	651	3	24	9,853	831
Madera	32	112	144	88		13	3	3		107	37
Marin	34	28	62	18		4	2			24	38
Mariposa	13	14	27	7		3	1			11	16
Mendocino	62	160	222	126		19	12	1	3	161	61
Merced	16	272	288	198		33	7			238	50
Merced Branch	10	98	108	85	8	3		3		99	9
Modoc <sup>1</sup>	12										10
Mono	9	5	14	2	2	6		1	1	12	2
Monterey	38	128	166	102		23	1			126	40
Napa	62	142	204	106		22	8	3		139	65
Nevada	56	97	153	80		27	2			109	44
Orange <sup>2</sup>	38	161	199	102	5	25		4	2	138	61
Placer	82	357	439	270		37	2			309	130
Plumas	21	102	123	59		22				81	42
Riverside	51	287	338	251	3	30	5	2	1	292	46
Sacramento	252	2,720	2,972	2,465		249				2,714	258
San Benito	36	37	73	26		18		1		45	28
San Bernardino	127	1,064	1,191	874	8	151	22	8	1	1,064	127
San Diego	201	1,115	1,316	932		141	63	3		1,139	177
San Francisco—											
Hospital	350	3,438	3,788	2,922	5	489	33			3,449	339
Relief Home	1,264	676	1,940	375	23	183	11	14		606	1,334
San Luis Obispo	30	132	162	113		12	1			126	36
San Joaquin	168	1,504	1,672	1,312		132				1,444	228
San Mateo	43	106	149	87		14				101	48
Santa Barbara	60	200	260	110	37	29		12	1	189	71
Santa Clara Farm <sup>3</sup>	154	203	357	207		7				214	165
Santa Clara Hospital	160	819	979	685		139				824	155
Santa Cruz	90	126	216	123		24				147	69
Shasta	53	117	170	93		29	5			127	43
Sierra	16	21	37	14		4				18	19
Siskiyou	56	103	159	65		19	1		1	86	73
Solano	50	155	205	121		25	2			148	57
Sonoma	103	437	540	386	1	59	3			449	91
Stanislaus	43	384	427	330		27	18	2		377	50
Sutter	18	74	92	74		4				78	14
Tehama <sup>4</sup>	36										96

<sup>1</sup>Report incomplete.<sup>2</sup>Report incorrect.<sup>3</sup>Original records deficient. Error could not be located.<sup>4</sup>Records incomplete on account of change in management.



TABLE 22—COUNTY HOSPITALS—Continued.

Movement of population July 1, 1913, to June 30, 1914.

Counties	No. of inmates July 1, 1913.	No. received dur- ing year	Total for year	Discharged	Removals	Died	Sent to state institutions	Sent to other counties	Sent out of state	Total passed out.	No. of inmates June 30, 1914.
Trinity	15	15	30	5		5	1			11	19
Tulare	30	182	212	148		28	2			178	34
Tuolumne	22	74	96	37		19	5	6	1	68	28
Ventura	17	202	219	160		18	10			188	31
Yolo	28	129	157	104		27				131	26
Yuba	42	240	282	101	6	29	6	4		236	46
Totals <sup>a</sup>	6,149	32,149	38,250	26,420	105	3,984	893	76	38	31,516	6,862

<sup>a</sup>Incomplete.

TABLE 23—DEFECTIVES

December

Counties	Blind				Deaf				Feeble-minded		
	Under 16	16 to 50	50 to 60	Over 60	Under 16	16 to 50	50 to 60	Over 60	Under 16	16 to 50	50 to 60
Alameda		2	1	8			2	6		2	4
Amador								1		2	1
Butte								3			
Calaveras			1	4							
Colusa				1							1
Contra Costa				2							
Del Norte				1							
El Dorado			2	1						1	
Fresno				3						2	5
Glenn											
Humboldt				4							
Inyo								1			
Kern				4							
Kings		4	1	7							
Lake		1		4							
Lassen				1							
Los Angeles Hospital		2		5		5				2	4
Los Angeles Farm		1	3	4				7		10	5
Madera				1							
Marin			1	1						1	
Mariposa				1							
Mendocino			2	1				3			
Merced			1								
Merced Branch											
Modoc											
Mono											
Monterey			1	3							
Napa										1	
Nevada			1	2						1	
Placer		2						1			
Plumas											
Riverside				1						1	1
Sacramento			2	3			1	3			
San Benito				2				1			
San Bernardino			2	4				6		2	
San Diego				4				2		1	1
San Francisco Hospital											
San Francisco Home for Aged		18	13	17		1	2	11		40	41
San Joaquin			1	1						1	
San Luis Obispo			3					1			
San Mateo											
Santa Barbara				1		1		2		3	
Santa Clara Hospital				1							
Santa Clara Farm			5				2				5
Santa Cruz				2				5			
Shasta				1				3			
Sierra				2							
Siskiyou				1				1			
Solano				3				1			
Sonoma			1	1				2		1	
Stanislaus				1							
Sutter				2							
Tehama				1							
Trinity				1							
Tulare											
Tuolumne								1			
Ventura				1							
Yolo				1					2		
Yuba											3
Totals		31	41	112		7	7	61	2	71	72

IN COUNTY HOSPITALS.  
31, 1912.

													Totals		Grand totals
Epileptic				Crippled				Consumptive					Male	Female	
Over 60	Under 16	16 to 50	50 to 60	Over 60	Under 16	16 to 50	50 to 60	Over 60	Under 16	16 to 50	50 to 60	Over 60			
14		5	5	1	1	6	2	1	1	44	15	8	88	40	128
1								16			2	1	19	4	23
1						1		2					3	2	5
5								13		1	2		25	4	29
1						1		1					5		5
2				1	1	2	3	1			1		10	3	13
								5					3	1	4
						1	1	8		1			14	2	16
13		2	1	1		10				24			47	14	61
					1	4	1	4					8	2	10
	1		1					10			1		11	6	17
1								3				2	7		7
3				1				4		5			17		17
													12		12
						1							6		6
													2		2
5			1		1	11	13	23	2	125	22	20	203	38	241
51		1		1		4	4	13	2				56	32	88
			1								1		3		3
2						1							5	1	6
							2						6		6
2						2				1			12		12
								1		2	1		5		5
							1						1		1
				1				2					3		3
				1				1					6		6
		1						2					3	1	4
4		1	1			3	4	8		2			23	4	27
1			1			6					3		12	2	14
1							1			1	1		3	1	4
										5			5	4	9
		1				10	4	15			9	9	58	6	64
1				1			4	4		1	1		13	2	15
1		1				14		8		18	5	2	55	9	64
8		1		1		7	4	10		13	7	5	46	13	64
													147	18	165
83		4	9	11		53	32	102					305	125	430
		1	1			3	6			20	3	2	43	4	47
							5			2			11		11
						1		1		1			3		3
8		1				2	4	15		1	1		29	10	39
							3			8			10	2	12
5							20	1			2		40		40
3							2				1		12	1	13
3				1				3					11		11
2								1					5		5
8										2			12		12
18								9				1	25	7	32
2		1				2		8		2	9		23	2	25
						1					1		3		3
						1	1						4		4
1													2		2
													1		1
1						1	2	5					9		9
1								4				1	7	1	8
					1	1		6					8	1	9
1							3	6					11	2	13
6		1								3	4	2	14	5	19
243	1	21	15	22	5	149	123	326	3	289	85	53	1,530	374	1,904

TABLE 24—DEFECTIVES

June

Counties	Blind				Deaf				Feeble-minded		
	Under 16	16 to 50	50 to 60	Over 60	Under 16	16 to 50	50 to 60	Over 60	Under 16	16 to 50	50 to 60
Alameda		2	2	7			2	4		2	1
Amador											1
Butte									2		
Calaveras			1	3				2			
Colusa				1							
Contra Costa			1					1	1		1
Del Norte				1							
El Dorado			2	4							
Fresno				4						2	2
Glenn											
Humboldt			1					2			
Inyo				1							
Kern				4							
Kings		1	4	1				1			
Lake											
Lassen				1							2
Los Angeles Hospital		1		2	1			3	1	1	
Los Angeles Farm		1	2	3				7		8	15
Madera				2				1			
Marin		2									3
Mariposa				1							
Mendocino			2	1				2			3
Merced			1								
Merced Branch											1
Modoc											
Mono											
Monterey		1		2							
Napa				1		1	1	2			
Nevada			1	1							
Orange											
Placer			2				1				1
Plumas				1							
Riverside										3	
Sacramento			2	2		1	3	3			
San Benito				2				1			
San Bernardino				3				1		1	2
San Diego				7				1		1	18
San Francisco Hospital											
San Francisco Home for Aged		4	27	18			5	8		4	77
San Joaquin		1	2					2			
San Luis Obispo				2				1			
San Mateo											
Santa Barbara				1				2			
Santa Clara Hospital			1	2			1	1		1	
Santa Clara Farm			6				4				4
Santa Cruz				2				3			1
Shasta				2				2			
Sierra				2							
Siskiyou											
Solano				3				1			
Sonoma		1		3			2				2
Stanislaus				3				1		1	
Sutter				2							
Tehama			1				1	1			
Trinity				2							
Tulare								2		1	
Tuolumne			1	1							
Ventura				1							
Yolo				1				2			
Yuba			2				8	2		1	4
Totals		14	61	100	1	2	28	59	4	26	139

## IN COUNTY HOSPITALS.

30, 1913.

Epileptic					Crippled					Consumptive					Totals		Grand Totals
Over 60	Under 16	16 to 50	50 to 60	Over 60	Under 16	16 to 50	50 to 60	Over 60	Under 16	16 to 50	50 to 60	Over 60	Male	Female			
5		5	1	1		4	2	7	1	38	14	11	77	32	106		
							1	8		1			10	1	11		
									2				2	2	4		
2								9		1	2		16	4	20		
								2					3		3		
2				1		2	2	3	1				11	4	15		
								2					2	1	3		
			1	2			1	3		2			14	1	15		
11			4	1				7		25			45	11	56		
		1			1	1						1	4		4		
4			1					5					11	2	13		
2								4					7		7		
2				1				14				4	24	1	25		
1								3				1	12		12		
							1	1					5		5		
7		5		1	1	14	9	17		96	18	29	167	40	207		
28		1	1	1		3	11	11					56	36	92		
2							1						1	5	6		
													6	1	7		
1								2					4		4		
		1				3		2		2			15	1	16		
							3						4		4		
1							1						3		3		
				1				1				1	9		9		
6								1					4		4		
1			1	1				8				1	14	3	17		
						2	1	7		1	1		12	2	14		
1								5		3	1		9	1	10		
						3	2	1			1		10	1	11		
								1		2			4		4		
				1					6				7	3	10		
						4	5	11	1	5	5	4	41	5	46		
1				1			1	6		3	1		14	2	16		
				1		5	4	7		22	7	1	48	6	54		
		1	1			3	7	5		9	3	4	45	15	60		
									(no age)			127	114	13	127		
105		3	11	4		12	105	86					318	151	469		
			2			5				7			17	2	19		
1				3							1		8		8		
					2				1				3		3		
11						2	1	17				1	25	11	36		
					1	4	3	15	2	18			28	21	49		
			1				10				2		27		27		
							1	4		1		1	10	3	13		
1				1				3					9		9		
													2		2		
3													3		3		
23								16		2			38	12	45		
2		1				2		3		3			17	2	19		
1						1							6	1	7		
						1	1			1	1		6		6		
													2	1	3		
													2		2		
1						2	2	2		2			12		12		
							1	1					2	2	4		
		2		6									8	1	9		
1								8		1			11	2	13		
							3						19	1	20		
226		20	24	27	5	73	179	308	14	245	58	188	1,402	399	1,801		



TABLE 25—DEFECTIVES IN COUNTY HOSPITALS.

December 31, 1913.

County	Blind		Deaf		Fren- tled minded		Epileptic		Crippled		Consump- tive	
	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
Alameda	9	4	6	2	8	4	8	6	18	11	73	12
Amador			4		1				1		4	
Butte						4			2	2		
Calaveras	3		2						8	2	1	
Colusa	1								3			
Contra Costa	2			2	5	1	1		2			
Del Norte	1									1		
El Dorado	6	1				1	2		6	1		
Fresno	2	1			14	3	3		7	1	13	1
Glenn									1		1	1
Humboldt	2			1	1	1	1		3	2		
Inyo	1										1	
Kern	4			1	2		1		10		9	
Kings									1		1	
Lake												
Lassen	1								1		1	
Los Angeles Farm	9	2	3	2	38	27	2	3	31	5		
Los Angeles Hospital	1	2	8	3	19	2	3	2	78	17	169	13
Madera	1			1	3	1					1	
Marin	3				1				3		2	
Mariposa	2				2				3			
Mendocino	3		4		2				5		2	
Merced	1				3	1			1		2	
Merced Branch					1				1			
Modoc									1			
Mono			1						1		1	
Monterey	5								7			
Napa	1		3	1	3	1		2	7	4		
Nevada	2	1			2				10	1	1	
Orange												
Placer	2		2		1	1			2	2	2	
Plumas	2											
Riverside	1				1	3		1		1	1	4
Sacramento	4		7	1					24	3	22	1
San Benito	2	1	1	1		1	1		9		4	1
San Bernardino	2	1									20	1
San Diego	4	1			5	7	2		15	2	17	
San Francisco Hospital												
San Francisco Hospital for Aged	38	7	16	9	106	64	14	6	156	64		
San Joaquin	3		2					1	6		13	2
San Luis Obispo	1		1						2			1
San Mateo							1		4			
Santa Barbara			2	2	5	3			17	4	3	1
Santa Clara Hospital		1				2	1	1	19	11	13	6
Santa Clara Farm	5		5		5				18			
Santa Cruz	2		1		3	2			2		2	
Shasta	2		2		3		1		2			
Sierra	2								1			
Siskiyou			2	1	1						2	1
Solano	2	1	1		12	5			7			
Sonoma	2	1	2		2	1	1		6	1	2	
Stanislaus	2				1				3		3	
Sutter	2								2		1	
Tehama	1				3							
Trinity	2											
Tulare			2		2				9		1	
Tuolumne	1	1			1				4		1	
Ventura	3			1	1		1		5	1		
Yolo	2				1	1			11	2		
Yuba	1	1	6		11		1		4		1	
Grand totals	148	26	84	28	269	136	44	22	539	138	390	45

TABLE 26—DEFECTIVES IN COUNTY HOSPITALS.

June 30, 1914.

County	Blind		Deaf		Feeble-minded		Epileptic		Crippled		Consumptive	
	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
Alameda	8	4	10	2	8	4	7	6	18	10	71	15
Amador	1		4			1	1		2		5	
Butte		1		1		2					2	
Calaveras	5		3		1				3		3	
Colusa	1				1				4			
Contra Costa	1			1	2	1	1		2	1	3	1
Del Norte	1									2		
El Dorado	6	1					1		3	1		
Fresno	3	2			14	4	4		6	2	26	2
Glenn									6	2		
Humboldt	2				2		1		5	4		
Inyo	1					2					1	
Imperial					2						2	
Kern	4		1		3		1		9		4	
Kings											1	
Lake												
Lassen	1				2				3			
Los Angeles Farm	7	2	3	1	40	28	2	5	35	6		
Los Angeles Hospital	4	1	17	1	21	5	3	1	54	25	173	27
Madera	1			1								
Marin	3		1		3				2			
Mariposa	1				2				2			
Mendocino	3		3		6				5		4	
Merced	1		1						6		1	
Merced Branch												
Modoc									1			
Mono					1						1	
Monterey	4								6		1	
Napa	2		4		3		2		8			
Nevada	2	1			3	2	10	1				
Orange							1		3		1	
Placer	1		1		1	1			5	2	1	
Plumas	1											
Riverside	1		1		3						1	
Sacramento	4	1	5	1			1		21	6	15	2
San Benito	2				1		1		7			1
San Bernardino	1	1			2	3			48	2	17	1
San Diego	4	1			5	7	2		14	1	14	1
San Francisco Hospital	3								11	2		
San Francisco Home for Aged	32	7	10	10	120	59	14	6	146	55		
San Joaquin	2								4			
San Luis Obispo	2		3						1			
San Mateo												
Santa Barbara			1	1	6	6			7	6	1	3
Santa Clara Hospital			1	1		2			17	9	17	3
Santa Clara Farm	3				2				11			
Santa Cruz	2		1						2	1		
Shasta	2		2				1		2			
Sierra	2											
Siskiyou	1				1						1	
Solano	2	1			6	6			6			
Sonoma	3	1	1	1	1	1	1		2		1	
Stanislaus	5				1				1		1	
Sutter	1								1		2	
Tehama	1				5	3					3	
Trinity		2										
Tulare			3		3				6			1
Tuolumne	2	1							2		1	
Ventura	2		2	2			6		2	1		
Yolo	1		2		1	1			8	2		
Yuba	1	1	9		2				9			
Totals	141	28	91	23	276	136	60	19	516	140	374	57

TABLE 27.—COST OF MAINTENANCE OF COUNTY HOSPITALS.  
Fiscal year ending June 30, 1913.

County	Food	Drugs	Clothing	Tobacco	Fuel, light and water	Farm expenses	Ordinary repairs	Other expenses	Salaries	Totals <sup>1</sup>	Permanent improvements
Alameda	\$42,915 36	\$3,838 68	\$1,772 39	\$988 43	\$7,170 68	\$8,379 10	\$4,419 08	\$13,492 61	\$28,423 40	\$11,397 03	\$11,585 79
Amador	1,840 00	300 00	224 00	180 00	840 00	1,120 00	245 00	350 00	2,210 00	7,409 00	2,280 00
Butte	6,789 73	943 30	273 58	276 00	2,185 95	733 00	284 73	753 88	5,490 50	17,730 47	
Calaveras	2,565 00	329 62	1,485 00	223 80	920 61	250 00	758 00	556 00	4,140 00	11,228 03	600 00
Colusa	3,034 71	348 21	396 67	180 00	783 54	947 30	253 00	100 75	3,060 00	9,104 38	611 85
Contra Costa	6,645 47	2,069 84	39 02	127 69	1,887 46	1,228 32	195 01	1,828 78	7,106 25	21,117 87	1,402 28
Del Norte	316 89	10 25	38 79	48 03	19 80	147 50	139 24	297 45	990 00	2,007 95	13 00
El Dorado										Failed to report	
Fresno	25,423 00	6,780 74	2,884 80	327 24	4,443 44	6,104 62	802 92	3,662 32	15,258 89	65,687 97	862 50
Glenn	3,382 57	1,875 51	367 38	111 00	306 50		86 00		1,450 00	7,668 96	1,588 08
Humboldt	6,222 28	706 65	760 37	359 81	1,565 20	689 00	349 39	1,077 40	5,401 76	17,131 86	54 00
Inyo										Failed to report	
Kern	6,546 92	1,084 90	330 90		2,468 70	786 40		1,381 35	7,272 10	19,064 87	5,312 49
Kings		400 49			608 53			3,893 76	2,663 30	8,502 48	
Lake <sup>2</sup>										2,694 17	
Lassen	2,000 00	240 00	200 00	25 00	350 00		100 00	150 00	2,500 00	5,565 00	
Los Angeles Hospital	96,657 97	21,905 30	647 21		20,784 97		24,268 92	35,006 90	98,607 04	297,873 31	242,780 90
Los Angeles Farm										Failed to report	
Madera	3,831 47	719 61	350 00	184 60	473 13	542 81		454 85	3,976 00	10,532 47	1,086 20
Marin	2,348 55	385 25	522 25	311 74	692 13	819 35	95 26	662 95	2,420 48	8,257 48	1,050 00
Mariposa <sup>3</sup>	3,360 00			52 50	55 00		9 00		600 00	4,076 50	
Mendocino	3,752 93	1,017 50	377 05	186 57	1,431 15	541 33	611 37	839 03	3,485 00	12,241 93	249 01
Merced	3,183 20	1,390 06	160 57	1,145 38	2,614 25	274 35	274 12	1,914 26	5,402 16	16,358 33	2,114 31
Merced Branch	1,300 69		50 00	45 00	16 75	4 00	20 10	41 55	1,560 00	3,038 09	
Modoc	1,833 78	120 00	308 00	60 00			181 17	781 00	600 00	3,883 95	
Mono										Failed to report	
Monterey	2,970 64	151 95	545 90	72 76	289 13	1,419 90	1,250 92	2,068 29	2,730 00	11,529 49	
Napa										Failed to report	
Nevada	4,051 39	287 76	170 30	108 78	1,253 42	2,301 29	200 00	1,429 07	4,980 00	14,782 21	125 00
Orange	1,302 73	1,221 21	52 15		239 88			131 77	2,650 00	5,597 74	35,428 91
Placer										Failed to report	
Plumas										Failed to report	
Riverside	4,029 73	1,075 12	339 43		2,263 20	708 76	2,055 28	1,562 32	7,281 15	19,386 99	9,441 43
Sacramento	20,429 06	5,213 79	712 75	318 86	5,677 16	2,165 57	2,941 71	4,805 51	19,970 95	62,235 36	1,454 38
San Benito										Failed to report	
San Bernardino	24,585 44	9,919 56	3,352 20		3,563 77	1,648 34	2,647 65	4,536 08	16,731 63	66,984 67	903 28
San Diego	16,805 92	5,371 21	1,744 43	360 23	4,196 69		1,061 08	10,632 09	19,373 14	59,604 39	3,077 30

San Francisco—	45,797 43	13,693 11		4,223 12		549 30	12,953 23	58,869 65	134,215 89
Hospital	80,747 63	1,978 90	8,518 64	2,497 65	873 41	6,637 01	16,238 39	63,450 00	185,250 01
Relief Home	14,813 91	4,618 58	1,873 14	504 92	4,780 81	5,790 07	3,768 63	20,176 30	61,474 27
San Joaquin									Failed to report
San Luis Obispo									Failed to report
San Mateo	3,938 74	1,221 85	15 60	263 96	2,342 37	161 46	7,029 25	3,779 75	19,883 31
Santa Barbara	8,035 66	1,545 90	1,008 55	255 00	191 92	731 54	2,677 93	7,147 13	23,366 86
Santa Clara Hospital	12,168 80	3,110 35	375 30	91 50	604 15	3,074 90	9,384 50	8,209 70	43,441 45
Santa Clara Farm	12,381 70	1,344 80	2,402 40	1,214 55	3,119 85	4,280 15	3,871 70	4,883 65	38,334 30
Santa Cruz	4,368 55	410 50	1,468 15	210 50	537 60	77 20	3,715 45	2,551 95	14,398 45
Shasta	3,846 83	786 51				189 13	962 90	4,785 85	11,089 35
Sierra	1,200 73	23 40	133 05	40 00	137 55	51 10	384 75	1,895 00	4,268 58
Siskiyou	6,138 97	267 28	276 30	302 00	251 00	186 20	1,620 95	7,119 15	17,722 29
Solano	5,099 40	686 98	413 58	50 00	560 00	765 00	1,659 31	5,050 65	14,963 92
Sonoma									Failed to report
Stanislaus <sup>1</sup>	2,711 25	521 94	148 51	183 10	810 87	66 41	1,432 16	5,100 00	12,182 47
Sutter <sup>2</sup>	4,162 80			102 00				480 00	4,744 80
Tehama									Failed to report
Trinity <sup>3</sup>	4,182 27	262 75	214 93	114 72	90 37	103 37	676 07	1,500 00	7,707 48
Tulare	3,187 42	766 35	520 00	140 00		302 00	928 60	2,750 00	9,261 17
Tuolumne	2,072 07	277 19	169 65	172 10		40 00	120 00	2,700 00	6,099 01
Ventura <sup>5</sup>		858 25	154 80	103 80		282 73	9,577 22	1,200 00	12,844 35
Yolo	2,018 46	88 11	266 87		488 55	625 87	238 25	3,575 59	8,500 57
Yuba	3,198 72	945 13	198 65	200 16	466 56	176 47	248 00	3,060 00	9,751 14
									1,600 25

<sup>1</sup>Exclusive of permanent improvements.

<sup>2</sup>Patients cared for on contract at a stated sum per head.

<sup>3</sup>Superintendent receives \$280 per month and furnishes food and clothing. Doctor gets \$50 per month and furnishes medicines.

<sup>4</sup>Report is for calendar year ending December 31, 1912.

<sup>5</sup>Institution operated on contract basis.

<sup>6</sup>Includes cost of outrelief.



TABLE 28—COST OF MAINTENANCE OF COUNTY HOSPITALS.  
Fiscal year ending June 30, 1914.

County	Food	Drugs	Clothing	Tobacco	Fuel, light and water	Farm expenses	Ordinary repairs	Other expenses	Salaries	Totals*	Permanent improvements
Alameda	\$48,055 95	\$3,006 08	\$2,272 90	\$1,122 40	\$6,568 03	\$6,140 05	\$1,885 12	\$16,830 61	\$32,751 40	\$118,632 54	\$7,773 55
Amador	1,675 00	355 00	310 00	185 00	870 00	1,000 00	420 00	700 00	2,410 00	7,925 00	1,125 00
Butte	6,567 69	929 56	258 85	275 00	2,816 77	1,188 21	459 01	1,981 83	5,699 00	20,173 92	1,200 00
Calaveras	2,746 00	243 82	895 41	230 40	213 55	165 00	210 15	881 91	4,390 00	10,506 09	700 00
Colusa	2,000 33	671 20	595 50	202 60	768 65	251 15	210 15	272 15	3,490 00	8,451 73	461 10
Contra Costa	8,237 04	2,641 15	196 55	162 63	1,875 96	1,185 61	253 69	2,337 70	7,834 40	24,719 33	
Del Norte	532 60	14 75	53 68	53 92	11 15	122 50	121 43	310 27	990 00	2,210 30	17 00
El Dorado										Failed to report	
Fresno	21,049 68	6,368 34	1,254 04	369 47	1,898 85	5,100 05	1,173 05	5,435 29	23,310 63	65,998 41	3,918 92
Glenn	5,267 65	1,840 00	468 00	96 00	488 75		656 58		2,880 80	11,697 78	
Humboldt	5,482 76	687 35	592 32	347 78	1,545 57	683 75	270 47	1,359 32	5,490 80	16,390 12	1,434 72
Inyo											
Kern	7,001 57	1,432 80	464 45	48 00	2,099 07	922 50	1,833 49	10,113 50	10,022 65	33,015 53	602 71
Kings	1,445 50	437 16	350 00		391 09			1,738 49	3,075 00	8,259 74	
Lake <sup>1</sup>										2,684 83	
Lassen	2,000 00	240 00	200 00	25 00	350 00		105 00	205 00	2,880 00	6,005 00	
Los Angeles Hospital	108,490 03	18,260 52	727 25		21,411 49		13,990 84	39,433 86	116,126 46	318,640 45	247,763 73
Los Angeles Farm	27,864 71	1,286 02	3,346 71	927 63	15,489 18	33,938 37	4,546 27	16,972 97	14,333 02	118,774 88	33,637 69
Madera	3,834 80	710 79	475 52	169 97	902 80	981 30	717 44	479 04	2,924 90	12,176 56	833 35
Marin	4,152 42	441 05	698 26	156 38	470 49	1,026 10	415 26	1,169 54	2,460 00	10,989 50	36,862 08
Mariposa <sup>2</sup>	3,360 00			54 00	61 00		19 50	12 00	600 00	4,106 50	
Mendocino	4,389 34	978 41	366 41	237 47	1,471 74	679 12	418 16	1,009 04	3,653 00	13,202 69	1,037 89
Merced	4,256 19	1,245 59	333 88	1,359 84	1,183 79	141 50	1,074 86	1,463 22	5,691 50	16,750 37	554 00
Merced Branch	1,352 97		60 00	55 00	15 55	21 00	20 00	78 55	1,590 00	3,163 07	
Modoc	2,506 18	120 00	196 00		37 50	8 50		186 95	600 00	3,635 13	263 80
Mono										Failed to report	
Monterey	3,395 53	235 90	592 62	83 72	465 94	1,322 05	151 35	397 20	5,585 36	12,199 67	
Napa	3,517 23		177 40	139 55	480 10	64 25	99 15	316 22	3,885 00	8,678 90	100 65
Nevada	3,004 13	269 30	75 00	111 30	1,211 20	2,032 52	150 00	306 25	4,980 25	13,369 73	1,542 50
Orange	1,498 89	1,499 43	401 47		80 71	25,649 45		358 77	2,850 00	32,338 72	34,714 71
Placer										Failed to report	
Plumas										Failed to report	
Riverside	4,856 32	4,356 52	435 71		2,259 63	1,212 35	5,053 27	1,133 86	8,956 00	24,546 21	389 00
Sacramento	23,253 02	6,380 69	639 50	325 25	6,624 42	2,061 69	1,275 02	4,017 33	21,585 45	66,162 37	300 00
San Benito										Failed to report	
San Bernardino	18,667 94	7,167 49	2,508 60		3,396 96	730 28	1,382 83	2,537 17	15,723 82	52,205 11	1,485 50
San Diego	18,502 63	3,918 32	751 23	370 20	3,864 98		1,860 87	9,770 62	22,991 11	62,030 01	1,631 57



San Francisco—	51,054 31	14,648 87	9,906 81	2,339 48	690 84	12,237 86	57,507 95	138,439 31
Hospital	80,207 04	1,897 36	2,282 06	17,709 26	8,117 38	12,533 07	65,077 00	190,455 84
Relief Home	14,799 12	3,717 89	1,994 80	5,590 89	5,805 23	4,710 00	20,065 40	63,918 39
San Joaquin								Failed to report
San Luis Obispo	4,368 23	1,178 72	14 65	1,230 30	155 60	12,040 03	4,743 66	25,410 09
San Mateo	8,413 81	1,493 65	1,171 86	1,619 15	206 59	3,309 67	8,467 18	26,176 89
Santa Barbara	11,367 50	2,174 50	558 85	5,802 05	2,366 85	13,177 14	7,492 60	45,638 50
Santa Clara Hospital	12,544 45	833 90	1,959 45	3,250 95	3,452 20	4,553 85	4,849 50	10,162 20
Santa Clara Farm	4,074 13	375 55	1,138 15	189 90	488 25	4,232 95	2,682 00	34,789 80
Santa Cruz	4,219 06	789 09		288 80		111 95	2,682 00	14,095 73
Shasta	1,229 10	36 60	127 65	311 50	106 50	482 55	4,824 70	10,888 89
Sierra	5,854 56	177 93	773 43	946 85	417 71	406 32	1,820 00	4,318 67
Siskiyou	4,890 50	654 90	395 75	775 00	576 40	1,460 42	7,774 00	18,990 18
Solano						1,622 07	4,829 38	13,875 54
Sonoma	2,698 52	432 47	159 47	1,655 35	971 22	1,127 91	5,130 00	12,487 04
Stanislaus <sup>a</sup>	54,156 20		102 00		355 00	100 00	480 00	5,133 20
Sutter <sup>b</sup>								Failed to report
Tehama								Failed to report
Trinity <sup>c</sup>	4,278 57	219 95	205 70	448 53	28 50	738 41	1,540 00	7,589 66
Tulare	3,152 97	919 27	500 00	604 90	342 19	1,343 74	3,370 00	10,381 57
Tuolumne	1,106 76	283 68	206 60	560 00	22 00	75 00	2,690 00	5,233 84
Ventura <sup>d</sup>		761 10	160 25	640 25	1,311 29	9,275 42	1,200 00	13,473 51
Yolo	2,852 47	103 35	230 15	1,604 04	384 40	696 42	3,546 82	9,590 60
Yuba	3,217 80	1,601 14	342 70	1,197 40	200 00	345 00	3,065 40	9,608 90
								1,126 90

<sup>a</sup>Exclusive of permanent improvements.

<sup>b</sup>Patients cared for on contract with superintendent at stated sum per head.

<sup>c</sup>Superintendent receives \$290 per month and furnishes food and clothing.

<sup>d</sup>Calendar year ends December 31, 1913.

<sup>e</sup>Includes outrelief.

<sup>f</sup>Contract each at 20c per meal.

<sup>g</sup>Hospital run on contract with superintendent.

Doctor receives \$50 per month and furnishes medicines.

TABLE 29—COST OF RELIEF OF INDIGENTS OUTSIDE OF COUNTY HOSPITALS.

Fiscal year ending June 30, 1913.

County	Aid to or- phans (less refund from state)	Drugs and medical attention	Groceries, clothing, etc.	Cash allowance	Other aid	Total expenditure
Alameda						
Alpine				\$120 00		\$120 00
Amador				2,550 00		2,550 00
Butte	Failed to re port.					
Calaveras	Failed to re port.					
Colusa	Failed to re port.					
Contra Costa			\$3,712 80	13,632 00	\$168 00	17,512 80
Del Norte			107 75			107 75
El Dorado	\$1,436 68		2,946 80			4,383 48
Fresno	1,746 06	\$133 75	3,562 53	7,650 65	4,184 40	17,277 39
Glenn				2,996 25		2,996 25
Humboldt	1,510 13	316 70	7,400 90	7,282 00	892 82	17,402 55
Imperial	Failed to re port.					
Inyo	Failed to re port.					
Kern	Failed to re port.					
Kings	533 65	259 70	4,287 28	650 00		5,730 73
Lake				257 55		257 55
Lassen			1,708 25			1,708 25
Los Angeles	382 45	664 56	27,907 72	26,716 47	16,603 09	72,274 29
Madera	1,169 60	165 00			5,420 02	6,754 62
Marin		1,106 55	3,142 45	648 00		4,897 00
Mariposa					651 50	651 50
Mendocino	1,590 96	73 50	1,880 17	2,023 75	686 65	6,255 03
Merced	688 33	215 75	363 80	5,063 50	112 00	6,443 38
Modoc		120 00	983 25	420 00		1,523 25
Mono	Failed to re port.					
Monterey	731 68	402 45	16,020 70	1,312 00	4,991 35	24,058 18
Napa	Failed to re port.					
Nevada	Failed to re port.					
Orange		82 85	5,608 59	7,683 25	479 78	13,854 47
Plumas	Failed to re port.					
Riverside			10,523 71	5,348 00	2,485 63	18,357 34
Sacramento	1,493 79	264 71	2,669 54		5,964 91	10,392 95
San Benito	Failed to re port.					
San Bernardino		328 90	10,867 52	12,253 86	1,517 57	24,967 85
San Diego	579 18	1,129 58	13,389 13		5,491 37	20,589 26
San Francisco	175,682 77					175,682 77
San Joaquin	Failed to re port.					
San Luis Obispo	Failed to re port.					
San Mateo	Failed to re port.					
Santa Barbara	2,425 51	3,103 48	3,712 77	9,807 74	1,257 20	20,306 67
Santa Clara	5,665 76	680 15	16,513 34			22,859 25
Santa Cruz	1,334 27	74 15	3,650 05	2,752 50	1,818 75	9,629 72
Shasta	Failed to re port.					
Sierra		21 90	684 55			705 55
Siskiyou	Failed to re port.					
Solano	Failed to re port.					
Sonoma	Failed to re port.					
Stanislaus	1,934 40	8 50	219 15	87 50		2,249 55
Sutter	83 80				1,130 00	1,213 80
Tehama	Failed to re port.					
Trinity	Failed to re port.					
Tulare	1,052 25	140 65	1,010 39	13,183 68	444 00	15,830 37
Tuolumne	Failed to re port.					
Ventura	377 17	55 00	401 28	6,078 00	1,015 50	7,926 95
Yolo	Failed to re port.					
Yuba	No out relief.					

TABLE 30—COST OF RELIEF TO INDIGENTS OUTSIDE OF COUNTY HOSPITALS.

Fiscal year ending June 30, 1914.

County	Aid to or- phans (less refund from state)	Drugs and medical attention	Groceries, clothing, etc.	Cash allowance	Other aid	Total expenditure
Alameda						\$87,194 11
Alpine				\$120 00		120 00
Amador				2,675 00		2,675 00
Butte	Failed to re port.					
Calaveras	Failed to re port.					
Colusa	Failed to re port.					
Contra Costa	Failed to re port.					
Del Norte	\$285 50		\$217 85	25 00		528 35
El Dorado	1,495 84		2,777 36			4,273 20
Fresno		\$296 00	3,921 67	10,161 75	\$3,211 20	17,590 62
Glenn		18 00	501 10	3,026 75		5,545 85
Humboldt	4,851 97	295 25	8,480 40	7,098 00	3,002 01	23,727 63
Inyo	Failed to re port.					
Kern	Failed to re port.					
Kings	1,169 25	247 80	4,276 11	755 00		6,448 16
Lake				365 16		365 16
Lassen	20 36		2,107 62			2,127 98
Los Angeles	2,134 39	486 04	26,035 43	30,193 82	22,355 06	91,203 74
Madera	1,512 08	245 00	1,292 31	4,207 10	56 50	7,312 99
Marin	754 39	2,796 00	2,983 60	750 00		7,283 99
Mariposa					786 90	786 90
Mendocino	2,984 60	50 90	3,281 10	2,832 50	520 25	9,669 35
Merced	1,574 25	100 00	1,007 64	6,049 00	646 00	9,376 89
Modoc		854 00	1,492 12	864 00		3,210 12
Mono	No out relief					
Monterey	Failed to re port.					
Napa	Failed to re port.					
Nevada	Failed to re port.					
Orange		1,234 70	20,311 38	3,745 75	1,344 40	26,636 58
Placer	Failed to re port.					
Plumas	Failed to re port.					
Riverside			11,255 51	5,188 50	1,975 95	18,419 96
Sacramento	Failed to re port.					
San Benito		125 00	2,347 50			2,472 50
San Bernardino		392 40	13,711 38	16,763 22	1,763 75	32,630 75
San Diego	1,482 85	2,030 55	24,063 04		5,371 26	32,947 70
San Francisco	121,217 00					121,217 00
San Joaquin	Failed to re port.					
San Luis Obispo	Failed to re port.					
San Mateo	Failed to re port.					
Santa Barbara	2,814 37	3,064 38	5,080 45	10,497 52	1,246 70	22,703 42
Santa Clara	5,672 69	624 48	26,679 90			32,977 07
Santa Cruz	2,203 59	110 75	3,278 50	2,961 00	1,798 35	10,352 19
Shasta						4,941 00
Sierra	75 00	15 00	781 16		95 00	966 16
Siskiyou		205 00			14 665 20	14,870 20
Solano	Failed to re port.					
Sonoma	Failed to re port.					
Stanislaus	3,188 51			5,340 00		8,528 51
Sutter	75 00				1,481 90	1,556 90
Tehama	Failed to re port.					
Trinity	Failed to re port.					
Tulare	639 75	725 55	1,976 05	14,238 53	630 00	18,209 88
Tuolumne	Failed to re port.					
Ventura	777 34	50 50	271 38	7,690 00	1,060 00	9,849 22
Yolo	1,807 82	338 40			2,683 75	4,829 97
Yuba				120 00		120 00

TABLE 31—OAKLAND ASSOCIATED CHARITIES.

Statistics for year ending August 31, 1914.

1. Children in homes under supervision September 1, 1913 .....	31
Children received and placed in homes during year September 1, 1913 to August 31, 1914 .....	57
Total for the year .....	88
2. Removed from supervision:	
Returned to parents or relatives .....	11
Adopted .....	5
Died .....	1
Placed in free homes .....	6
Total removed from supervision .....	23
3. Total children under supervision September 1, 1914 .....	65
4. Financial statement:	
Received from county for maintenance of dependent and neglected children committed to associated charities by juvenile court .....	\$5,244 85

TABLE 32—CATHOLIC HUMANE BUREAU.

Statistics for year ending June 30, 1913.

1. Children received and supervised:	
Children in homes, under supervision, July 1, 1912 .....	483
Committed to bureau during year ending June 30, 1913, and placed in family homes .....	334
Total for the year .....	817
2. Children released during year ending June 30, 1913:	
To parents .....	105
Reached the age of majority .....	6
Adopted .....	3
Died .....	2
Transferred to institutions .....	20
Secured free homes .....	2
	138
Total in family homes under supervision, June 30, 1913 .....	679
3. Supervision:	
Paid nurse (1), volunteer visitors (10) .....	11
Children visited during the year .....	817
Total visits to children, approximately .....	5,000
4. Financial statement:	
Cash on hand June 30, 1912 .....	\$4,754 92
Receipts .....	64,540 58
Total .....	\$39,295 50
Expenditures .....	\$57,938 89
Cash on hand June 30, 1913 .....	11,326 61
Total .....	\$39,295 50

TABLE 33—CATHOLIC HUMANE BUREAU.

Statistics for year ending June 30, 1914.

1. Number of children in homes under supervision, July 1, 1913 .....	679
Committed to the bureau and placed in family homes during year ending June 30, 1914 .....	137
Total for the year .....	816
2. Children released during the year ending June 30, 1914:	
To parents .....	188
Reached the age of majority .....	14
Adopted .....	5
Died .....	4
Transferred to institutions .....	6
Secured free homes .....	2
Total released during year .....	219
Total in family homes under supervision July 1, 1914 .....	597
3. Supervision:	
Visitors, from 3 to 10 persons.	
Total visits to children: All visited every month.	
4. Financial statement:	
Cash on hand July 1, 1913 .....	\$11,326 61
Receipts .....	80,785 61
Total .....	\$92,112 22
Expenditures during year .....	\$80,282 75
Cash on hand July 1, 1914 .....	11,829 47
Total .....	\$92,112 22

TABLE 34—CATHOLIC LADIES' AID SOCIETY OF ALAMEDA COUNTY.

Statistics for year ending June 30, 1914.

1. Number of children under supervision July 1, 1913 .....	580
Number of children received during year .....	35
Number of children under our supervision with parents, no county payment .....	15
Total children cared for during year .....	630
Number of children removed from supervision during year:	
Returned to parents or relatives .....	10
Transferred to other societies .....	
Adopted .....	
Died .....	1
Number remaining under supervision July 1, 1914 .....	619
Number boarded in private families .....	586
Number boarded with parents or relatives .....	34
Number boarded in institutions .....	
Number in free homes .....	
2. Financial statement:	
Receipts, county aid .....	\$5,512 51
Expenditures .....	5,512 51



TABLE 35—CHILDREN'S AGENCY OF THE SAN FRANCISCO ASSOCIATED CHARITIES.

Statistics for year ending June 30, 1913.

1. Boarding-out department:		
Number of children under care of department July 1, 1912.....		529
Number received during year July 1, 1912 to June 30, 1913.....		263
Total children cared for during year.....		792
Number discharged from custody.....		227
Number remaining in care of the agency July 1, 1913.....		565
Disposition of children discharged from custody:		
Placed in free homes.....		79
Transferred to institutions.....		12
Returned to parents or relatives.....		80
Returned to juvenile court.....		13
Became self-supporting.....		4
Died.....		11
Mothers' pension discontinued.....		21
Commitment cancelled by juvenile court before children were received by the agency for care.....		7
Total.....		227
Classification of children in the care of the agency at the beginning and at the end of the year:		
	Beginning	End
Children boarded in private families.....	284	265
Children boarded with parents or relatives.....	213	268
Children boarded in institutions.....	13	9
Commitment held for legal control.....	17	20
Commitment held pending investigation.....	2	3
Totals.....	529	565
2. Placing-out department:		
Number in family homes July 1, 1912.....		137
Number placed in free homes during year.....		21
Number returned for supervision.....		3
Number outgrowing supervisions (over 18 years).....		10
Number of children adopted during year (eleven of these were on list of the central committee).....		37
Number of children died during the year (one of these was on list of central committee).....		2
Number of children returned to other societies or to relatives for supervision.....		30
Number remaining under supervision of this department June 30, 1913.....		80
Number children visited during the year.....		154
Visits made during the year (includes investigations of homes).....		663
Number of children not visited during year (these 4 children have been taken out of the state—have kept in touch by correspondence).....		4
(See report of Boarding-out Department for total number of children under the care of the Children's Agency during the year. This number includes only those placed by the Children's Agency itself and does not include those placed by the Native Daughters Central Committee.)		
3. Financial statement:		
Receipts for year ending June 30, 1913.....		\$70,555 29
Expenditures for year ending June 30, 1913.....		70,555 29

TABLE 36—CHILDREN'S AGENCY OF ASSOCIATED CHARITIES OF SAN FRANCISCO.

(Failed to report.)

TABLE 37—CHILDREN'S HOME SOCIETY.

Children cared for during the year ending March 31, 1913.

1. Children received and cared for:		
On hand April 1, 1912.....		40
Received April 1, 1912, to February 28, 1913.....		205
Returned from previous placements .....		176
Total cared for during year .....		511
2. Disposal of children:		
Placed for the first time.....	253	
Placed more than once.....	132	
Placed in other institutions.....	11	
Returned to relatives.....	36	
Returned to court.....	14	
Died .....	13	
Became self-supporting .....	1	
Total disposed of .....		463
Total on hand March 31, 1913.....		48
3. Miscellaneous data:		
Received under one year, boys.....	76	
Received under one year, girls.....	68	
		144
Received, one year and over, boys.....	80	
Received, one year and over, girls.....	71	
		151
Average number of days in receiving home.....	30.4	
Applications received for children.....	564	
Applications rejected, dropped or withdrawn.....	112	
Applications approved and supplied.....	290	
Applications still pending .....	162	
		564
Children visited during the year.....	527	
Total visits to children during the year.....	603	
Children adopted during year .....	131	
4. Financial statement:		
Value of property, real and personal.....	\$16,500 00	
Receipts for year ending March 31, 1913.....	86,741 30	
Expenditures for year ending March 31, 1913.....	75,154 83	

TABLE 38—CHILDREN'S HOME SOCIETY.

Movement of population and financial report for year ending March 31, 1914.

1. Children received and cared for:		
On hand April 1, 1913	-----	48
Received April 1, 1913 to March 31, 1914	-----	254
Returned from previous placements	-----	180
Total cared for during year	-----	482
2. Disposal:		
Placed for the first time	-----	221
Placed more than once	-----	144
Placed in other institutions	-----	9
Returned to relatives	-----	25
Returned to court	-----	7
Died	-----	19
Became self-supporting	-----	4
Total disposed of during year	-----	429
Total on hand March 31, 1914	-----	53
3. Miscellaneous data:		
Received under one year of age, boys	-----	81
Received under one year of age, girls	-----	68
	-----	149
Received over one year of age, boys	-----	54
Received over one year of age, girls	-----	51
	-----	105
Average number days in receiving home	-----	32.5
Applications received for children	-----	476
Applications rejected, dropped or withdrawn	-----	94
Applications approved and supplied	-----	246
Applications still pending	-----	136
Total visits to children during the year	-----	476
Children adopted	-----	678
	-----	110
4. Financial statement:		
Receipts—		
Collections by district superintendents	-----	\$21,352 88
Received through Los Angeles office	-----	5,074 81
Received through Berkeley office	-----	717 38
Interest on investments, net	-----	3,160 20
Publications	-----	388 30
Deficit	-----	559 75
Total	-----	\$31,253 32
Disbursements—		
Repairs and improvements	-----	\$160 82
Maintenance of receiving home	-----	12,588 61
Salaries and transportation	-----	15,625 77
Publications and printing	-----	1,505 00
Not classified	-----	1,373 12
Total	-----	\$31,253 32
5. Present distribution and disposal of all children received (1892-1914):		
Attained majority	-----	179
Adopted	-----	873
Self-supporting, still minors	-----	62
Returned to parents or relatives	-----	289
Placed in other institutions	-----	37
Returned to courts	-----	56
Died in homes	-----	96
Died before placing	-----	150
Disappeared, traces lost	-----	73
In homes under supervision	-----	564
On hand in receiving homes	-----	53

TABLE 39—EUREKA BENEVOLENT SOCIETY.

July 1, 1913, to June 30, 1914.

Children under supervision July 1, 1913 .....	94
Classification:	
Dependent children .....	66
Half-orphan children .....	28
New children received during year .....	13
Classification:	
Dependent children .....	9
Former wards returned (dependents) .....	3
Half-orphans .....	1
	107
Disposition:	
Boarded in private families .....	13
Boarded with mother .....	72
Boarded in institutions .....	22
Number of children removed from supervision during year:	
Returned to parents .....	29
Transferred to other societies .....	3
	32
Children under supervision at end of year .....	75
Classification:	
Dependent children .....	59
Half-orphan children .....	16
Financial statement:	
Receipts—	
From city and county of San Francisco .....	\$10,181 36
From relatives' contributions toward support .....	209 50
Total .....	\$10,390 86
Expenditures—	
Maintenance of children .....	\$14,036 75
Salary and carfares of paid visitor .....	815 80
Total .....	\$14,852 55

NOTE.—Maintenance of children does not include cost of clothing and medical supervision.

TABLE 40—LOS ANGELES HUMANE SOCIETY FOR CHILDREN.

Year ending June 30, 1914.

Cases reported .....	1,185
Cases investigated .....	1,185
New reports on old cases investigated .....	328
Total number of cases investigated .....	1,513
Calls made on new cases .....	3,192
Calls made on old cases .....	1,014
Children involved .....	1,960
Complaints unsubstantiated .....	61
Returned to parents or relatives .....	107
Placed in private homes .....	113
Placed in institutions .....	204
Placed in hospitals .....	44
Referred to Associated Charities .....	30
Referred to county charities .....	58
Referred to St. Vincent de Paul Society .....	22
Referred to Jewish Benevolent Society .....	10
Referred to Japanese Humane Society .....	4
Referred to Health Office .....	19
Referred to Labor Commission .....	2
Referred to Juvenile Bureau .....	6
<i>Court Cases.</i>	
Juvenile Court .....	278
Superior Court .....	60
Justice Court .....	47
Police Court .....	42
Total number of prosecutions .....	377
Total number of convictions .....	343

*Home.*

Separated, 84; father and mother living, 529; father and mother dead, 75; father dead, mother living, 214; mother dead, father living, 202; divorced, 37; conditions unclassified, 84.

*Race.*

American, 553; Hebrew, 73; Irish, 2; Mexican, 179; Spanish, 37; colored, 46; Austrian, 20; German, 58; Swede, 16; Hungarian, 10; Russian, 7; Canadian, 1; French, 13; Italian, 28; English, 12; Roumanian, 1; Norwegian, 3; unclassified, 99.

*Religion.*

Protestant, 611; Catholic, 281; Israelite, 80; Russian, 13; Christian Science, 3; Japanese, 3; Mormon, 1; unclassified, 193.

*Nature of Complaint.*

Lost girl, 10; lost boy, 1; immorality of mother, 58; ruined girl, 8; runaway girl, 10; runaway boy, 5; mistreatment, 26; improper environment, 16; desertion, 81; truancy, 2; kidnaped, 4; abandonment, 2; disorderly place, 1; insanity, 3; unlawful detention, 3; no proper guardian, 5; rape, 1; violation city ordinance, 1; neglect, 109; abuse, 44; immorality, 29; cruelty, 111; failure to provide, 104; sick and needy, 57; homeless, 34; violation child labor law, 4; incorrigible girl, 69; incorrigible boy, 25; destitution, 91; unfit home, 146; feeble-minded, 9; white slavery, 1; intemperance, 28; Section 288, 5; incest, 1; improper influence, 2; shop-lifting, 1; stealing, 3; unlawful detention, 1; unclassified, 74.

*Receipts.*

Trust fund .....	\$1,231 00
Regular membership .....	182 50
Patron .....	400 00
Donation .....	1,236 83
City allowance .....	3,000 00
County allowance .....	1,800 00
	<hr/>
	\$7,850 33
Balance 1913 .....	364 29
	<hr/>
	\$8,214 62

*Disbursements.*

Trust fund .....	\$1,482 63
General expense .....	1,058 03
Transportation .....	202 03
Salary .....	5,050 50
	<hr/>
	\$7,793 19
Balance, 1914, in general fund .....	324 86
Balance, 1914, in trust fund .....	96 57
	<hr/>
	\$8,214 62



TABLE 41—NATIVE SONS AND NATIVE DAUGHTERS CENTRAL COMMITTEE  
ON HOMELESS CHILDREN.

Year ending	Number of different children placed for adoption	Replaced	Number of homes supplied with children
April 1, 1912.....	131	13	144
April 1, 1913.....	159	28	187
April 1, 1914.....	156	39	195
Totals .....	446	80	526
Adopted up to April 1, 1914.....			137
Died up to April 1, 1914.....			13
Returned to institutions.....			48
In homes under supervision awaiting adoption, April 1, 1914.....			248
			446
Applications received during year ending April 1, 1912.....			363
Applications received during year ending April 1, 1913.....			310
Applications received during year ending April 1, 1914.....			290
			963
Applications rejected, postponed and withdrawn.....			330
Applications granted .....			526
Applications pending investigation and awaiting children.....			107
			963
<i>Sources of Children Placed During Year Ending April 1, 1914.</i>			
Relinquished to Central Committee by parents.....			35
Committed by Juvenile Court of San Francisco.....			9
Committed by Juvenile Court of Santa Barbara County.....			4
Committed by Juvenile Court of Glenn County.....			3
Los Angeles Committee.....			17
Associated Charities of San Francisco.....			47
Associated Charities of Oakland.....			15
Ladies' Protection and Relief Society of San Francisco.....			8
Ladies' Relief Society of Oakland.....			4
Florence Crittenton Home.....			5
Catholic Humane Bureau.....			4
Boys' and Girls' Aid Society.....			2
Sacramento Children's Home.....			2
			156
<i>Financial Statement, April 1, 1913, to April 1, 1914.</i>			
Cash on hand April 1, 1913.....			\$10,151 24
Contributions from parlors.....	\$3,180 61		
Deposit receipts account returns San Francisco parlors.....	1,899 98		
Outside donations.....	65 20		
Baby merchandise.....	2 00		
Board.....	261 00		
Notary fees.....	7 00		
Interest on deposit receipts.....	420 62		
Total receipts .....			5,836 41
			\$15,987 65
Salaries.....	\$3,655 00		
Traveling expenses.....	837 20		
Rent.....	636 00		
Office supplies.....	117 48		
Telephone.....	207 84		
Telegraph and messenger.....	126 27		
Local committee expense.....	164 75		
Baby merchandise.....	52 05		
Board.....	401 10		
Printing.....	178 66		
Office files and furniture.....	69 70		
Notary.....	19 50		
Amount due Mrs. Humphrey.....	21 30		
Total expenditures .....			6,486 93
Cash on hand April 1, 1914.....			9,500 72
			\$15,987 65

TABLE 42—LICENSED ORPHANAGES.  
Movement of population year ending June 30, 1913.

Name of Institution	Number in Institution July 1, 1912			Received between July 1, 1912, and June 30, 1913			Passed out between July 1, 1913, and June 30, 1913			Number in Institution June 30, 1913		
	Boys	Girls	Total	Boys	Girls	Total	Boys	Girls	Total	Boys	Girls	Total
Albertinum	130		130	42		42	32		32	140		140
Boys and Girls' Aid, San Francisco	131		151	234		234	227		227	158		158
Boys and Girls' Aid, South Pasadena*	82	60	142	51	37	88	51	36	87	78	51	129
Boys and Girls' Industrial Home and Farm	126	104	230	55	29	84	43	45	88	138	88	226
Church Home for Children†												
Fred Finch*	75	49	124	50	24	74	56	41	97	59	42	101
Good Templars' Home*	55	24	79	16	25	41	19	21	40	54	26	80
Grass Valley*	54	74	128	21	29	50	5	6	11	70	93	163
Home of the Guardian Angel*	130	20	150	19	17	36	5	7	12	139	135	274
L. O. O. F. Home	34	21	55	7	3	10	10	5	15	31	19	50
Jewish Orphans' Home*	35	30	65	16	13	29	4	4	8	45	41	86
Ladies' Relief, Oakland*	43	32	75	47	33	80	44	29	73	47	35	82
Los Angeles Orphan Asylum		246	246		137	137		136	136		247	247
Los Angeles Orphans' Home*	34	44	78	33	26	59	31	25	56	35	46	81
Maria Kip		75	75		21	21		32	32		64	64
Masonic Homes	35	21	56	6	4	10	7	3	10	34	22	56
McKinley Industrial Home			91	46		46	48		48	89		89
McKinley Orphanage*	28	31	59	15	19	34	17	13	30	29	34	63
Mt. St. Joseph's*	138	185	323	126	80	206	146	148	294	118	117	235
Pacific Hebrew	81	70	151	18	24	42	13	8	23	84	86	170
Pajaro Valley	247		247	81		81	78		78	250		250
Pasadena Children's Training	30	28	58	11	14	25	12	8	20	29	34	63
Presbyterian*	66	34	100	30	19	49	24	5	29	73	47	120
Regina Coeli		78	78		27	27		37	37		68	68
Roman Catholic, San Francisco		352	352		200	200		216	216		426	426
Sacramento Orphanage and Farm*	69	42	111	30	21	51	33	29	62	67	33	100
San Diego	33	31	64	44	45	89	29	25	54			
San Francisco Ladies' Protection*	59	60	119	24	15	39	28	27	55	57	46	103
San Francisco Nursery*	38	26	64	33	31	64	33	32	66	41	22	63
San Francisco Protestant*	65	74	139	19	7	26	12	17	29	73	63	136
San José Home of Benevolence	49	27	76	13	9	22	17	8	25	45	28	73

St. Catherine's, Anaheim	157	157	80	80	78	78	159	159
St. Catherine's, San Bernardino	35	35	23	23	5	5	53	53
St. Mary's	140	140	45	45	36	36	149	149
St. Vincent's, Marin County	483	483	201	201	228	228	456	456
St. Vincent's, Santa Barbara	59	59	48	48	40	40	67	67
Santa Cruz	79	79	31	31	30	30	80	80
West Oakland Home*	54	86	33	55	39	62	46	79
Youths' Directory	75	75	346	346	351	351	70	70
Incomplete totals	2,747	4,930	1,747	2,915	1,722	2,819	2,710	5,049

\*These institutions made reports which would not check; i. e., the boys, or the girls, or the total, in the institution July 1, 1912, plus those received, minus those passed out, gives a result different from the number in the institution June 30, 1913.

†This institution was not organized until September, 1913.

TABLE 43—LICENSED ORPHANAGES.  
Movement of population year ending June 30, 1914.

Name of institution	Number in institution July 1, 1913			Received between July 1, 1913 and June 30, 1914			Passed out between July 1, 1913 and June 30, 1914			Number in institution June 30, 1914		
	Boys	Girls	Total	Boys	Girls	Total	Boys	Girls	Total	Boys	Girls	Total
Albertinum	140	---	140	9	---	9	16	---	16	133	---	133
Boys and Girls' Aid, San Francisco	158	---	158	254	---	254	251	---	251	161	---	161
Boys and Girls' Aid, South Pasadena	78	51	129	72	45	117	75	37	112	75	39	114
Boys and Girls' Industrial Home and Farm	138	88	226	84	20	104	83	37	120	139	71	210
Church Home for Children	---	---	---	10	16	26	5	6	11	5	10	15
Fred Finch <sup>1</sup>	65	46	111	29	9	38	39	15	54	55	30	85
Good Templars' Home <sup>2</sup>	---	---	---	---	---	---	---	---	---	---	---	---
Grass Valley <sup>1</sup>	70	93	163	13	11	24	14	4	18	74	40	114
Home of Guardian Angel <sup>1</sup>	131	115	246	43	64	107	61	47	108	121	123	244
I. O. O. F. Home	31	19	50	5	9	14	6	4	10	30	24	54
Jewish Orphans' Home	42	40	82	19	2	21	21	12	33	40	30	70
Ladies' Relief, Oakland <sup>1</sup>	47	35	82	34	37	71	26	31	57	57	39	96
Los Angeles Orphan Asylum <sup>3</sup>	---	246	246	---	371	371	---	152	152	---	---	---
Los Angeles Orphans' Home <sup>1</sup>	35	46	81	21	22	43	16	25	41	39	44	83
Maria Kip	---	64	64	13	13	26	---	---	---	---	---	---
Masonic Homes	34	22	56	9	10	19	8	4	12	35	28	63
McKinley Industrial Home	89	---	89	79	---	79	79	---	79	80	---	89
McKinley Orphanage <sup>1</sup>	29	34	63	11	7	18	23	15	38	18	23	41
Mt. St. Joseph's	118	117	235	133	92	225	138	70	208	113	139	252
Pacific Hebrew	84	86	170	19	16	35	17	17	34	86	85	171
Pajaro Valley	---	---	---	100	---	100	80	---	80	270	---	270
Pasadena Children's Training	31	32	63	20	12	32	17	11	28	34	33	67
Presbyterian	73	47	120	21	12	33	34	21	55	60	38	98
Regina Coeli	---	68	68	---	21	21	---	26	26	---	63	63
Roman Catholic, San Francisco	---	426	426	---	178	178	---	220	220	---	384	384
Sacramento Orphanage and Farm	67	33	100	81	79	160	67	54	121	81	58	139
San Diego <sup>1</sup>	40	57	97	44	23	67	46	24	70	40	57	97
San Francisco Ladies' Protection	57	46	103	29	23	52	42	32	74	44	37	81
San Francisco Nursery	41	22	63	48	33	81	35	34	69	54	21	75
San Francisco Protestant <sup>1</sup>	73	68	136	24	5	29	26	13	39	73	53	126
San Jose Home of Benevolence	43	28	71	15	8	23	14	11	25	44	25	69

St. Catherine's, Anaheim	159	40	159	44	44	72	72	131	131
St. Catherine's, San Bernardino <sup>1</sup>	---	149	40	---	42	---	17	---	25
St. Mary's	---	---	149	---	34	---	26	---	137
St. Vincent's, Marin County	456	---	456	133	133	229	229	390	390
St. Vincent's, Santa Barbara	---	67	67	---	61	---	35	---	93
Santa Cruz <sup>1</sup>	---	84	84	---	28	---	22	---	93
West Oakland Home <sup>1</sup>	46	33	79	36	14	34	18	50	28
Youths' Directory <sup>4</sup>	70	---	70	229	229	229	229	70	70
Incomplete totals	2,695	2,297	4,992	1,668	1,317	2,985	1,803	2,581	1,943
									4,524

<sup>1</sup>Report is incorrect; figures are those sent to this Board by the Institution but they do not check through accurately.

<sup>2</sup>Failed to report.

<sup>3</sup>Report incomplete.

<sup>4</sup>Year runs from March to March.



TABLE 44—EXPENDITURES OF STATE BOARD OF CHARITIES AND  
CORRECTIONS.

## Sixty-fourth fiscal year.

Salaries .....	\$5,820 00
Rent .....	876 00
Traveling expenses .....	1,549 46
Printing (including biennial report) .....	889 65
Postage .....	192 17
Office supplies and expenses .....	105 24
Telephone and telegraph service .....	76 50
Press clippings .....	36 00
*Sundries .....	177 70
	<hr/>
	\$9,722 72
	<hr/>
Appropriation for the year .....	\$10,000 00
Expenditures for the year .....	9,722 72
	<hr/>
Balance unexpended .....	\$277 28

## Sixty-fifth fiscal year.

Salaries .....	\$5,025 18
Rent .....	864 00
Traveling expenses .....	1,992 69
Printing .....	127 64
Postage .....	131 00
Office supplies and expenses .....	115 29
Telephone and telegraph service .....	120 76
Press clippings .....	36 00
*Sundries .....	281 28
	<hr/>
	\$8,693 24
	<hr/>
Appropriation for the year .....	\$10,000 00
Expenditures for the year .....	8,693 24
	<hr/>
Balance unexpended .....	\$1,306 76

\*The item "Sundries" includes office furniture, additions to library, etc.











# Thirtieth Annual Report

OF THE

## Board of Dental Examiners

OF THE

## State of California



CALIFORNIA  
STATE PRINTING OFFICE  
1914

MEMBERS OF THE BOARD OF DENTAL EXAMINERS OF THE  
STATE OF CALIFORNIA, 1914.

---

L. D. JONES, D.D.S., <i>President</i>	801 Watts Building, San Diego
C. A. HERRICK, D.D.S., <i>Secretary</i>	401 Whitney Building, San Francisco
J. M. BLODGETT, D.D.S.	Lodi
C. E. RICE, D.D.S.	Los Angeles
F. H. HOUCK, D.D.S.	Anaheim
L. T. CORWIN, D.D.S.	Oakland

# THIRTIETH ANNUAL REPORT

## OF THE

### BOARD OF DENTAL EXAMINERS OF CALIFORNIA.

*To his Excellency, HIRAM W. JOHNSON,*  
*Governor of the State of California.*

SIR: The Board of Dental Examiners of California has the honor of submitting the following as the thirtieth annual report of its proceedings, together with an account of all moneys received and disbursed in compliance with the provisions of that certain act of the legislature approved March 23, 1901, and amended and approved March 20, 1903, March 23, 1905, March 2, 1907, April 6, 1909, and June 11, 1913, entitled "An act to insure the better education of practitioners of dental surgery, and to regulate the practice of dentistry in the State of California, providing penalties for the violation thereof, and to repeal an act now in force relating to the same and known as 'An act to insure the better education of practitioners of dental surgery and to regulate the practice of dentistry in the State of California,' approved March 12, 1885."

Since December 1, 1913, the date of the last report, the Board has held three (3) regular meetings for the purpose of examining applicants for a license to practice dentistry, and four (4) special meetings. The Executive Committee has held eight (8) meetings.

The first regular meeting was held in San Francisco from December 3d to December 14th, at which time fifty-six (56) applicants presented themselves for examination and the following forty-two (42) were successful and were granted licenses to practice dentistry:

Allen, H. J.	Hess, O. G.	Millham, T. L.
Andrews, E. R.	Jackson, H. N.	Mohney, B. T.
Atamian, A. G.	Johnson, A. E.	Norris, R. W.
Bell, R.	Kennedy, A. I.	Penwarden, R. S.
Bold, H. H.	Keck, H. E.	Reed, J. T.
Bollermann, C. E.	Leonard, J. W.	Scheick, A. G.
Carey, H. M.	Lieberthal, C. P.	Schuessler, A. J.
Coyne, W. E. S.	Lukens, C. W.	Shannon, H. R.
DeCou, C. L.	Lutz, I. D.	Smith, R. F.
Dodge, W. H.	Mason, J. A.	Sparrow, W. J.
Downs, L. W.	Manning, P. R.	Sweet, H. A.
Fontaine, Mae L.	Marr, G. D.	Tegarden, J. W.
Gillam, C. E.	Matsuno, M. A.	Whinnery, J. K.
Gum, E. S.	McCord, W. B.	White, A.

At this meeting officers for the ensuing year were elected as follows: President, Dr. Leland D. Jones of San Diego; Secretary, Dr. C. A. Herrick of San Francisco.

The next regular meeting was held in San Francisco, beginning on June 4, 1914, and continuing to June 17th. At this time there were seventy-one (71) applicants for examination and fifty-nine (59) were successful. Following are the names:

Barbour, Edw.	Gilbride, R. F.	Nutter, B. S.
Barr, Arthur.	Griffith, C. M.	Peck, H. P.
Bauchert, M. F.	Haley, P. S.	Petray, H. C.
Bell, D. G.	Hanschen, P. H.	Richards, J. L.
Boalt, H. A.	Herd, F. D.	Richert, J. A.
Brewer, W. O. D.	Hicok, E. L.	Rideout, W. E.
Brownell, R. E.	Howard, J. R.	Renwick, W. R.
Byrne, G. D.	Jackson, F. C.	Ross, W. E.
Cunha, J. A.	Jacobsen, L. J.	Sams, H. L.
Dalton, T. F.	Johnson, G. C.	Sargent, W. E.
DeCarvalho, A. A.	Jones, L. S.	Seki, N.
Decker, K. I.	Kleaver, G. C.	Stamer, J. A.
Eaton, F. N.	Kneass, M. S.	Stevenson, E. R.
Edwards, D. I.	Kobayashi, M.	Tabb, W. T.
Eggert, H. O.	Leek, G. W., Jr.	Wanz, A. H.
Embree, H. S.	Lovell, R. B.	Watson, R. L.
Flanagan, C. A.	Muegge, T. C.	Whetstone, L. S.
Frantz, C. B.	Meagher, F. L.	Yawata, T.
Frates, J. E.	McCluskey, R. W.	Yee, J. T.
Giles, C. R.	Nathan, E. W.	

A meeting in Los Angeles followed this examination, beginning on June 17th. Sixty-nine (69) applicants took this examination for a license at this time and the following forty-nine (49) were successful:

Archer, G. S.	Griffin, E. M.	Rhodes, A. D.
Ayers, L. W.	Haberdier, O. A.	Roberts, A. F.
Black, J. P.	Humes, H. C.	Ross, J. L.
Bronson, E. R.	Iwata, K.	Schildwachter, G. H.
Cannon, H. E.	Kikuchi, Y.	Sewell, P. P.
Casner, A. J.	Kloppel, F. C.	Smith, G. V.
Champion, R. M.	Knight, R.	Staley, F. G.
Davis, M. L.	Laraia, E. A.	Stone, F. G.
Dennis, F. P.	Lau, C. D.	Tashjian, V. A. K.
Doty, C. V.	Lee, E. F.	Tedford, W. G.
Eames, E. L.	Lusby, C. R.	Washburn, J. G.
Echternach, E. G.	Meyer, P. E.	Wells, H. T.
Egbert, M.	McCabe, W. H.	Worthy, C. B.
Fairfield, G. M.	McNally, E. T.	Yoshida, F. R.
Farwell, G. Q.	Parker, J. T., Jr.	Young, R. L.
Getts, B. R.	Powers, E. G.	
Goodwin, L. L.	Radcliff, C. P.	

The Board has restored the licenses of seven (7) dentists who had forfeited the same by failure to register with the county clerk within the six months allowed by section 10 of the dental law.

The Board has also reinstated forty-four (44) licenses in accordance with the provisions of section 14 of the dental law.

The following is a report of the prosecutions of illegal practitioners of dentistry since December 1, 1913:

**Alameda County.**

*People vs. Ralph W. Newbre* of Berkeley. Defendant was arrested in October, 1913, had a preliminary examination and was held to answer before the superior court. On January 23, 1914, he pleaded guilty and was fined \$100.00, which he paid.

*People vs. James R. Morton* of Berkeley. Defendant had been arrested in October, 1913, and after preliminary examination he was held to answer before the superior court. He was tried on January 5, 1914, and was convicted and fined \$250.00, which he paid.

*People vs. McConnell.* Defendant was arrested on November 4, 1913, and tried in the police court of the city of Oakland on March 4, 1914. He pleaded guilty and asked for probation. He was admitted to probation for six months.

**Imperial County.**

*People vs. F. P. Amo.* Complaint was sworn to and warrant issued on January 23, 1914. The case was dismissed and Amo has ceased practicing.

*People vs. C. B. Harlin.* Complaint was sworn to and warrant issued on October 24, 1914, and the case is pending.

*People vs. Williamson.* Complaint was sworn to and warrant issued on January 30, 1914. The case was dismissed.

*S. H. Rankin*, against whom complaint had been made to the Board that he was practicing dentistry illegally, ceased practicing when notified by the district attorney.

**Kern County.**

*People vs. C. F. Walter* of Bakersfield. Defendant was arrested on April 24, 1914, and after preliminary examination on May 5th was held to answer before the superior court. He was tried by a jury on November 10th and 11th. The jury disagreed and the case is set for the second trial on December 16, 1914.

*People vs. E. R. Victor* of Bakersfield. Defendant was arrested on September 25, 1914, and charged with practicing dentistry without a license, he having failed to pay the \$2 annual renewal license fee. Preliminary hearing was held on September 25th and the defendant was held to answer before the superior court. The case is pending.

*Mrs. F. L. Little*, against whom complaint was made that she was practicing dentistry illegally in Taft, upon being notified to cease such practice, closed her office and left the county without the necessity of legal action being taken.



*H. Rademacher*, against whom complaint was made that he was practicing dentistry illegally in Bakersfield, left the city November 13th before the necessary papers were served for his arrest.

*C. E. Pryor*, against whom complaint was made that he was practicing dentistry illegally in Taft on November 12th, has ceased such practice.

**Lassen County.**

*J. H. Gasper* and *Mrs. E. D. Chapman*, known as the "California Dental Experts," against whom complaint had been made to the Board that they were practicing illegally at Susanville, were notified by District Attorney G. P. Johnson to cease practice, which they did and left the community.

**Los Angeles County.**

*People vs. C. F. Kuster*. On January 13, 1914, defendant was arrested and charged with practicing dentistry without a license, he having failed to pay the \$2 annual license fee. He was taken before Judge Williams of the police court of the city of Los Angeles. He pleaded guilty and was sentenced to pay a fine of \$100. Sentence was suspended.

*People vs. Geo. H. Sprague*. On January 19, 1914, defendant was arrested charged with practicing dentistry without a license, he having failed to pay the \$2 annual license fee. He was taken before Judge White of the police court in the city of Los Angeles, February 20th. He pleaded not guilty. On January 26, 1914, he changed his plea from not guilty to guilty and was sentenced to pay a fine of \$250 or serve 180 days in jail. Sentence was suspended.

*People vs. Geo. H. Key*. On January 19, 1914, defendant was arrested and taken before Judge Williams of the police court of the city of Los Angeles. He pleaded guilty and was sentenced to pay a fine of \$100.

*People vs. R. E. Hewes*. On January 22, 1914, defendant was arrested and charged with practicing dentistry without a license, he having failed to pay the \$2 annual license fee. On January 29th a demurrer was interposed to complaint and the same was overruled. A plea of not guilty was entered and trial by jury was set for April 1st. The case was continued from time to time and dismissed on June 26th.

*People vs. R. E. Hewes* (second arrest). On February 25, 1914, defendant was arrested again and charged with practicing dentistry without a license, he having failed to pay the \$2 annual license fee. Bail was fixed at \$100 and February 22d was the date set to plead. Defendant not appearing, the bail was forfeited. In the afternoon his attorney appeared and a plea of not guilty was entered. On April 10th the defendant was found guilty by Judge Williams and sentenced to pay a fine of \$100. Appeal was taken from this judgment, and on May 9th the judgment was reversed in the superior court.

*People vs. Fred Kloeppel.* On February 2, 1914, defendant was arrested and taken before Judge Williams of the police court of the city of Los Angeles. He pleaded guilty and was sentenced to pay a fine of \$100.

*People vs. Geo. E. Hill.* On February 11, 1914, defendant was arrested and taken before Judge Chambers of the police court of the city of Los Angeles. He pleaded guilty and was sentenced to pay a fine of \$100.

*People vs. Chas. H. Edgar* of Lankershim. On May 1, 1914, defendant was arrested. After preliminary examination defendant was bound over to the superior court for trial June 12th, at which time he pleaded guilty and was sentenced by Judge Craig to pay a fine of \$250.

*People vs. Fred H. Huff.* On June 3, 1914, defendant was arrested and taken before Judge Chambers of the police court of the city of Los Angeles. He pleaded not guilty and was convicted by a jury and sentenced to pay a fine of \$100 or serve 100 days in jail. He served two days in jail and paid a fine of \$99.

*People vs. A. W. LaVelie* of Calabassas. Defendant was arrested. Preliminary hearing was held on September 3d, but owing to the failure of the chief witness to appear, defendant was discharged for lack of sufficient evidence.

*People vs. D. W. Thomas.* On July 21, 1914, defendant was arrested and taken before Judge Williams of the police court of the city of Los Angeles. He pleaded not guilty and demanded a jury trial. Date of trial was set for September 4th, at which time the trial resulted in a disagreement of the jury. Case was continued until December 16th.

*People vs. D. W. Thomas* (second arrest). On October 7, 1914, defendant was arrested. On October 8th a plea of not guilty was entered. He demanded a jury trial and the case was set for November 18th, at which time it was continued to December 7, 1914.

*People vs. S. S. Street.* On August 10, 1914, defendant was arrested and taken before Judge Chesebro of the police court of the city of Los Angeles. On August 12th he pleaded not guilty. On September 30th defendant was found guilty and was sentenced to pay a fine of \$500 or serve 180 days in jail. Sentence was suspended. On October 9th appeal was taken from this judgment.

*People vs. Geo. H. Hayes.* On October 14, 1914, defendant was arrested and taken before Judge Chambers of the police court of the city of Los Angeles. He pleaded guilty and was fined \$100, which he paid.

*People vs. Geo. Sepulveda.* On October 16, 1914, defendant was arrested. He pleaded guilty and was fined \$100 by Judge Chambers. Sentence was suspended.

*People vs. L. W. McGill.* On January 26th defendant was arrested. He pleaded not guilty. On April 10th the case was dismissed on account of witnesses having disappeared.

*People vs. E. H. Scheifer.* On July 9, 1914, defendant was arrested and taken before Judge Fredrickson. He asked for time to plead and was given until July 13th and was released on his own recognizance. He left the city before July 13th.

*People vs. B. E. Schore.* On June 16, 1914, defendant was arrested and taken before Judge Chesebro. He was given until June 17th to plead and bail was fixed at \$250, which was furnished. When the case was called on June 17th it was found that Schore had forfeited his bail and had left the city.

*People vs. Raymond A. Stewart.* On October 19, 1914, defendant was arrested and taken before Judge Chambers. He was given until October 28th to plead, at which time he entered a plea of not guilty and asked for a jury trial. The case was set for November 30th. Bail was fixed at \$100.

*E. C. Parr* was, on January 17th, found practicing dentistry without a license at Fourth and Spring streets, Los Angeles. Before action could be taken, Dr. Parr ceased practicing.

#### **Orange County.**

*People vs. Foster O. Dudgeon* of Brea. Defendant was arrested on May 11, 1914, and charged with practicing dentistry without a license. Preliminary examination was held on May 11th and defendant was held to answer before the superior court. He pleaded guilty before Judge West on July 10th and was sentenced to pay a fine of \$100.

*People vs. E. G. Powers.* Defendant was held to answer before the superior court on November 20, 1913. He pleaded guilty before Judge West and the case was dismissed and the defendant discharged.

#### **Placer County.**

*H. T. Barbour*, against whom complaint had been made to the Board that he was practicing illegally at Newcastle, was notified by the district attorney to cease practice, which he did and left the community.

#### **San Bernardino County.**

*People vs. A. W. McDavitt* of San Bernardino. Complaint was issued on January 15, 1914. Preliminary trial was held on February 3, 1914. The case was dismissed for failure to secure a jury to try the same.

#### **San Diego County.**

*People vs. T. B. Wilson* of San Diego. Complaint was sworn to and warrant issued on July 17, 1914. After preliminary trial on July 28th defendant was held to answer before the superior court. He pleaded guilty and was fined \$100, \$30 of which was paid and the balance of the fine was suspended.



*People vs. W. C. Owens* (Chinese) of La Mesa. Complaint was sworn to and warrant issued on September 17, 1914. He had a preliminary trial on October 16th and bail was fixed at \$100. Bail was forfeited on October 23, 1914.

*People vs. A. E. King.* Complaint was sworn to and warrant issued on January 30, 1914. Preliminary examination was held on February 6, 1914, and defendant was held to answer before the superior court. He pleaded guilty before Judge Lewis and asked for probation, which was refused and he was fined \$100.

**San Joaquin County.**

*Herbert Clemmens*, against whom complaint had been made to the Board that he was practicing dentistry illegally at Ripon, was notified by the district attorney to cease practice, which he did.

**San Francisco County.**

*People vs. Lester Irwin.* January 23, 1914, complaint was sworn to and warrant issued. After the usual preliminary, on March 6, 1914, defendant was held to answer for trial before the superior court. On March 20, 1914, defendant pleaded guilty before Judge Lawlor and motion was made for probation, which was denied. Defendant was sentenced to pay a fine of \$500 and to serve six months in the county jail. This judgment was ordered suspended by the court upon the theory of the court that the defendant would be precluded from active practice during the term of said suspended sentence.

*People vs. Lester Irwin.* January 23, 1914, complaint was sworn to and warrant issued. After the usual preliminaries on March 12, 1914, the examination was held by Judge Deasy and the matter ordered submitted, the case being placed by him upon his reserve calendar. This order was made in conformity with the usual custom of holding a defendant to answer upon only one charge where there be more than one charge of a similar nature in the police court.

*People vs. James V. Munn.* January 23, 1914, complaint was sworn to and warrant issued. After the usual preliminaries, on January 29, 1914, the defendant was held to answer for trial before the superior court. This defendant is a fugitive from justice, having absconded to the State of Washington. Application for his extradition having been denied, the case is still pending.

*People vs. Arthur H. Wanz.* January 23, 1914, complaint was sworn to and warrant issued. After the usual preliminaries, on January 30, 1914, defendant was held to answer for trial before the superior court. Defendant pleaded guilty and on March 10, 1914, was sentenced to pay a fine of \$250.

*People vs. Robert D. Lowrey.* January 23, 1914, complaint was sworn to and warrant issued. After the usual preliminaries, on February 26,

1914, defendant was held to answer for trial before the superior court. March 18, 1914, defendant pleaded not guilty. March 24, 1914, the case was tried before a jury and a verdict of guilty returned. Defendant was sentenced to one year in the county jail and to pay a fine of \$1,000, which said judgment was ordered suspended for the period of one year.

*People vs. A. J. Breckenridge.* October 5, 1914, complaint was sworn to and warrant issued. After the usual preliminaries, on October 27, 1914, defendant was held to answer for trial before the superior court. November 12, 1914, defendant pleaded guilty, and was sentenced to pay a fine of \$1,000 and to be imprisoned in the county jail for the term of one year. Judgment was ordered suspended for the term of one year.

*People vs. J. J. Driscoll.* February 19, 1914, complaint was sworn to and warrant issued. After the usual preliminaries the case was disposed of March 12, 1914. The court, on its own motion, placed the said case upon the reserve calendar, showing having been made by the defendant that he would make application to the Board of Dental Examiners for the restoration of his license, which had been revoked for failure to pay the annual license fee.

*People vs. N. Rasnik.* November 19, 1914, defendant was arrested and the case is pending in the police court.

#### HEARINGS OF CHARGES OF UNPROFESSIONAL CONDUCT.

*In the matter of the accusation against R. C. Anderson.* An accusation was filed against R. C. Anderson, April 17, 1914, charging him with unprofessional conduct in that he employed J. V. Munn, an unlicensed person, in the conduct of his business, and in that he aided and abetted said J. V. Munn to practice dentistry unlawfully. This matter came on for hearing June 16, 1914, and was presented to the Board. Judgment therein was rendered June 19, 1914, the said R. C. Anderson being found guilty of said charges and his license suspended for the period of one year beginning July 1, 1914.

*R. C. Anderson, Plaintiff, vs. Board of Dental Examiners et al., Defendants.* Petition was filed by this plaintiff seeking to prohibit the Board of Dental Examiners from proceeding with the accusation hereinabove referred to. An alternative writ of prohibition was issued by Judge Seawell, returnable June 12, 1914. On June 10, 1914, demurrer to said petition was filed and the return day was continued from June 12 to June 16, 1914. The demurrer was orally argued before Judge Seawell, and sustained, the writ of prohibition being denied. Thereafter the Board of Dental Examiners proceeded with the accusation as hereinabove set forth.

*R. C. Anderson vs. Board of Dental Examiners, etc.* (District Court of Appeal). Petition for writ of review was filed in the above named



court (First Appellate District), returnable July 27, 1914. In this proceeding said Anderson seeks to review the action and judgment of the Board of Dental Examiners in the matter of the accusation filed against him. The return day has been continued from time to time and the matter will be orally argued in the District Court of Appeal, First Appellate District, on December 28, 1914.

*In the matter of the accusation against C. J. Carter.* An accusation was filed against C. J. Carter charging him with unprofessional conduct in that he was guilty of gross immorality. The said matter came on for hearing August 15, 1914, and was presented to the Board. Judgment therein was rendered August 15, 1914, the said Carter being found not guilty.

*In the matter of the accusation against W. P. Meyer.* An accusation was filed against W. P. Meyer charging him with unprofessional conduct in that he directly employed in his business T. B. Wilson, an unlicensed person, to practice dentistry and in that he aided and abetted the said Wilson to practice dentistry unlawfully. The said matter came on for hearing at San Diego, California, October 23, 1914, and was fully presented to the Board for its determination. Judgment therein was rendered October 23, 1914, the said W. P. Meyer being found guilty of the charges made against him, and as a penalty therefor the license of the said W. P. Meyer was revoked. Proceedings have been instituted by the said Meyer in the superior court of the county of Los Angeles, State of California, in which he seeks to review the action and judgment of the said Board. This matter is being handled by the office of the Attorney General of the State of California.

*In the matter of J. P. Lassen.* J. P. Lassen, whose license had been suspended during the year 1913 for a period of one year for unprofessional conduct, filed a petition for a writ of review in the superior court of the city and county of San Francisco. The writ was denied and on appeal to the Appellate Court the judgment was affirmed. Thereafter a petition to have the matter heard by the Supreme Court was denied by that court. The Attorney General appeared for the Board in this case.

*W. E. Hutchason vs. Board of Dental Examiners et al.* On October 15, 1914, action was brought by W. E. Hutchason against the individual members of the Board of Dental Examiners for the sum of \$10,000 damages. This action was instituted as a result of the activities of the agents of the Board in arresting D. W. Thomas, an unlicensed dentist in the employ of said W. E. Hutchason; and the seizure, upon warrant, of some of the instruments, etc., which said Thomas was using at the time of his arrest. The case is pending.

## FINANCIAL STATEMENT.

The following is an account of all moneys received and disbursed during the year:

## GENERAL FUND.

December 1, 1913, balance on hand..... \$4,271 07

*Receipts.*

197 examination fees at \$25.....	\$4,925 00
46 reinstatement license fees at \$25.....	1,150 00
7 restoration license fees at \$25.....	175 00
Fines .....	1,399 00
	<hr/>
	\$7,649 00

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\$11,920 07

*Disbursements.*

Board compensation and mileage.....	\$3,938 00
Secretary's salary and office rent.....	895 00
Telephone and postage.....	197 18
Printing and stationery.....	524 63
Examination expenses.....	240 23
Miscellaneous .....	107 15
	<hr/>
	\$5,902 19

December 1, 1914, balance on hand..... \$6,017 88

## REGISTRATION FUND.

December 1, 1913, balance on hand..... \$5,798 86

*Receipts.*

2364 annual renewal license fees at \$2.....	\$4,728 00
Exchange .....	82
	<hr/>
	\$4,728 82

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\$10,527 68

*Disbursements.*

Secretary's salary and office rent.....	\$885 00
Telephone and postage.....	112 40
Printing and stationery.....	29 72
Attorney fees.....	1,385 70
Detective and inspector fees.....	1,742 20
Expenses incidental to prosecutions.....	987 43
Miscellaneous .....	109 85
	<hr/>
	\$5,252 29

December 1, 1914, balance on hand..... \$5,275 39

All of which is respectfully submitted by the Board of Dental Examiners of California.

LELAND D. JONES, D.D.S., President.

C. A. HERRICK, D.D.S., Secretary.

December 1, 1914.





SEVENTH BIENNIAL REPORT

OF THE

STATE VETERINARIAN

OF

CALIFORNIA

FOR THE TWO YEARS ENDING JUNE 30, 1914

CHARLES KEANE, D.V.S.	State Veterinarian
WARD B. ROWLAND, D.V.S.	Assistant State Veterinarian
J. P. IVERSON, D.V.S.	Deputy State Veterinarian
W. KADY	Clerk



CALIFORNIA  
STATE PRINTING OFFICE  
1915





## LETTER OF TRANSMITTAL

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STATE OF CALIFORNIA, OFFICE OF STATE VETERINARIAN.  
SACRAMENTO, February 12, 1915.

*To His Excellency, HIRAM W. JOHNSON,*  
*Governor of California,*

State Capitol, Sacramento, California.

DEAR SIR: I have the honor to transmit herewith report of the State Veterinarian for the biennial period ending June 30, 1914.

Yours very truly,

CHARLES KEANE,  
State Veterinarian.



## REPORT OF THE STATE VETERINARIAN.

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The report of this department for the biennial period, ending June 30, 1914, shows little if any change on the whole, from the report submitted to you two years ago. This is due to the fact that our energies have been concentrated in a continuation of the work as outlined in our last report, believing as we do that, with our limited facilities, much more could be accomplished by devoting such energies to work on hand rather than by dividing our attention by the creation of new lines of endeavors. Thus we have continued our systematic fight against glanders in horses and mules; and, in cooperation with the United States Bureau of Animal Industry, the campaign against the cattle tick and scabies in sheep has been energetically continued. In addition the following animal diseases, viz: anthrax, blackleg, necrobacillosis in cattle, hogs and sheep, hog cholera, tuberculosis, forage poisoning in horses, rabies, as well as many miscellaneous investigations of reported sickness and deaths among animals of presumably infectious nature have occupied the undivided attention of the employees of this department during the past two years.

Supervision of the importation and exportation of live stock, in order to protect this state and to guarantee the healthfulness of California shipments into other states, has also added considerably to the work of this office.

Meetings of live stock men were arranged at various times during the past two years at which addresses on the subject of the care and prevention of diseases of live stock were made by members of this department.

Inspections and testing of purchases of live stock for the various state institutions, in accordance with the instructions of the State Board of Control, were made at various times, and in addition the dairy herds of most of the state institutions were tuberculin tested one or more times. The policy thus adopted by the State Board of Control, in causing an examination of such animals to be made by a veterinarian before purchase, is undoubtedly wise, for in a number of instances animals have been rejected as unsound or unfit for the purposes required.

The most serious loss among live stock during the past two years has undoubtedly been due to cholera in hogs. This disease has been very widespread throughout the United States, including California, exceeding by far losses of previous years. This might appear incongruous in view of the fact that the Niles-Dorset method of protecting swine against cholera by vaccination has been used, and in this state the Agricultural Experiment Station has been preparing this serum, and

according to law establishing the serum laboratory, has been distributing such serum to swine raisers at cost of production. In discussing this subject under the title of "Cholera in Hogs," I shall endeavor to explain this serious situation.

At the last session of the legislature of this state a commission was created for the purpose of investigating the damage, if any, done by wastes from smelting establishments to neighboring animal and vegetable life. The state veterinarian was, by statute, made a member of this commission. Considerable of our time was consumed in carrying out the provisions of this law.

With the exception of cholera among hogs, no serious epizootic has appeared among live stock in California during the last biennial period. On the whole, I am of the opinion that our live stock industry has prospered. During 1913 lack of precipitation caused a rather serious shortage of range feed, but ready markets were found for surplus animals located in these sections of the state most seriously affected.

During 1914, which was one of the best years that we have ever experienced, a shortage of live stock existed, as the feed produced was considerably in excess of consumption. Prices of live stock during these two years were good, and from the present outlook it is the general impression that the live stock industry will remain a stable and profitable business.

I have no radical recommendations to offer as to the future conduct or policy of this department. I believe, however, that minor amendments in the law creating this department can be made to advantage. Under the provisions of the present law it is necessary for the state veterinarian to report to the board of supervisors of a county in which an infectious disease of animals is discovered, and await a period of five days before taking any action in the premises, and if at the expiration of that time the board fails to act, the state veterinarian is then authorized to take the necessary action to circumscribe and eradicate such infection. Legally this ties the hands of the state office for a sufficient length of time that might allow the widespread distribution of an infectious disease; furthermore, many boards only meet monthly. As prompt action is always necessary in handling infectious diseases, I would respectfully recommend that our law be amended to legally authorize the state veterinarian to proceed immediately to circumscribe and eradicate infections when discovered.

The law providing for the inspection and testing of animals before being transported into California should, in my opinion, be amended to provide that in lieu of a certificate of veterinary inspection and testing, such animals may be transported into this state if accompanied by a certificate issued by the state veterinarian at point of origin stating that the animals are free from disease and have not been exposed thereto.



The live stock sanitary officials, having a knowledge of prevailing conditions in their states, could issue such certificates without causing a special examination of the animals to be made, thereby saving the shipper the cost of the inspection fees, and in many instances avoiding unnecessary delays to the shipper.

During the past two years there has been regularly employed in this department, in addition to the state veterinarian, one assistant and two deputy state veterinarians. In addition, and especially during the fall and spring of the year, two or more live stock inspectors have been employed for temporary periods in the inspection and disinfection of sheep for scabies. The state, assistant state and one deputy state veterinarian, as well as a clerk, are statutory officials, while the other employees are paid out of the appropriation for support of this department.

While there are a number of ways by which this service to the live stock industry of California might be extended, this would, however, occasion the need of a larger appropriation for this department, but I feel that the state is now providing liberally for this branch of the service, and I do not hesitate to state, without any feeling of self-gratification, that adequate protection is now afforded our live stock industry through the efforts of this department and with the appropriation now allowed for its support.

#### TEXAS FEVER (CATTLE TICK ERADICATION).

The work of eradicating cattle ticks, the cause of Texas or Southern fever in cattle, has been continued, in cooperation with the United States Bureau of Animal Industry. This work is now confined to one large cattle range in the extreme northern section of San Luis Obispo County, and to one large range in the northern section of San Diego County and extending over the county line into Orange County. Contiguous to this latter range are several small ranches which are also receiving attention as reinfestation of these latter has occurred at various times, undoubtedly through the means of infested cattle from the large range breaking through the line fences or vice versa.

In San Luis Obispo County the work of eradicating the infestation on this large range is progressing rapidly. Infested pastures have been subdivided by the erection of fences and the work has been progressing by means of resting infested pastures and disinfections of infested and exposed cattle. As the work has progressed so favorably on this large range during the past two years, and repeated inspections have revealed no further infestation in San Luis Obispo County during the last biennial period, I would respectfully recommend to your Excellency that all that part of San Luis Obispo County which remains under quarantine for southern cattle fever be removed, with the exception of the terri-

tory lying north of the town of Cambria and west of the summit of the Santa Lucia range of mountains.

At this time I can not refrain from citing cattle tick eradication in San Luis Obispo County as an example of what can be accomplished by intelligent and systematic live stock sanitary work. At the time this work was started in San Luis Obispo County a survey by state and federal inspectors disclosed the fact that a blanket of tick infestation existed in all that section of the county west of the summit of the Santa Lucia range of mountains, from the extreme northerly border of the county to its southern intersection with Santa Barbara County. The task at that time appeared insurmountable, and predictions were freely made that it was a waste of effort and money. The work was necessarily slow at first, mainly through lack of cooperation, but as a few ranches were cleaned, and it was recognized that our work and efforts were serious, the obstacles that were thrown in our path became less and less and the work continually progressed.

The results of this work are that cattle do not now die from Texas fever in San Luis Obispo County; this large dairy and beef section is now producing more and better milk and beef than formerly; and the movements of cattle therefrom are unrestricted, giving San Luis Obispo County a larger field and better prices for its surplus cattle.

In San Diego County the work is progressing on the remaining large infested ranch by means of pasture resting and disinfections of cattle.

Along the Mexican border, in spite of the line fence that was erected by the United States Government, a few reinfestations of border ranches have occurred from tick infested Mexican cattle carrying ticks over the border. This will always be a difficult matter to control until the Mexican Government adopts means to control and eradicate tick infestation on its side of the international line.

### ANTHRAX.

The attention of this department was called to seventy-four outbreaks of anthrax during the past two years. These outbreaks occurred in the following counties: San Luis Obispo, Stanislaus, Marin, Monterey, Mono, Solano, Sacramento, Calaveras, Imperial, Merced, Kern, San Bernardino, Fresno, Colusa, San Benito, San Joaquin, Butte, Yuba, Kings, Glenn, Mendocino, Sierra, Riverside, and Los Angeles.

This disease, the most deadly of all live stock diseases and communicable to human beings, is most difficult to control. Once a range becomes infected it remains so year after year, and the possibility of eradicating the infection is practically impossible. Many of our ranges, especially along the large river courses, have been infected for years. This infection is impossible to eradicate, and as long as animals are fed therefrom some will, under certain conditions, die from year to year.

There is no legal obstacle to prevent the use of such ranges, even if such were feasible, consequently all that this department can do in the premises is to guard against the spread of the disease to non-infected areas and to advise owners of the methods of control.

Our experience has shown that fatalities from anthrax more often commence to occur during the late summer and fall. This is probably due to the fact that as the infection exists among the grass roots, and the grass being more closely cropped at this time of the year, consequently the infection is more likely to be taken up at this time. Furthermore during the warm weather, on moist lands, multiplication of the bacillus anthracis is said to occur.

Preventive vaccination against this disease has not afforded uniform security. This is undoubtedly due to several reasons, among which I might mention are: impotent vaccines and improper methods of administration of same. When a potent vaccine is administered sufficiently in advance of the time the animals are exposed to this infection the results are more or less satisfactory. Unfortunately, however, many owners do not vaccinate until their animals begin to die, and frequently the vaccine used possessed little if any immunizing properties.

### GLANDERS.

A perusal of the table herewith accompanying will show that while this disease still continues to be the most serious infection among horses and mules in this state, its prevalence during the past two years was of considerably less extent than during the preceding biennial period. In the two years ending June 30, 1912, there were 1,252 head of horses and mules destroyed for glanders, while during the last biennial period only 598 animals were destroyed. The same vigorous efforts to control and eradicate this disease have been exercised during the last two years as in the two years preceding, and if we can base any judgment on figures it will be seen that glanders infection has been reduced by approximately fifty-two per cent. Only 320 animals exhibited physical symptoms of glanders and consequently were destroyed without a test, while the balance destroyed, 278 in number, were animals which had been in contact with physical cases, and responded to tests.

The ophthalmo mallein test was used as a diagnostic agent with the majority of contact animals. In the early part of the biennial period the subcutaneous mallein test was employed, and in many instances corroborative serum tests were employed.

The ophthalmo mallein test is now the recognized official test for glanders of the United States Department of Agriculture and of most of the states. It has many advantages over the previously used sub-

cutaneous mallein test inasmuch as its application is very simple, the reaction is pronounced and evident to the layman, and is very reliable.

GLANDERS TABLE.

Counties	Tested	Tested and passed	Tested and destroyed	Held for retest	Destroyed without test	Total destroyed	Reactors not disposed of
Alameda	245	195	46		37	83	4
Butte	532	503	29		8	37	
Contra Costa	124	115	9		7	16	
Colusa	206	174	31		8	39	1
Fresno	35	26	9		18	27	
Glenn	12	12			2	2	
Imperial	26	25	1		3	4	
Inyo	2	2					
Kern	135	118	11	4	2	13	2
Kings	2		2		3	5	
Los Angeles	343	320	20		46	66	3
Madera	1	1			1	1	
Marin	14	14			1	1	
Mendocino	151	124	27		1	28	
Merced	35	33	2		9	11	
Modesto	1		1		1	2	
Monterey	108	107	1		4	5	
Napa	9	8	1			1	
Nevada	1	1			1	1	
Placer	10	9	1		6	7	
Riverside					15	15	
Sacramento	33	25		3	5	5	5
San Benito	3		3			3	
San Bernardino	73	68	5		2	7	
Santa Clara	32	24	8		10	18	
San Diego	49	34	15		3	18	
San Francisco	304	274	24	1	72	96	5
San Joaquin	162	149	9		20	29	4
San Luis Obispo	13	10	3		8	11	
San Mateo	8	8			3	3	
Solano	1	1					
Sonoma	12	11	1		4	5	
Stanislaus	30	24	5		2	7	1
Tulare	67	56	11		13	24	
Tuolumne	5	1	3			3	1
Ventura	12	12			4	4	
Yuba					1	1	
Totals	2,796	2,484	278	8	320	598	26

## BLACKLEG.

Deaths among young cattle due to this disease occurred in the following counties: Santa Barbara, Glenn, Riverside, Merced, San Bernardino, Placer, Sonoma, Kings, Sacramento, Sutter, Yolo, Nevada, San Benito, Calaveras, Stanislaus, Butte, Tulare, and San Luis Obispo.

This disease is so easily controlled by preventive vaccination that its ravages are no longer viewed with the same fear by stockmen as in former years. The activities of this department in connection with this disease were in the nature of investigating reports of deaths among young cattle and when a diagnosis of blackleg was established, caused the cremation or deep burial of the carcasses, and advice regarding control by preventive vaccination.



### HOG CHOLERA.

The most perplexing problem that we had to contend with during the last two years was hog cholera. This has been the experience of live stock sanitary authorities throughout the United States. This disease, which for years has been the most serious of all hog diseases in the United States, was, during 1913 and 1914, extremely prevalent and existed in epizootic form. California did not escape its ravages, and in practically every county in which hogs are raised to any extent severe losses from this disease were experienced. In fact, to endeavor to control this infection, with meagre state facilities, was simply impossible. At times so many reports of outbreaks would simultaneously be received from widely separated sections of the state that even if we dropped all other work on hand, our efforts would be very feeble, indeed. In view of this fact, and likewise in consideration of the widespread prevalence of the disease, our efforts were devoted more to organizing the hog raisers in the various counties into organizations for the purpose of fighting cholera.

When we first took up the work of eradicating the cattle tick in California we found that without adequate cooperation from the cattlemen our work would be prolonged or useless. This cooperation was obtained through the organization of the cattlemen's associations in the tick infested counties and the work speedily progressed. We have attempted to start the organization of similar associations among hog raisers, and believe when the idea takes root that the control of hog cholera will be successful. Two associations of this character have already been started, one in Colusa and the other in Imperial County. In the Code of Ethics of the Colusa County Swine Breeders' Association, which is included in this report, you will see that if the members of such an association were careful in its observance cholera would soon be brought under absolute control.

Following is the Code of Ethics of the Colusa County Swine Breeders' Association:

#### CODE OF ETHICS.

SECTION 1. Members of this association are expected to cooperate with the state veterinarian in his efforts to control and eradicate cholera as well as other diseases among swine in Colusa County.

SEC. 2. Every member of this association whenever sickness occurs in his swine which appears to be infectious in nature, shall immediately notify the state veterinarian of the existence thereof.

SEC. 3. No member of this association shall allow the carcass of any hog which dies to remain upon the ground, but he shall immediately dispose of such carcass by cremation, if possible; otherwise, by deep burial.

SEC. 4. Whenever cholera appears among the hogs of a member of this association he shall allow a placard to be tacked on a prominent place on the fence adjacent to the entrance of his premises; such placard



shall state in plain language that cholera exists among the hogs on these premises, and shall warn all people to keep away from the hogpens thereof.

SEC. 5. Every member of this association shall prohibit strangers, and especially vendors of patent hog remedies, from visiting his hogpens.

SEC. 6. Every member of this association, whenever cholera exists among his hogs, shall refrain from visiting the hogpens of other swine raisers in Colusa County, and shall also clean and disinfect his hands and change his clothes and shoes after handling his infected hogs and visiting the infected pens, before he holds any intercourse with any other swine raiser in Colusa County.

SEC. 7. Whenever it has been determined that cholera exists among the hogs of any resident of Colusa County, the president of this association shall urge all swine breeders who are raising hogs in the vicinity of such outbreak, to allow all such hogs to be immunized with anti-hog cholera serum.

SEC. 8. Every member of this association shall have displayed in a prominent place on a fence, near the entrance of his premises, a stenciled sign reading as follows:

MEMBERS OF COLUSA COUNTY SWINE BREEDERS' ASSOCIATION—NO  
VISITORS ALLOWED IN HOGPENS WITHOUT PERMISSION.

SEC. 9. Every member of this association agrees to see that the rules of this association and its Code of Ethics, as well as the laws of the county of Colusa and the State of California concerning the eradication of hog cholera, are properly complied with by his neighbors, and each member further agrees that when violations of these rules, Code of Ethics and laws come under his observation, he will immediately notify the member of the executive committee who lives in his district, as well as the president of the association, and also, if necessary, the state veterinarian.

SEC. 10. As hogs which are vaccinated by the sero-simultaneous method for producing immunity against cholera are, in many instances, capable of transmitting cholera to non-immunized hogs, every member of this association agrees, whenever his hogs are so vaccinated, that he will permit his premises to be placarded as follows:

HOGS ON THESE PREMISES HAVE BEEN VACCINATED WITH VIRUS  
AND SERA; NO VISITORS ALLOWED IN THESE HOGPENS.

Such a member shall also handle his hogs and prevent the extension of hog cholera infection, as is provided for in section 6 of this article.

SEC. 11. The members of this association agree, wherever possible, to remove their hogpens from portions of their ranches that abut on public roads.

SEC. 12. Every member of this association agrees that whenever new hogs are purchased from outside of Colusa County, that they shall be placed by themselves for a period of at least ten days before being turned in with the other hogs.

It can hardly be expected that rapid progress in the organization of such associations would occur at this early date. However, many inquiries on the subject have been received from other counties, and

with the valuable assistance being rendered by the State Agricultural Experiment Station and county advisors I believe this plan will receive a great impetus during the next two years.

In view of the fact that we now possess a reliable immunizing agent for hog cholera, and inasmuch as the State Agricultural Experiment Station, in accordance with the law of 1911, has, since that date, been preparing and distributing anti-hog cholera serum to swine raisers of this state, it would appear that hog cholera should be on the wane, instead of being on the increase and greatly widespread. Many reasons have been ascribed for the great prevalence of this disease during the past two years, but in the opinion of the writer and many other observers, this increase can be ascribed principally to the misuse of the sero-simultaneous method of vaccination, and the absolute reliance which swine raisers have been prone to place on this preventive to the utter neglect, in many instances, of the simple principles of sanitation.

There can be no denial that the sero-simultaneous method of vaccination, in a district hitherto free from cholera, is a dangerous menace, when the principles of this method are understood. By sero-simultaneous vaccination is meant the simultaneous vaccination of hogs with anti-hog cholera serum and virus, the latter containing the active causative agent of the disease. This method of vaccination when successful produces an active immunity. Unfortunately, a small percentage of healthy hogs so vaccinated contract cholera, and even when disease does not result such immunized hogs must be considered as infected for a rather indefinite period after vaccination. As this method of vaccinating was more or less generally practiced during the past two years, it is reasonable to assume that at least some of the infection could be traced to the use of virus.

Unfortunately, through the medium of the current literature of experiment stations, farm journals and biological establishments, swine raisers were lead to believe that vaccination against cholera was a panacea, while, on the contrary, it is only an adjunct to be used in fighting this disease when the menace exists, and then it must be supplemental to the well known principles of sanitation.

#### MISCELLANEOUS DISEASES.

Many investigations were made to ascertain the cause of a variety of diseases from which considerable numbers of animals were sick or had died in which the ailments had the characteristics of serious, infectious diseases. Among such diseases found might be mentioned the pneumonic form of influenza, strangles, forage poisoning, acute indigestion, actinomycosis, infectious abortion, plant poisoning, starvation and necrobacillosis, the latter exemplified by such diseases as foot rot in sheep, necrotic dermatitis in hogs and sore mouth in calves.

In addition frequent reports of sickness and deaths among dairy calves due to umbilical infection were investigated. Pneumonia, polyarthritis and diarrhoea were the diseases found affecting calves in numerous instances, and which were due to entrance of pathogenic organisms through the unhealed umbilicus.

The foregoing investigations were conducted in the following counties: Butte, Sierra, Stanislaus, San Benito, Napa, El Dorado, Siskiyou, Calaveras, Fresno, Merced, Marin, Alameda, Contra Costa, Tehama, San Joaquin, Yuba, Inyo, Mendocino, Shasta, Modoc, Yolo, Glenn, Plumas, Lassen, Santa Barbara, Imperial, Tulare, Nevada, Los Angeles, Sonoma, and Placer.

In all instances advice and treatment, both preventive and therapeutic, were given and followed with success.

### SHEEP SCABIES.

Cooperative work with the United States Bureau of Animal Industry in the work of eradicating scabies in our flocks has been continued by this department during the past two years. While this disease has been under control for several years, yet systematic inspections must be continually made of all California sheep in order to detect as early as possible any infected bands. On account of the manner in which California sheep are run, and their migration to and from summer and winter ranges, one band of infected sheep, if not detected in time, will often scatter the infection to other bands. This has occurred in a number of instances, but it can not, however, be ascribed to carelessness on the part of the inspectors. Oftentimes the parasitic cause of this disease will remain dormant in a band of sheep, and at the time the inspection is made the sheep are apparently clean, only to break out later under favorable conditions. In such cases, if the sheep have been trailed, the disease is often spread to other bands.

### TUBERCULOSIS.

For several years past this department has been testing herds for tuberculosis when owners would sign agreements to follow our instructions in subsequently building up tuberculous free herds. This work has been done without expense to the owner. However, during the last biennial period the volume of other work of an urgent nature prevented us from encouraging owners to enter into these agreements. The records of this department show that 3,712 animals were tuberculin tested, 359 of which reacted to the test and were either destroyed or segregated.





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# STATISTICAL REPORT

OF THE

California

## State Board of Agriculture

For the Year 1913



CALIFORNIA  
STATE PRINTING OFFICE  
1914

## STATE BOARD OF AGRICULTURE, 1913.

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### DIRECTORS.

I. L. BORDEN	San Francisco
CHAS. J. CHENU	Sacramento
THEO. GIER	Oakland
E. FRANKLIN	Colfax
H. A. JASTRO	Bakersfield
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A. L. SCOTT	President
B. F. RUSH	Vice-President
CHAS. W. PAINE	Secretary
H. E. SMITH	Assistant Secretary

# REPORT

OF THE

## STATE BOARD OF AGRICULTURE.

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### LETTER OF TRANSMITTAL.

July 1, 1914.

*To His Excellency, HIRAM WARREN JOHNSON,*  
*Governor of the State of California.*

SIR: We have the honor to submit herewith the Sixtieth Annual Report of the State Board of Agriculture, containing the financial statement for the fiscal year ending June 30, 1914, with a statistical report of the production of California for the calendar year 1913.

The financial statement shows an increase over previous years that is gratifying, notwithstanding the fact that the year could not be viewed as a prosperous one for the State, owing to the decreased production of the soil, due to unfavorable weather conditions for 1913, as well as the previous year.

The State Fair is steadily gaining in prestige and usefulness, as well as in aggregate receipts. The comparative statement for the past three years, giving in round numbers the gains for each year, is as follows:

1911	-----	\$7,500 00
1912	-----	9,000 00
1913	-----	12,000 00

This increase is largely due to the policy of making the fair fully representative of the agricultural, manufacturing and live stock industries, while other interests of the State are recognized and given full opportunity for proper exploitation and advancement. The State Fair is one of our most potential agencies in the line of practical education, not alone in displaying our products, but in the more valuable field of comparing methods and experiences of those in whose hands lies the development of our resources.

It is opportune at this time to call attention to the necessity for better facilities for the State Fair. The buildings and grounds are inadequate to meet the demands of the producers of the State for the proper display of their products. Exhibits in all departments rival in volume and quality the best fairs of older and more thickly settled states, while our facilities are much inferior. This condition should not exist if the fair is to keep pace with the increasing production of the State. If this condition were fully understood by the people there would be no doubt of their favorable action on the pending bond issue for the improvement of the fair grounds. With \$750,000.00 from this source California's



State Fair could be made a most useful instrument for this great state, and would rival any in the union.

The statistical figures submitted with this report are not a complete statement of the resources of California, but give data on some lines that can not be obtained elsewhere. The report also shows valuable figures and comparisons compiled from United States reports and from other official and quasi-official sources, representing, as a whole, a very useful compendium of California's wealth and diversified interests. It is to be regretted that the funds at the disposal of the board are not sufficient to justify the undertaking of this work on an original and independent basis; California, with its wonderful resources, could well afford to spend the money each year that is necessary, in order to place facts in regard to our vast production and resources before the world.

Excepting dairy cattle, the year 1913 shows a slight decrease in the live stock industry. The dairy class shows a substantial gain, both in numbers and value. Grain and fruits are below the average, the aggregate ranging from 60 to 80 per cent of the normal production. On the other hand, the development of cotton, rice, and tobacco is noteworthy. The cultivation of cotton on a commercial basis dates back but five years, yet the crop of 21,500 bales in 1913 is an important feature in the State's production for the year. Rice is a more recent product, its cultivation having commenced in 1911. The seeding of 6,250 acres in rice in 1913, with an estimated production of 20,000,000 pounds, and the establishing of two rice mills during the year are the best evidence of the growing importance of this staple product to California.

The cultivation of tobacco is gaining in importance. The growers have been somewhat disappointed in the prices received, but this is largely due to the method used in curing the leaf, a matter that will be overcome by experience. The yield for 1913 was estimated at 175,000 pounds.

Our own citizens, as well as those of other states and countries, will find it of interest to review this report, showing, as it does, the development of California and our relative position in the production of the world's resources.

Respectfully submitted.

A. L. SCOTT, President.

CHAS. W. PAINE, Secretary.

## FINANCIAL STATEMENT.

July 1, 1913, to June 30, 1914.

## SUMMARY.

## RECEIPTS.

Appropriations for statistics.....	\$3,570 20
Appropriation for directors' traveling expenses.....	3,035 52
Appropriation for salaries.....	5,541 67
Appropriation for aid.....	30,000 00
Deficiency sixty-third and sixty-fourth fiscal years.....	15,337 26
Interest .....	261 05
Race card sales.....	352 99
Poultry entry fees.....	402 65
Live stock entry fees.....	1,226 50
Gate receipts, 1912.....	47,895 80
Concessions .....	8,205 11
Stall rent .....	743 90
Park and pavilion, 1913.....	1,239 20
Park and pavilion, 1914.....	10 00
Sale of junk.....	538 20
<b>Total .....</b>	<b>\$118,360 05</b>

## DISBURSEMENTS.

Electric light account.....	\$3,054 66
Traveling expenses .....	364 85
Directors' traveling expenses.....	2,052 67
Bills payable .....	15,337 26
Groom prizes .....	195 00
Salaries .....	10,961 67
Payroll .....	10,638 18
Expenses .....	11,055 34
Advertising .....	8,776 42
Freight, drayage, express.....	412 77
Stable expense .....	1,019 27
Postage .....	582 58
Premiums paid .....	17,923 16
Night horse show.....	714 00
Races .....	8,141 76
Judges' fees .....	1,175 00
Attractions .....	16,478 28
Official program .....	256 65
Revolving fund .....	500 00
State treasurer, balance on hand.....	8,720 53
<b>Total .....</b>	<b>\$118,360 05</b>

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Premiums paid .....	17,923 16
Night horse show.....	714 00
Races .....	8,141 76
Judges' fees .....	1,175 00
Attractions .....	16,478 28
Official program .....	256 65
Revolving fund .....	500 00
State treasurer, balance on hand.....	8,720 53
<b>Total .....</b>	<b>\$118,360 05</b>





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STATISTICAL SUMMARY  
OF THE  
Production and Resources  
OF  
CALIFORNIA  
BY  
GEORGE ROBERTSON  
State Statistician

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## PREFACE.

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In the year 1911 a statistical report for the whole State was first issued, the statistics being carried back to the year 1850, when the State was first organized. In the report for 1913 the statistics for the earlier years from 1850 to 1880 have as a rule been omitted, but they can be obtained on referring to the reports of the two previous years. The source of the figures contained in this report are the most trustworthy that can be obtained, and have been brought down to the latest possible date.

This report is compiled in compliance with the law which provides that the State Board of Agriculture shall "create and maintain a statistical department for the annual collection, compilation and distribution of statistics relating to the production and resources of the State," and another act, in 1911, which appropriated the sum of \$5,000.00 per annum for this purpose.

The great importance and value of statistics is now universally recognized, but it is a science which has been much neglected in California. In the reports published in all civilized countries it is usual to give the figures for ten to twenty years, and even longer periods, in order to enable comparisons to be made, and this precedent has been followed, as being the only way in which reliable data can be secured.

It has been found necessary to reduce the size of this report by upwards of sixty pages in order to keep within the amount of the appropriation. Since the report for 1911 was issued there has been a constant and growing demand for statistics classified by counties, such as were given in the report of that year. It is therefore intended to give a descriptive account of each county next year, together with complete statistics.

The duties on imports are those imposed by the Tariff Act of 1913.

Much information has been obtained from federal publications, and acknowledgement and an expression of high appreciation are due to the United States Department of Agriculture, the Bureau of Statistics, Bureau of the Census, Department of Commerce, United States Geological Survey, Commissioner of Fisheries, Commissioner of Indian Affairs, General Land Office, National Conservation Commission, the Reclamation Service Department, the Commissioner of Internal Revenue, the Comptroller of the Currency, and the Bureau of Corporations.

The report of the Conservation Commission of California, recently issued, is the most valuable work relating to irrigation yet published, as it shows what land is capable of irrigation in every part of the State

The writer desires to express his special obligations to Frank Adams, Irrigation Manager; George H. Willson, Local Forecaster of the Weather Bureau at San Francisco; David T. Day, of the United States Geological Survey; Henry S. Graves, U. S. Forester; and Frank J. Snow, Deputy Collector, Internal Revenue Department of San Francisco. For the description of varieties of wine grapes and wine-making, acknowledgments are due Professor F. T. Bioletti, the viticulturist of the University of California.

Among the state departments, valuable assistance has been received from the State Controller's Department, the State Water Commission, State Mining Bureau, State Dairy Bureau, and the splendid State Library at the Capitol.

G. R.

Sacramento, California, July 1, 1914.

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NOTE.—For the section containing a descriptive account of each county with summary of the number of domestic animals and farm crops, see Report for 1911. The duty on imports given is that imposed by the Tariff Act of 1913.

## NOTES REGARDING CHANGES IN BOUNDARIES OF COUNTIES AND INCORPORATED PLACES.

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*Colusa*—Part taken to form Glenn in 1891.

*Del Norte*—Part annexed to Siskiyou between 1880 and 1890.

*Fresno*—Part taken to form Madera in 1893, and part annexed to Kings in 1909.

*Glenn*—Organized from part of Colusa in 1891.

*Humboldt*—Part of Klamath annexed in 1874.

*Imperial*—Organized from part of San Diego in 1907.

*Kings*—Organized from part of Tulare in 1893, and part of Fresno annexed in 1909.

*Lake*—Part annexed to Napa in 1872.

*Los Angeles*—Part taken to form Orange in 1889.

*Madera*—Organized from part of Fresno in 1893.

*Modoc*—Organized from part of Siskiyou in 1874.

*Monterey*—Part taken to form San Benito in 1874.

*Napa*—Part of Lake annexed in 1872.

*Orange*—Organized from part of Los Angeles in 1889.

*Riverside*—Organized from parts of San Bernardino and San Diego in 1893.

*San Benito*—Organized from part of Monterey in 1874.

*San Bernardino*—Part taken to form part of Riverside in 1893.

*San Diego*—Part taken to form part of Riverside in 1893, part taken to form Imperial in 1907.

*Santa Barbara*—Part taken to form Ventura in 1871.

*Siskiyou*—Part taken to form Modoc in 1874; part of Klamath annexed in 1874, and part of Del Norte annexed between 1880 and 1890.

*Tulare*—Part taken to form Kings in 1893.

*Ventura*—Organized from part of Santa Barbara in 1871.

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## INCORPORATED PLACES.

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*Bakersfield*—Part of township 3 (Kern City) annexed in 1909.

*Berkeley*—Part of Oakland township annexed in 1906 and 1908.

*Fresno*—Part of township 3 annexed in 1910.

*Los Angeles*—Parts of Ballona, Burbank, Cahuenga, and San Antonio townships annexed between 1890 and 1900; part of Ballona township annexed in 1906; part of Willington township (including San Pedro city) annexed in 1909, and parts of Burbank and Cahuenga townships annexed in 1910.

*Oakland*—Parts of Brooklyn and Oakland townships annexed in 1909.

*Ontario*—Part of Ontario township annexed in 1901.

*Pasadena*—Parts of Pasadena township annexed in 1904 and 1906.

*San Leandro*—Part of Brooklyn township annexed in 1909.

TABLE I.  
 Counties and County Seats.  
 (Date of creation and land area.)

County	County seat	Date of creation	Land area, square miles	Approximate acreage
Alameda	Oakland	Mar. 25, 1853	732	468,480
Alpine	Markleeville	Mar. 16, 1864	776	496,640
Amador	Jackson	May 11, 1854	601	384,640
Butte	Oroville	Feb. 18, 1850	1,722	1,102,080
Calaveras	San Andreas	Feb. 18, 1850	1,027	657,280
Colusa	Colusa	Feb. 18, 1850	1,140	729,600
Contra Costa	Martinez	Feb. 18, 1850	714	456,960
Del Norte	Crescent City	Mar. 2, 1857	1,024	655,360
El Dorado	Placerville	Feb. 18, 1850	1,753	1,121,920
Fresno	Fresno	Apr. 19, 1856	5,950	3,808,000
Glenn	Willows	Mar. 11, 1891	1,259	805,760
Humboldt	Eureka	May 12, 1853	3,634	2,325,760
Imperial	El Centro	Aug. 15, 1907	4,089	2,616,960
Inyo	Independence	Mar. 22, 1866	10,019	6,412,160
Kern	Bakersfield	Apr. 2, 1866	8,003	5,121,920
Kings	Hanford	Mar. 22, 1893	1,159	741,760
Lake	Lakeport	May 20, 1861	1,278	817,920
Lassen	Susanville	Apr. 1, 1864	4,531	2,899,840
Los Angeles	Los Angeles	Feb. 18, 1850	4,067	2,602,880
Madera	Madera	Mar. 11, 1893	2,112	1,351,680
Marin	San Rafael	Feb. 18, 1850	529	338,560
Mariposa	Mariposa	Feb. 18, 1850	1,463	936,320
Mendocino	Ukiah	Feb. 18, 1850	3,453	2,209,920
Merced	Merced	Apr. 19, 1855	1,995	1,276,800
Modoc	Alturas	Feb. 17, 1874	3,823	2,446,720
Mono	Bridgeport	Apr. 24, 1861	3,030	1,939,200
Monterey	Salinas	Feb. 18, 1850	3,330	2,131,200
Napa	Napa	Feb. 18, 1850	783	501,120
Nevada	Nevada City	Apr. 25, 1851	974	623,360
Orange	Santa Ana	Mar. 11, 1889	795	508,800
Placer	Auburn	Apr. 25, 1851	1,395	892,800
Plumas	Quincy	Mar. 18, 1854	2,594	1,660,160
Riverside	Riverside	Mar. 11, 1893	7,240	4,633,600
Sacramento	Sacramento	Feb. 18, 1850	983	629,120
San Benito	Hollister	Feb. 12, 1874	1,392	890,880
San Bernardino	San Bernardino	Apr. 26, 1853	20,157	12,900,480
San Diego	San Diego	Feb. 18, 1850	4,221	2,701,440
San Francisco	San Francisco	Feb. 18, 1850	43	27,520
San Joaquin	Stockton	Feb. 18, 1850	1,448	926,720
San Luis Obispo	San Luis Obispo	Feb. 18, 1850	3,334	2,133,760
San Mateo	Redwood City	Apr. 19, 1856	447	286,080
Santa Barbara	Santa Barbara	Feb. 18, 1850	2,740	1,753,600
Santa Clara	San Jose	Feb. 18, 1850	1,328	849,920
Santa Cruz	Santa Cruz	Feb. 18, 1850	435	278,400
Shasta	Redding	Feb. 18, 1850	3,858	2,469,120
Sierra	Downieville	Apr. 16, 1852	923	590,720
Siskiyou	Yreka	Mar. 22, 1852	6,256	4,003,840
Solano	Fairfield	Feb. 18, 1850	822	526,080
Sonoma	Santa Rosa	Feb. 18, 1850	1,577	1,009,280
Stanislaus	Modesto	Apr. 1, 1854	1,450	928,000
Sutter	Yuba City	Feb. 18, 1850	608	389,120
Tehama	Red Bluff	Apr. 9, 1856	2,893	1,851,520
Trinity	Weaverville	Feb. 18, 1850	3,166	2,026,240
Tulare	Visalia	Apr. 20, 1852	4,856	3,107,840
Tuolumne	Sonora	Feb. 18, 1850	2,190	1,401,600
Ventura	Ventura	Mar. 22, 1872	1,878	1,201,920
Yolo	Woodland	Feb. 18, 1850	1,014	648,960
Yuba	Marysville	Feb. 18, 1850	639	408,960



# THE STATE OF CALIFORNIA.

(Date of organization as a State, September 9, 1850.)

## PART I.

### AREA AND POPULATION.

**Vacant Public Lands; Indian Reservations; Population by Counties; White and Colored Population; Incorporated Cities and Towns; Japanese Statistics; Population by Counties, 1850-1910; Color and Nativity of Farmers; Counties, County Seats, and Land Areas.**

The State of California is about 780 miles in length; its breadth varies from 150 to 350 miles and its total area is 158,297 square miles, of which 2,645 are water surface. In size it ranks second among the states of the Union, Texas being the only one to exceed it, and it is larger than the nine states of New York, New Jersey, Rhode Island, Massachusetts, Maine, Vermont, New Hampshire, Connecticut and Ohio, combined. The coast line is more than 1,000 miles long.

California has the highest and lowest land of the United States, the greatest variety of temperature and rainfall, and of products of the soil. The spread of irrigation and of intensive cultivation, and the increase of small farms during the last thirty years, have made California what it is to-day.

Agriculture had its beginning in wheat raising on great ranches, from fifty to several hundred thousand acres in extent; then deciduous orchard fruits and semi-tropical citrus fruits, successively.

Both the Spanish and Mexican governments made large grants of land to encourage settlement. These were used as cattle ranches exclusively, up to the time of the American occupation, and the exports consisted entirely of hides and tallow. These grants covered the valleys of the State to a large extent, and later were recognized and patented by the United States Government. About 500 of these claims, covering nearly nine million acres, were found to be valid.

Of the fifty-eight counties into which the State is now divided, the first twenty-seven were organized on the 18th of February, 1850; ten years later the number had increased to forty-two. In 1872, Ventura became the fiftieth county, and Imperial, the latest addition, was formed in 1907.

The land area of the State is about 99,617,280 acres, a great part of which is rough, mountainous country and desert, roughly classified as follows:

Land surface		Water surface		Total	
Square miles	Acres	Square miles	Acres	Square miles	Acres
155,652	99,617,280	2,645	1,692,800	158,297	101,310,080

Approximately one half of the land surface of the State is under the control of the Federal Government, including 25,000,000 acres in forest reserves, and about an equal amount in public domain. In 1908 the amount of swamp and overflow land was 1,850,000 acres.

### Indian Reservations—1880-1913.

#### Area—Unallotted.

1900		1912		1913		
Acres	Square miles	Acres	Square miles	Allotted, acres	Unallotted, acres	Total, acres
406,396	635	364,743	569	72,886	364,743	437,629

### Indian Population—1880-1913.

1890	1900	1912	1913
12,108	11,431	17,517	16,513

### Public and Indian Lands Entered for Cash—1902-1913.

#### (In acres.)

1902	655,966	1908	766,932
1903	957,507	1909	1,290,579
1904	986,253	1910	1,214,348
1905	1,032,758	1911	1,064,644
1906	809,811	1912	872,301
1907	579,294	1913	937,230

### Original Homestead Entries—1900-1912.

#### (In acres.)

1902	315,784	1908	235,816
1903	300,968	1909	216,699
1904	266,317	1910	278,700
1905	262,973	1911	1,062,005
1906	211,567	1912	871,381
1907	173,438	1913	*

### Railroad Selections—1902-1912.

#### (In acres.)

1902	9,587	1908	3,897
1903	76,089	1909	589,000
1904	347,258	1910	364,084
1905	426,951	1911	442,879
1906	318,986	1912	23,995
1907	100,971	1913	*

### Vacant Public Lands—Areas Unappropriated and Unreserved—1890-1913.

#### (In acres.)

Year	Surveyed	Unsurveyed	Total
1890	38,750,564	15,172,154	53,922,718
1900	34,423,923	8,043,589	42,467,512
1912	17,671,839	5,343,499	23,015,338
1913	15,633,304	5,220,333	20,853,637

## Total Public Lands Surveyed and Unsurveyed—1913.

(In acres.)

Surveyed during year 1913	Total surveyed to June 30, 1913	Unsurveyed	Total land area
302,876	78,912,454	20,986,426	99,898,880

\*Figures not yet issued.

## Regulations for Obtaining Vacant Public Lands.

Practically all the vacant public land which is easily accessible has been already taken up, the areas now remaining being situated at a considerable distance from towns or villages, or in remote mountain valleys.

Before entry personal inspection of the lands should be made to ascertain if they are suitable, and when the applicant is satisfied on this point, entry can be made at the local land office. Information regarding vacant land in any district can be obtained on application to the register and receiver of the proper local land office, who will give full information regarding vacant land and the steps necessary to be taken in making entry. All vacant unappropriated public lands, non-mineral and non-saline in character, are subject to entry under the homestead laws. School lands have been withdrawn from sale until September 1, 1915.

## Homesteads.

Any person who desires to obtain a homestead must be a citizen of the United States or have declared his intention to become such, over the age of twenty-one years, and not the proprietor of more than 160 acres of land in the United States; having selected his land, must file his application to enter in the United States land office for the district in which the land is situated. The application must be sworn to before the register or receiver of the land office, or before the county clerk of the county in which the land is situated, or before a United States commissioner for the district in which the land is situated.

Six months from the date of filing is allowed him to establish his bona fide residence on the homestead, which from that time to the date of his final proof must be his home to the exclusion of a home elsewhere.

The period of residence was reduced in June, 1912, from five to three years, from the time of establishing actual permanent residence upon the land.

He must show that he has cultivated one sixteenth of the area of the land, beginning with the second year from date of entry, and one eighth of the area the following year and until proof is submitted. A mere breaking of the soil will not meet the terms of the law, but such breaking and stirring of the soil must be accompanied by planting or the sowing of seed and tillage for crops other than native grasses. If his proof is satisfactory, and the Government, after investigation, finds that he has complied with the law in good faith, his entry will be clear-listed, and in due time he will receive a patent for the land.

He may, before three years, by paying the purchase price of the land, at the rate of \$1.25 per acre if it is situate outside the limits of a railroad grant, and at the rate of \$2.50 per acre if it is within the granted limits of a railroad, offer what is known as commutation proof, which must show at least fourteen months of actual and substantially con-



tinuous residence, with bona fide cultivation and improvement of the land, immediately prior to his application to make such proof.

The United States Land Office fees and commissions for filing on 160 acres are \$16.00 if the land is outside of the limits of a railroad grant; if inside the granted limits of a railroad they would amount to \$22.00. The fees and commissions are computed upon the acreage of the tract entered.

The final proof commissions on 160 acres would be \$6.00, if the land is outside a railroad grant, and \$12.00 if inside the limits of a grant. Added to this are fees ranging from \$2.00 to \$4.00 based upon the number of words of testimony in the proof. There are no other fees or commissions required of a homesteader by the Government.

Those who commute their homesteads must pay the purchase price of the land in addition to the above fees, except the final proof commission, which are not required on commuted homesteads.

The following tables, based on reports furnished by the district land offices, show, by states, territories, land districts, and counties, the area of unappropriated and unreserved public lands, surveyed and unsurveyed, and a brief description of the character of the vacant lands. The General Land Office can furnish no more definite information as to the location and character of the vacant lands than is found in said tables. Inquiries regarding the climate and soil in any given vicinity may be addressed to the Department of Agriculture.

A township diagram, showing only entered lands in any township, can be procured by sending \$1.00 to the register and receiver of the land office of that district. The diagram required should be specified by township and range number.

While the figures in the tables may not be absolutely correct, owing to liability to error in a work of such magnitude and to the necessity of making estimates of unsurveyed lands, it is believed that they afford a close approximation to the actual areas. The statement is intended to inform correspondents and the general public as to whether there is much or little public land in the several land states and territories and the land districts therein and in particular counties and localities.

In many counties only a few acres are reported as vacant. Neither the General Land Office nor the local land officers can furnish information as to the location of such tracts, but such information may be obtained from the records of the local land offices, which, when not in official use, are open to inspection by prospective home seekers or their agents.

Before entry personal inspection of the lands should be made to ascertain if they are suitable, and when the applicant is satisfied on this point entry can be made at the local land office in the manner prescribed by law, under the direction of the local land officers, who will give full information. Should any one desire information in regard to vacant lands in any district before going there for a personal inspection, he should address the register and receiver of the proper land office, who will give full information regarding vacant lands and the steps necessary to be taken in making entry.

#### Dry Farming.

A regulation has recently been issued increasing the area of a homestead from 160 to 320 acres on land having no water supply, in Los Angeles, Imperial, San Diego, and Riverside counties.

## Vacant Public Lands in California Unappropriated and Unreserved, July 1, 1913.

Counties	Land-district	Surveyed	Unsurveyed	Total	Brief description of character of unappropriated and unreserved land
Alameda	San Francisco	2,265	1,519	3,784	Mountain land.
Alpine	Independence	10,581		10,581	Agricultural, mountainous.
Amador	Sacramento	13,972		13,972	Grazing, timber, mineral.
Butte	Sacramento	54,824		54,824	Mountainous land; timbered.
Calaveras	Sacramento	73,354		73,354	Grazing, timber, mineral.
Colusa	Sacramento	25,564	1,280	26,844	Agricultural and grazing.
Contra Costa	San Francisco	2,080	320	2,400	Mountainous.
Del Norte	Eureka	831		831	Very rough, broken, and mountainous: timber, grazing and mineral land.
El Dorado	Sacramento	43,022	1,540	44,562	Timber, grazing, mineral.
Fresno	Visalia	130,720	11,480	142,200	Mountainous, grazing, and timber.
Fresno	Sacramento	25,756	4,560	30,316	Mountain land.
Fresno	San Francisco	62,997	3,862	66,859	Mountain land.
Glenn	Sacramento	15,858		15,858	Agricultural and grazing.
Humboldt	Eureka	86,011	18,623	104,634	Mountainous; grazing and timber land; some mineral.
Imperial	Los Angeles	76,503	15,147	91,650	Arid, level desert, mountainous.
Inyo	Independence	2,591,967	1,205,823	3,797,790	Agricultural, mountainous.
Kern	Visalia	97,658	24,128	121,786	Arid plains, mountainous.
Kern	San Francisco	33,879		33,879	Mountain land.
Kern	Independence	384,834	98,041	482,875	Arid, mountainous, grazing.
Kern	Los Angeles	76,503	15,147	91,650	Arid, level desert, mountainous.
Kings	San Francisco	2,431		2,431	Mountain land.
Kings	Visalia	32,292		32,292	Arid plains; mountainous.
Lake	Sacramento	9,720		9,720	Hilly, agricultural, grazing.
Lake	San Francisco	153,433	12,185	165,618	Mountain land.
Lassen	Susanville	1,312,370	46,746	1,359,116	Timber, desert, grazing and mineral.
Los Angeles	Los Angeles	584,791	132,592	717,383	Arid, level desert, mountainous.
Madera	Sacramento	32,817		32,817	Hilly; farming, grazing and mineral.
Marin					None.
Mariposa	Sacramento	95,953		95,953	Mountainous; mineral, grazing, timber.
Mendocino	Eureka	19,118		19,118	Mountainous; timber and grazing land.
Mendocino	San Francisco	229,604	23,789	253,393	Mountain land.
Merced	Visalia	8,361		8,361	Mountainous, grazing.
Merced	Sacramento	14,932		14,932	Rolling foothills; farming and grazing.
Merced	San Francisco	26,115		26,115	Mountain land.
Modoc	Sacramento	9,069	21,205	30,274	Mountainous, grazing, timber.
Modoc	Susanville	287,032	16,840	303,872	Timber, desert, grazing and farming.
Mono	Independence	299,764	40,573	340,337	Grazing, agricultural, mineral.
Monterey	San Francisco	300,616	14,760	315,376	Mountain land.
Monterey	Visalia	2,240		2,240	Mountainous, grazing.
Napa	Sacramento	27,601		27,601	Hilly, mineral and grazing.
Napa	San Francisco	49,953		49,953	Mountain land.
Nevada	Sacramento	47,722		47,722	Mineral, timber.
Orange	Los Angeles	20,218	1,906	22,124	Mountainous and hilly.
Placer	Sacramento	26,100	1,540	27,640	Mineral, timber and grazing.
Plumas	Susanville	14,056	3,877	17,943	Mountainous, timber mineral.
Riverside	Los Angeles	1,192,408	575,241	1,767,649	Mountainous, rolling, and level desert.
Sacramento					None.
San Benito	San Francisco	195,275	4,035	199,310	Mountain land.
San Benito	Visalia	9,066		9,066	Mountainous, grazing.
San Bernardino	Independence	2,214,079	1,198,237	3,412,316	Arid, mineral, mountainous.
San Bernardino	Los Angeles	2,827,233	888,545	3,715,778	Mountainous, rolling, and level desert.
San Diego	Los Angeles	85,571	334,599	420,170	Mountainous, rolling, and level desert.
San Francisco					None.
San Joaquin	San Francisco	3,957		3,957	Mountain land.
San Luis Obispo	San Francisco	191,870	5,332	197,202	Mountain land.
San Luis Obispo	Visalia	29,955		29,955	Mountainous, grazing.
San Mateo					None.
Santa Barbara	Los Angeles	42,820	6,396	49,216	Mountainous and rolling.



## Vacant Public Lands—Continued.

Counties	Land district	Surveyed	Unsurveyed	Total	Brief description of character of unappropriated and unreserved land
Santa Barbara	San Francisco	11,538		11,538	Mountain land.
Santa Clara	San Francisco	66,666	4,924	71,590	Mountain land.
Santa Cruz					None.
Shasta	Sacramento	4,968	35,050	40,018	Farming, grazing, timber, and mineral.
Sierra	Susanville	40,420		40,420	Timber, mountainous and mineral.
Siskiyou	Eureka	302		302	Agricultural.
Siskiyou	Sacramento	155,701	116,213	271,914	Farming, grazing, timber, and mineral.
Solano	San Francisco	2,007		2,007	Mountain land.
Sonoma	San Francisco	42,726	4,361	57,087	Mountain land.
Stanislaus	Sacramento	20,991		20,991	Foot hills; farming, grazing.
Stanislaus	San Francisco	26,639	2,926	29,565	Mountain land.
Sutter					None.
Tehama	Sacramento	54,831	10,751	65,582	Grazing and agricultural.
Trinity	Eureka	31,349	2,560	33,909	Mountainous; grazing, timber, and mineral land.
Trinity	Sacramento	48,947	9,361	58,308	Mountainous; grazing, timber, and mineral land.
Tulare	Visalia	9,996	50,868	60,864	Arid plains and mountainous; timber.
Tuolumne	Sacramento	66,978	1,600	68,578	Timber, grazing, mining.
Ventura	Los Angeles	54,610	54,438	109,048	Mountainous and rolling.
Yolo	Sacramento	40,753		40,753	Grazing and agricultural.
Yuba	Sacramento	26,442		26,442	Agricultural, timber, and mineral.
	Totals	15,633,304	5,220,333	20,853,637	

## Total Vacant Public Lands in Counties Situated in More Than One Land District.

County	Surveyed	Unsurveyed	Total
Fresno	219,473	19,902	239,375
Kern	592,874	137,316	730,190
Kings	34,723		34,723
Lake	163,153	12,185	175,338
Merced	49,408		49,408
Mendocino	248,722	23,789	272,511
Modoc	296,101	38,045	334,146
Monterey	302,856	14,760	317,616
Napa	77,554		77,554
San Benito	204,341	4,035	208,376
San Bernardino	5,041,312	2,086,782	7,128,094
San Luis Obispo	221,825	5,332	227,157
Santa Barbara	54,358	6,396	60,754
Siskiyou	156,003	116,213	272,216
Stanislaus	47,630	2,926	50,556
Trinity	80,296	11,921	92,217

The following six counties have no unappropriated or unreserved land:

Marin.  
Sacramento.

San Francisco.  
San Mateo.

Santa Cruz.  
Sutter.

## Summary by Land Districts, July 1, 1913.

District	Surveyed	Unsurveyed	Total
Eureka -----	137,611	21,183	158,794
Independence -----	5,501,225	2,542,674	8,043,899
Los Angeles -----	5,670,366	2,221,424	7,891,790
Sacramento -----	935,875	203,100	1,138,975
San Francisco -----	1,414,051	78,013	1,492,064
Susanville -----	1,653,888	67,463	1,721,351
Visalia -----	320,288	86,476	406,764
Totals -----	15,633,304	5,220,333	20,853,637

## Vacant Public Lands in the United States.

State or territory	Area unappropriated and unreserved		
	Surveyed	Unsurveyed	Total
Alabama -----	77,600		77,600
Alaska -----		367,963,823	367,963,823
Arizona -----	11,750,267	27,774,928	39,525,195
Arkansas -----	397,489	70,000	467,489
California -----	15,633,304	5,220,333	20,853,637
Colorado -----	17,787,548	1,565,683	19,353,231
Florida -----	202,886	155,531	358,417
Idaho -----	7,748,512	10,167,110	17,915,622
Kansas -----	92,568		92,568
Louisiana -----	78,014		78,014
Michigan -----	89,057		89,057
Minnesota -----	1,286,394		1,286,394
Mississippi -----	41,660		41,660
Missouri -----	713		713
Montana -----	10,977,501	10,565,352	21,542,853
Nebraska -----	405,469		405,469
Nevada -----	29,359,141	25,779,452	55,138,593
New Mexico -----	20,927,792	10,370,829	31,298,621
North Dakota -----	1,156,120		1,156,120
Oklahoma -----	41,636		41,636
Oregon -----	13,613,442	2,932,080	16,545,522
South Dakota -----	3,751,651	53,781	3,107,432
Utah -----	12,290,342	21,547,254	33,837,596
Washington -----	1,079,957	670,251	1,750,208
Wisconsin -----	9,880		9,880
Wyoming -----	30,405,454	1,850,225	32,255,679
Grand totals -----	179,204,397	486,686,632	665,891,029

<sup>1</sup> The unreserved lands in Alaska are mostly unsurveyed and unappropriated.

## Indian Reservations.

The Indians were prominent in early California history, but their progress towards their present insignificance began far back in the Spanish period. It proceeded much more rapidly after the restraining influence of the Missions was removed, leaving them free to revert to savagery; and the downward progress of the race was fearfully accelerated during the mining period, when they were ambushed, depraved, and in large numbers killed. There have been no Indian wars in California's annals, but many butcheries.

The natives have declined exceedingly in number since 1834. They have always been mild-tempered, low, and unintelligent, and are to-day a poor and miserable race. They are called "Digger Indians," indiscriminately, although divided by a multiplicity of tongues.

The Indians of California are of at least fourteen different linguistic stocks. The Government, in dealing with the California tribes, did not follow the policy pursued with the wild Indians of the plains, and no treaties were made with them and no remuneration paid for lands acquired by white settlers. None of the California tribes knew anything of agriculture until the advent of the Spaniard, and with the exception of Mission Indians, they received their first instructions after they were taken in charge by the United States Government. Those near the coast and rivers lived principally upon fish, while in the interior the acorn and other nuts, mesquite beans, roots, and game furnished the food supply. Large numbers are located on twenty-six reservations, namely: Hupa Valley, Round Valley, Tule River, Yuma, and twenty-two Mission reservations. They are in advance of the Indians of the plains in intelligence and civilization.

Hupa Valley reservation, consisting of the reservation proper and the Lower Klamath "connecting strip," is located in Humboldt County, and comprises an area of 155 square miles. The Lower Klamath on the "connecting strip" bears no resemblance in language to the Hupa or Klamath of Oregon.

Most of the Mission Indians are located on small reservations scattered over Riverside and San Diego counties. Among them are found representatives of a number of different tribes.

Round Valley reservation, embracing an area of 59 square miles, is situated in Mendocino County, and the remnants of nine small tribes are located here, who might well be classed as civilized. Tule River reservation in Tulare County contains 76 square miles, and contains the remainder of the once powerful Tule tribe. The Yuma reservation contains an area of  $71\frac{3}{4}$  square miles, the Indians living on this section being the most primitive of the California tribes in manners and customs.

#### POPULATION OF CALIFORNIA.

The first settlement in California was made by the Spaniards in 1769, when the Franciscan Fathers founded a mission at San Diego. In 1776 the Mission Dolores was established where San Francisco now stands. California was under Spanish rule until 1822, when, at the termination of the Mexican revolution, it declared its allegiance to Mexico. For several years prior to 1846 large numbers of immigrants from the United States had been arriving in California, and in June of that year a revolt against Mexico was begun by the American settlers. In July and August the American flag was raised at Monterey, San Francisco, Sonoma, Sacramento, San Jose, San Diego, Santa Barbara, and Los Angeles, and other places.

The end of the war in Mexico took place January, 1847, and in February, 1848, California was ceded to the United States. From 1846 to 1849 California was under military and provisional rule by the United States. In October, 1849, a state constitution was adopted at Monterey, and on September 9, 1850, California became a state of the Union.

## Population of California, 1850-1910.

Year	Population	Increase over preceding census	
		Number	Per cent
1850	92,597		
1860	379,994	287,397	310.4
1870	560,247	180,253	47.4
1880	864,694	304,447	54.3
1890	*1,213,398	348,704	40.3
1900	1,485,053	271,655	22.4
1910	2,377,549	892,496	60.1

\*Includes population of Indian reservations (5,268).

During each decade since 1850, the population of California has increased more rapidly than that of continental United States. The population of the State in 1910 was more than twenty-five times as large as in 1850, while the population of the continental United States was a little less than four times that in 1850.

## Rank in Population of the Fifty States and Territories.

California ranked twenty-ninth in 1850, twenty-sixth in 1860, twenty-fourth in 1870 and 1880, twenty-second in 1890, twenty-first in 1900, and twelfth in 1910.

## The Density of Population per Square Mile.

1850	1860	1870	1880	1890	1900	1910
.6	2.4	3.6	5.5	7.8	9.5	15.3

The density of population in California is low, the average number of persons to the square mile in 1910 being 15.3; in 1900, 9.5, and in 1890, 7.8. The average number per square mile for continental United States in 1910 was 30.9. This compares with 508.8 in Rhode Island, 418.8 in Massachusetts, 337.7 in New Jersey, 191.2 in New York, 342.4 in the United Kingdom, and 213.3 in India. The Australian Commonwealth has only 1.39 to the square mile, New Zealand 7.8, and Canada 1.4; 589 in Belgium, 436 in Holland, 188 in France, and 270 in Germany.

## Population of Cities and Places of 2,500 to 25,000.

Population of cities of 25,000 and upward (8)		Cities of 2,500 to 6,000 (24)	
San Francisco	416,912	Richmond	6,802
Los Angeles	319,198	Petaluma	5,880
Oakland	150,174	San Luis Obispo	5,157
Sacramento	44,696	Alhambra	5,021
Berkeley	40,434	Hanford	4,829
San Diego	39,578	Grass Valley	4,520
Pasadena	30,291	Palo Alto	4,486
San Jose	28,946	Coalinga	4,199
		Colton	3,980
		Oroville	3,859
		Chico	3,750
Cities of 10,000 to 25,000 (13).		Salinas	3,736
Fresno	24,892	Redding	3,572
Alameda	23,383	Corona	3,540
Stockton	23,253	Red Bluff	3,530
Long Beach	17,809	San Leandro	3,471
Riverside	15,212	Redondo Beach	2,935
San Bernardino	12,779	Glendale	2,746
Bakersfield	12,727	Hayward	2,746
Eureka	11,845	Porterville	2,696
Santa Barbara	11,659	Anaheim	2,628
Vallejo	11,340	Emeryville	2,613
Santa Cruz	11,146	Roseville	2,608
Redlands	10,449	Oxnard	2,555
Pomona	10,207		



San Francisco, the largest city, has a population of 416,912, and Los Angeles, the second city, a population of 319,198. Oakland, with 150,174 inhabitants, is the only other city in the State having over 100,000 inhabitants. The following eight cities had over 25,000 inhabitants in 1910:

City	Population	Increase over preceding census	Per cent
Berkeley -----	40,434	27,220	206.0
Los Angeles -----	319,198	216,719	211.5
Oakland -----	150,174	83,214	124.3
Pasadena -----	30,291	21,174	232.2
Sacramento -----	44,696	15,414	52.6
San Diego -----	39,578	21,878	123.6
San Francisco -----	416,912	74,130	21.6
San Jose -----	28,946	7,446	34.6

California has 58 counties, the population ranging from 309 in Alpine to 504,131 in Los Angeles County.

Two territorial changes have taken place since 1900: The eastern portion of San Diego County was taken into Imperial County in 1907, and part of Fresno County was annexed to Kings County in 1909.

Ten counties have decreased in population during the last decade, the rates of decrease ranging from 5.8 per cent in Mono County, to 39.3 in Alpine County, and a decrease from 125 in Mono County to 2,834 in Nevada County.

San Bernardino County, with 20,157 square miles, has the largest area; San Francisco County, co-extensive with San Francisco city, with 43 square miles and 9,695.6 persons per square mile, has the smallest area and the highest density. Alpine, Inyo, and Mono counties each average less than 1 person per square mile. In 1910 the urban territory of the State, or the cities and incorporated towns of 2,500 or more, contained 61.8 per cent of the total population, while 38.2 per cent lived in rural territory.



TABLE II.  
Population in California by Counties, 1850-1910.

Counties	1850	1860	1870	1880	1890	1900	1910
Alameda		8,927	24,237	62,976	93,864	130,197	246,131
Alpine			685	539	667	509	309
Amador		10,930	9,582	11,384	10,320	11,116	9,086
Butte	3,574	12,106	11,403	18,721	17,939	17,117	27,301
Calaveras	16,884	16,299	8,895	9,094	8,882	11,200	9,171
Colusa <sup>1</sup>	115	2,274	6,165	13,118	14,640	7,364	7,732
Contra Costa <sup>2</sup>		5,328	8,461	12,525	13,515	18,046	31,674
Del Norte <sup>3</sup>		1,993	2,022	2,584	2,592	2,408	2,417
El Dorado	20,057	20,562	16,509	10,683	9,232	8,986	7,492
Fresno <sup>4</sup>		4,605	6,336	9,478	32,026	37,862	75,657
Glenn <sup>1</sup>						5,150	7,172
Humboldt <sup>5</sup>		2,694	6,140	15,512	23,469	27,104	33,857
Imperial <sup>11</sup>							13,591
Inyo			1,956	2,928	3,544	4,377	6,974
Kern			2,925	5,601	9,808	16,480	37,715
Kings <sup>6</sup>						9,871	16,230
Klamath <sup>7</sup>		1,803	1,686				
Lake			2,969	6,596	7,101	6,017	5,526
Lassen			1,327	3,340	4,239	4,511	4,802
Los Angeles <sup>8</sup>	3,530	11,333	15,309	33,381	101,454	170,298	504,131
Madera <sup>4</sup>						6,364	8,368
Marin	323	3,334	6,903	11,324	13,072	15,702	25,114
Mariposa	4,379	6,243	4,572	4,339	3,787	4,720	3,956
Mendocino	55	3,967	7,545	12,800	17,612	20,465	23,929
Merced		1,141	2,807	5,656	8,085	9,215	15,148
Modoc				4,399	4,986	5,076	6,191
Mono			430	7,499	2,002	2,167	2,042
Monterey	1,872	4,739	9,876	11,302	18,637	19,380	24,146
Napa	405	5,521	7,163	13,235	16,411	16,451	19,800
Nevada		16,446	19,134	20,823	17,369	17,789	14,955
Orange <sup>8</sup>					13,589	19,696	34,436
Placer		13,270	11,357	14,232	15,101	15,786	18,237
Plumas		4,363	4,489	6,180	4,933	4,657	5,259
Riverside <sup>9</sup>						17,897	34,696
Sacramento	9,087	24,142	26,830	34,390	40,339	45,915	67,806
San Benito				5,584	6,412	6,633	8,041
San Bernardino <sup>9</sup>		5,551	3,988	7,786	25,497	27,929	56,706
San Diego <sup>9</sup>	798	4,324	4,951	8,618	34,987	35,090	61,665
San Francisco <sup>2</sup>		56,802	149,473	233,959	298,997	342,782	416,912
San Joaquin	3,647	9,435	21,050	24,349	28,629	35,452	50,731
San Luis Obispo	336	1,782	4,772	9,142	16,072	16,637	19,383
San Mateo		3,214	6,635	8,669	10,087	12,094	26,585
Santa Barbara	1,185	3,543	7,784	9,513	15,754	18,934	27,738
Santa Clara <sup>2</sup>		11,912	26,246	35,039	48,005	60,216	83,539
Santa Cruz	643	4,944	8,743	12,802	19,270	21,512	26,140
Shasta	378	4,360	4,173	9,492	12,133	17,318	18,920
Sierra		11,387	5,619	6,623	5,051	4,017	4,098
Siskiyou <sup>10</sup>		7,629	6,848	8,610	12,163	16,962	18,801
Solano	580	7,169	16,871	18,475	20,946	24,143	27,599
Sonoma	560	11,867	19,819	25,926	32,721	38,480	48,394
Stanislaus		2,245	6,499	8,751	10,040	9,550	22,522
Sutter	3,444	3,390	5,030	5,159	5,469	5,886	6,328
Tehama		4,044	3,587	9,301	9,916	10,996	11,401
Trinity	1,635	5,125	3,213	4,999	3,719	4,383	3,301
Tulare <sup>6</sup>		4,638	4,533	11,281	24,574	18,375	35,440
Tuolumne	8,351	16,229	8,150	7,848	6,082	11,166	9,979
Ventura				5,073	10,071	14,367	18,347
Yolo	1,086	4,716	9,899	11,772	12,684	13,618	13,926
Yuba	9,673	13,668	10,851	11,284	9,636	8,620	10,042
Totals	92,597	379,994	560,247	864,694	1,208,130	1,485,053	2,377,549

<sup>1</sup>Glenn organized from part of Colusa in 1892. <sup>2</sup>The returns for 1850 for Contra Costa and Santa Clara were lost, and those for San Francisco were destroyed by fire. <sup>3</sup>Part annexed to Siskiyou between 1880 and 1890. <sup>4</sup>Madera organized from part of Fresno in 1893, and another part of Fresno County annexed to Kings in 1909. <sup>5</sup>Part of Klamath annexed in 1874. <sup>6</sup>Kings organized from part of Tulare in 1893, enlarged by annexation of part of Fresno County in 1909. <sup>7</sup>Annexed to Humboldt and Siskiyou in 1874. <sup>8</sup>Orange organized from part of Los Angeles in 1889. <sup>9</sup>Riverside organized from part of San Bernardino and San Diego in 1893. <sup>10</sup>Part of Klamath annexed in 1874, and part of Del Norte annexed between 1880 and 1890. <sup>11</sup>Organized from part of San Diego County in 1907.

TABLE III.

White and Colored Population by Counties, 1900.

Counties	Population, 1900				
	White	Negro	Indian	Chinese	Japanese
Alameda	125,432	1,334	71	2,211	1,149
Alpine	359	3	142	5	
Amador	10,805	28	130	153	
Butte	15,733	106	201	712	365
Calaveras	10,879	69	100	148	4
Colusa	6,840	76	121	274	53
Contra Costa	17,088	47	8	627	276
Del Norte	2,138	1	269		
El Dorado	8,513	99	138	206	30
Fresno	34,570	399	520	1,775	598
Glenn	4,867	18	24	227	14
Humboldt	25,359	12	1,728	5	
Imperial					
Inyo	3,355	15	940	67	
Kern	14,974	208	344	906	48
Kings	9,171	76	51	417	156
Lake	5,492	12	428	82	3
Lassen	4,099	1	381	28	2
Los Angeles	163,975	2,841	69	3,209	204
Madera	5,664	51	401	229	19
Marin	14,999	137	25	489	52
Mariposa	4,410	35	173	102	
Mendocino	18,833	38	1,353	218	23
Merced	8,780	31	4	357	43
Modoc	4,560	7	503	6	
Mono	1,656	1	389	120	1
Monterey	17,707	80	26	857	710
Napa	15,857	29	18	541	6
Nevada	17,024	70	48	632	15
Orange	19,459	98		136	3
Placer	14,494	35	74	1,050	133
Plumas	4,018	3	444	192	
Riverside	16,421	254	809	316	97
Sacramento	40,917	511	24	3,254	1,209
San Benito	6,456	57	36	69	15
San Bernardino	26,605	216	572	388	148
San Diego	32,048	406	2,197	414	25
San Francisco	325,378	1,654	15	13,954	1,781
San Joaquin	32,941	322	1	1,875	313
San Luis Obispo	16,389	77	1	154	16
San Mateo	11,652	89	1	306	46
Santa Barbara	18,256	33	72	459	114
Santa Clara	57,934	251	9	1,738	284
Santa Cruz	20,515	81	67	614	235
Shasta	16,131	203	862	102	20
Sierra	3,669	7	31	309	1
Siskiyou	15,646	38	480	790	8
Solano	22,267	101	2	903	870
Sonoma	37,385	32	316	599	148
Stanislaus	9,223	61	25	236	5
Sutter	5,451	34	20	226	155
Tehama	9,878	147	99	729	143
Trinity	3,803	9	234	336	1
Tulare	17,709	73	175	370	48
Tuolumne	10,804	53	149	158	2
Ventura	13,826	34	5	408	94
Yolo	12,662	172	28	346	410
Yuba	7,651	170	24	719	56
Totals	1,402,727	11,045	15,377	45,753	10,151

TABLE IV.

## White and Colored Population by Counties, 1910.

Counties	White	Negro	Indian	Chinese	Japanese	Total*
Alameda	234,520	3,684	41	4,588	3,266	246,131
Alpine	213	-----	94	1	1	309
Amador	8,838	2	143	101	2	9,086
Butte	25,684	122	298	572	295	27,301
Calaveras	8,941	17	161	49	3	9,171
Colusa	7,155	50	169	218	140	7,732
Contra Costa	29,911	67	3	550	1,009	31,674
Del Norte	2,078	1	337	1	-----	2,417
El Dorado	7,198	28	177	58	31	7,492
Fresno	71,215	474	313	1,377	2,233	75,657
Glenn	6,915	15	32	129	33	7,172
Humboldt	32,153	40	1,652	6	6	33,857
Imperial	12,582	65	682	32	217	13,591
Inyo	6,920	21	792	100	41	6,974
Kern	36,007	369	220	841	273	37,715
Kings	15,266	172	32	358	293	16,230
Lake	5,055	11	433	24	3	5,526
Lassen	4,372	1	410	13	6	4,802
Los Angeles	483,478	9,424	97	2,602	8,461	504,131
Madera	7,650	56	419	211	32	8,368
Marin	24,186	145	26	555	199	25,114
Mariposa	3,674	18	192	69	3	3,956
Mendocino	22,310	31	1,170	263	77	23,929
Merced	14,697	75	-----	278	98	15,148
Modoc	5,629	4	546	11	1	6,191
Mono	1,621	-----	386	21	14	2,042
Monterey	22,135	107	29	575	1,121	24,146
Napa	19,437	48	6	205	103	19,800
Nevada	14,558	14	52	309	22	14,955
Orange	33,589	97	21	83	641	34,436
Placer	16,572	55	102	612	862	18,237
Plumas	4,629	5	380	105	20	5,259
Riverside	31,613	518	1,590	187	765	34,696
Sacramento	61,040	631	62	2,143	3,874	67,806
San Benito	7,643	26	-----	66	286	8,041
San Bernardino	54,153	642	573	284	946	56,706
San Diego	58,514	684	1,516	430	520	61,665
San Francisco	400,014	1,642	46	10,582	4,518	416,912
San Joaquin	46,339	307	8	1,968	1,804	50,731
San Luis Obispo	18,693	77	14	165	434	19,383
San Mateo	25,321	67	1	309	358	26,585
Santa Barbara	26,282	108	45	440	863	27,738
Santa Clara	79,349	262	16	1,064	2,299	83,539
Santa Cruz	25,159	83	15	194	689	26,140
Shasta	17,873	159	756	88	42	18,920
Sierra	3,910	-----	54	117	17	4,098
Siskiyou	17,413	29	1,109	226	24	18,801
Solano	25,432	250	1	811	894	27,559
Sonoma	47,167	43	340	287	554	48,394
Stanilaus	22,129	89	30	161	113	22,522
Sutter	6,012	10	18	79	134	6,328
Tehama	10,809	91	94	309	98	11,401
Trinity	2,903	8	227	163	-----	3,301
Tulare	34,159	190	204	257	615	35,440
Tuolumne	9,698	14	186	75	6	9,979
Ventura	17,132	64	3	235	872	18,347
Yolo	12,618	280	32	198	789	13,926
Yuba	8,909	203	16	493	336	10,042
Totals	2,259,672	21,645	16,371	36,248	41,356	2,377,549

\*Not including 1,948 Hindus, 304 Koreans, and 5 Filipinos.

TABLE V.

## Foreign-born Population in California, 1860-1900.

Country of birth	1860	1870	1880	1890	1900
Africa -----	12	48	86	139	168
Asia <sup>1</sup> -----	346	56	16	164	235
Atlantic islands -----	121	943	3,356	2,587	3,515
Australia -----	896	1,593	2,350	1,905	2,269
Austria -----	727	1,078	1,948	3,687	5,356
Belgium -----	299	291	1,092	663	785
Bohemia -----		90	229	243	504
Canada -----	5,437	10,660	18,889	26,028	29,818
Central America -----	100	124	188	309	481
China -----	34,935	48,790	73,548	71,066	40,262
Cuba -----		45	182		93
Denmark -----	1,328	1,837	3,748	7,764	9,040
England -----	12,227	17,774	24,722	35,503	35,746
Europe <sup>2</sup> -----	33	56	109	194	59
Finland -----					2,763
France -----	8,462	8,068	9,550	11,855	12,256
Germany -----	20,919	29,701	42,532	61,472	72,449
Greece -----	93	97	170	259	372
Holland -----	439	452	694	760	1,015
Hungary -----		102	216	369	799
India -----		63	155	202	263
Ireland -----	33,147	54,421	62,962	63,138	44,476
Italy -----	2,987	4,660	7,537	15,495	22,777
Japan -----		32	133	1,224	10,264
Luxemburg -----		11	97	24	42
Mexico -----	9,150	9,339	8,648	7,164	8,086
Norway -----	715	1,000	1,765	3,702	5,060
Pacific islands <sup>3</sup> -----	334	93	173	1,296	1,089
Poland -----	730	804	1,026	914	1,320
Portugal -----	1,459	2,508	4,705	9,859	12,068
Roumania -----					73
Russia -----	260	540	1,013	3,140	3,421
Scotland -----	3,670	4,949	6,465	9,299	9,467
South America -----	2,250	1,940	1,797	1,366	1,137
Spain -----	470	405	572	836	896
Sweden -----	1,405	1,944	4,209	10,923	14,549
Switzerland -----	1,714	2,927	5,308	9,743	10,974
Turkey -----	13	17	36	202	649
Wales -----	1,262	1,517	1,920	1,860	1,949
West Indies <sup>4</sup> -----	304	349	528	670	372
Other countries -----	181	289	20	8	260
Born at sea -----		142	170	277	358
Totals -----	146,528	209,831	292,874	366,309	<sup>5</sup> 367,240

<sup>1</sup>Except China, Japan, and India. <sup>2</sup>Not otherwise specified. <sup>3</sup>Except Philippine Islands. <sup>4</sup>Except Cuba and Porto Rico. <sup>5</sup>Of this number (367,240) 123,725 were English speaking from United Kingdom, Australia, and Canada.



TABLE VI.

Foreign-born White Population in California in 1910.

Country*	White population of foreign birth or foreign parentage			
	Foreign born	Native, both parents foreign born	Native, one parent foreign born	Total
Atlantic islands -----	2,860	2,830	973	6,663
Austria -----	17,163	5,576	2,839	25,578
British:				
England -----	48,667	26,096	40,725	115,488
Ireland -----	52,475	69,988	37,216	159,679
Scotland -----	13,694	7,443	11,021	32,158
Wales -----	2,415	1,961	2,559	6,935
Australia -----	3,296	207	2,064	5,567
Canada—French -----	3,109	1,755	3,202	8,066
Canada—other -----	41,445	11,921	35,553	88,919
Total British -----	165,101	119,371	132,340	416,812
Denmark -----	14,208	8,244	4,043	26,495
Finland -----	6,156	2,535	301	8,992
France -----	17,390	8,836	6,387	32,613
Germany -----	76,305	85,362	44,715	206,382
Greece -----	7,918	269	211	8,398
Holland -----	2,304	1,078	1,035	4,417
Hungary -----	3,301	985	366	4,652
Italy -----	63,601	32,651	6,366	102,618
Mexico -----	33,444	10,787	6,806	51,037
Norway -----	9,952	4,666	2,528	17,146
Portugal -----	22,427	21,794	7,398	51,619
Russia -----	16,607	8,946	1,633	27,186
Spain -----	4,218	1,180	1,045	6,443
Sweden -----	26,210	14,797	5,464	46,471
Switzerland -----	14,520	8,861	4,632	28,018
Turkey -----	4,521	1,679	132	6,332
All other -----	9,044	†62,917	3,306	†75,267
Totals -----	517,250	403,364	232,525	1,153,139

\*Foreign country in which born; or if native, in which parents were born.

†Exclusive of 161 whites and 5,107 Indians not distributed by state of birth.

NOTE.—The number of British born have increased in ten years from 123,725 to 416,812, an increase of 293,087.



## COMPARATIVE SUMMARY.

## Color, Nativity, and Parentage, 1890-1910.

The State	1890	1900	1910
White -----	1,111,833	1,402,727	2,259,672
Negro -----	11,322	11,045	21,645
Indian -----	16,624	15,377	16,371
Chinese -----	72,472	45,753	36,248
Japanese -----	1,147	10,151	41,356
All other* -----			2,257
<b>Total -----</b>	<b>1,213,398</b>	<b>1,485,053</b>	<b>2,377,549</b>
Total native -----	847,089	1,117,813	1,791,117
Total foreign born -----	366,309	367,240	586,432
Total native white -----	818,280	1,086,222	1,742,422
Native parentage -----	497,890	644,428	1,106,533
Foreign parentage -----	217,979	282,830	403,364
Mixed parentage -----	102,411	158,964	232,525
Foreign-born white -----	293,553	316,505	517,250

\*Includes 1,948 Hindus, 304 Koreans, and 5 Filipinos.

## JAPANESE STATISTICS.

In March, 1912, the Japanese owned 331 farms, containing 12,726 acres, the assessed value of the land being \$478,990, the improvements \$130,615, or a total of \$609,605.

The number of town lots held by Japanese was 218, the assessed value, \$136,955, and the improvements \$98,720, or a total of \$235,675.

The information gathered in accordance with an act of the legislature (Chapter 134, of 1909) shows that there were 2,548 business establishments, the capital invested in most cases being very small, 68.7 per cent of the total having a capital of less than \$1,000. The total aggregate capital invested, exclusive of that represented by banks, was \$4,075,226. The total annual business transacted by these establishments amounted to \$16,114,407, of which about 37 per cent was carried on with white persons. The total annual rent paid by these Japanese business houses was over \$900,000.

TABLE VII.

## Japanese Farmers.

(Compiled from the Report of the Bureau of Labor Statistics.)

Counties	Owners		Total assessed value	Number of town lots	Total assessed value	Farm land leases	
	Number of farms	Acres				Number	Acreage*
Alameda	6	47	\$63,200	36	\$49,300	4	96
Alpine							
Amador							
Butte							
Calaveras							
Colusa							
Contra Costa	2	31	12,380	3	21,050	1	284
Del Norte							
El Dorado							
Fresno	31	4,776	229,020	61	75,695	11	45
Glenn				3	1,750		
Humboldt							
Imperial						7	848
Inyo							
Kern	5	100	1,170	4	2,565		
Kings	13	577	16,320	4	2,175		
Lake							
Lassen							
Los Angeles	27	459	33,800	23	3,560	60	2,418
Madera	4	100	3,600				
Marin							
Mariposa							
Mendocino							
Merced	14	1,049	42,095	2	1,785		
Modoc							
Mono				1	150		
Monterey	2	8	1,280	18	1,050	15	1,741
Napa	1	160	2,300			1	
Nevada	1	320	820	1	1,200		
Orange	5	41	4,190			7	292
Placer	26	732	20,335	4	1,825	23	1,007
Plumas							
Riverside	2	18	1,375	2	600	1	40
Sacramento	17	444	23,290	19	44,200	87	4,682
San Benito	3	60	2,050			5	280
San Bernardino	12	150	11,810	2	285		
San Diego						1	10
San Francisco				5	5,470		
San Joaquin	12	652	24,845	3	1,000	18	1,787
San Luis Obispo							
San Mateo	1	5	1,000	7	3,500	1	3
Santa Barbara						7	327
Santa Clara	4	90	15,365	1	4,750	35	904
Santa Cruz	3	330	9,065	4	3,635	6	220
Shasta	1	82	555				
Sierra				1	300		
Siskiyou							
Solano	11	814	23,230	2	550	5	565
Sonoma	2	66	5,900	3	3,600	1	
Stanislaus	2	40	1,625			1	180
Sutter	1	16	680			2	452
Tehama							
Trinity							
Tulare	15	1,053	47,525	2	2,150	2	60
Tuolumne							
Ventura	2	24	670	6	2,830	2	77
Yolo	5	320	8,830			11	1,278
Yuba	1	162	1,280	1	700		
Totals	331	12,726	\$609,605	218	\$235,675	282	17,596

\*In 32 instances the acreage was not reported. Leases recorded from November 1, 1909, to December 1, 1912.

NOTE.—These figures show only the leases recorded in the offices of the various recorders, and do not represent all the land leased to Japanese, as most of the share leases are not recorded.

## Comparative Summary.

	1909	1912
Owners:		
Acreage .....	10,791	12,726 + 1,935
Total assessed value .....	\$397,298	\$609,605 + \$212,307
Number of town lots .....		218
Total assessed value .....	\$174,694	\$235,675 + \$60,981
Leases:		
Number .....	319	282
Acreage .....	20,294	17,596

## Population of the United States in 1910.

State	Total population	Indians not taxed	State	Total population	Indians not taxed
Alabama .....	2,138,093	-----	North Dakota .....	577,056	2,653
Arkansas .....	1,574,449	-----	Ohio .....	4,767,121	-----
California .....	2,377,549	988	Oklahoma .....	1,657,155	-----
Colorado .....	799,024	452	Oregon .....	672,765	-----
Connecticut .....	1,114,756	-----	Pennsylvania .....	7,665,111	-----
Delaware .....	202,322	-----	Rhode Island .....	542,610	-----
Florida .....	752,619	-----	South Carolina .....	1,515,400	-----
Georgia .....	2,609,121	-----	South Dakota .....	583,888	8,212
Idaho .....	325,594	2,154	Tennessee .....	2,184,789	-----
Illinois .....	5,638,591	-----	Texas .....	3,896,542	-----
Indiana .....	2,700,876	-----	Utah .....	373,351	1,487
Iowa .....	2,224,771	-----	Vermont .....	355,956	-----
Kansas .....	1,690,949	-----	Virginia .....	2,061,612	-----
Kentucky .....	2,289,905	-----	Washington .....	1,141,990	1,856
Louisiana .....	1,656,388	-----	West Virginia .....	1,221,119	-----
Maine .....	742,371	-----	Wisconsin .....	2,333,860	1,007
Maryland .....	1,295,346	-----	Wyoming .....	145,965	1,307
Massachusetts .....	3,366,416	-----			
Michigan .....	2,810,173	-----	Total for 46 states	91,109,542	37,425
Minnesota .....	2,075,708	1,332	Arizona .....	204,354	24,129
Mississippi .....	1,797,114	-----	New Mexico .....	327,301	10,318
Missouri .....	3,293,335	-----			
Montana .....	376,053	9,715	Total, including		
Nebraska .....	1,192,214	-----	Arizona and New		
Nevada .....	81,875	1,582	Mexico .....	91,641,197	71,872
New Hampshire .....	430,572	-----	District of Columbia	331,069	-----
New Jersey .....	2,537,167	-----			
New York .....	9,113,614	4,680	Total for conti-		
North Carolina .....	2,206,287	-----	nental U. S. ....	91,972,266	-----

## Area of the United States in Land and Water.

[Based upon careful joint calculations made in the General Land Office, the Geological Survey, and the Bureau of the Census.]

State or territory	Land surface		Water surface		Total areas	
	Square miles	Acres	Square miles	Acres	Square miles	Acres
Alabama -----	51,279	32,818,560	719	460,160	51,998	33,278,720
Arizona -----	113,810	72,838,400	146	93,440	113,956	72,931,840
Arkansas -----	52,525	33,616,000	810	518,400	53,335	34,134,400
California -----	155,652	99,617,280	2,645	1,692,800	158,297	101,310,080
Colorado -----	103,658	66,341,120	290	185,600	103,948	66,526,720
Connecticut -----	4,820	3,084,800	145	92,800	4,965	3,177,600
Delaware -----	1,965	1,257,600	405	259,200	2,370	1,516,800
Dist. of Columbia	60	38,400	10	6,400	70	44,800
Florida -----	54,861	35,111,040	3,805	2,435,200	58,666	37,546,240
Georgia -----	58,725	37,584,000	540	345,600	59,265	37,929,600
Idaho -----	83,354	53,346,560	534	341,760	83,888	53,688,320
Illinois -----	56,043	35,867,520	622	398,080	56,665	36,265,600
Indiana -----	36,045	23,068,800	309	197,760	36,354	23,266,560
Iowa -----	55,586	35,575,040	561	359,040	56,147	35,934,080
Kansas -----	81,774	52,335,360	384	245,760	82,158	52,581,120
Kentucky -----	40,181	25,715,840	417	266,880	40,598	25,982,720
Louisiana -----	45,409	29,061,760	3,097	1,982,080	48,506	31,043,840
Maine -----	29,895	19,132,800	3,145	2,012,800	33,040	21,145,600
Maryland -----	9,941	6,362,240	2,386	1,527,040	12,327	7,889,280
Massachusetts -----	8,039	5,144,960	227	145,280	8,266	5,290,240
Michigan -----	57,480	36,787,200	500	320,000	57,980	37,107,200
Minnesota -----	80,858	51,749,120	3,824	2,447,360	84,682	54,196,480
Mississippi -----	46,362	29,671,680	503	321,920	46,865	29,993,600
Missouri -----	68,727	43,985,280	693	443,520	69,420	44,428,800
Montana -----	146,201	93,568,640	796	509,440	146,997	94,078,080
Nebraska -----	76,808	49,157,120	712	455,680	77,520	49,612,800
Nevada -----	109,821	70,285,440	869	556,160	110,690	70,841,600
New Hampshire -----	9,031	5,779,840	310	198,400	9,341	5,978,240
New Jersey -----	7,514	4,808,960	710	454,400	8,224	5,263,360
New Mexico -----	122,503	78,401,920	131	83,840	122,634	78,485,760
New York -----	47,654	30,498,560	1,550	992,000	49,204	31,490,560
North Carolina -----	48,740	31,193,600	3,686	2,359,040	52,426	33,552,640
North Dakota -----	70,183	44,917,120	654	418,560	70,837	45,335,680
Ohio -----	40,740	26,073,600	300	192,000	41,040	26,265,600
Oklahoma -----	69,414	44,424,960	643	411,520	70,057	44,836,480
Oregon -----	95,607	61,188,480	1,092	698,880	96,699	61,887,360
Pennsylvania -----	44,832	28,692,480	294	188,160	45,126	28,880,640
Rhode Island -----	1,067	682,880	181	115,840	1,248	798,720
South Carolina -----	30,495	19,516,800	494	316,160	30,989	19,832,960
South Dakota -----	76,868	49,195,520	747	478,080	77,615	49,673,600
Tennessee -----	41,687	26,679,680	335	214,400	42,022	26,894,080
Texas -----	262,398	167,934,720	3,498	2,238,720	265,896	170,173,440
Utah -----	82,184	52,597,760	2,806	1,795,840	84,990	54,393,600
Vermont -----	9,124	5,839,360	440	281,600	9,564	6,120,960
Virginia -----	40,262	25,767,680	2,365	1,513,600	42,627	27,281,280
Washington -----	66,836	42,775,040	2,291	1,466,240	69,127	44,241,280
West Virginia -----	24,022	15,374,080	148	94,720	24,170	15,468,800
Wisconsin -----	55,256	35,363,840	810	518,400	56,066	35,882,240
Wyoming -----	97,594	62,460,160	320	204,800	97,914	62,664,960
Alaska -----	2,973,890	1,903,289,600	52,899	33,855,360	3,026,789	1,937,144,960
					590,884	378,165,760



TABLE VIII.  
Color and Nativity of Farmers.

Counties	Native white	Foreign-born white	Negro and other non-white	Total number of farmers
Alameda	866	1,490	66	2,422
Alpine	24	16	2	42
Amador	387	145	5	537
Butte	1,204	274	22	1,500
Calaveras	426	207	5	632
Colusa	547	112	8	667
Contra Costa	712	715	38	1,465
Del Norte	62	46	6	114
El Dorado	551	150	15	716
Fresno	3,968	2,033	244	6,245
Glenn	502	160	1	663
Humboldt	856	614	64	1,534
Imperial	1,077	143	102	1,322
Inyo	313	98	27	438
Kern	818	298	51	1,167
Kings	1,312	475	50	1,837
Lake	478	122	3	603
Lassen	412	77	13	502
Los Angeles	5,682	1,613	624	7,919
Madera	419	131	23	573
Marin	138	360		498
Mariposa	253	63	14	330
Mendocino	966	363	27	1,356
Merced	1,054	780	22	1,856
Modoc	639	80	17	736
Mono	44	42	5	91
Monterey	933	676	49	1,658
Napa	1,006	527	4	1,537
Nevada	349	184	11	544
Orange	2,362	718	85	3,165
Placer	619	263	180	1,062
Plumas	155	63	3	221
Riverside	2,044	517	127	2,688
Sacramento	885	485	231	1,601
San Benito	616	289	16	921
San Bernardino	2,365	567	17	2,949
San Diego	1,591	586	121	2,298
San Francisco	30	118	9	157
San Joaquin	2,179	977	130	3,286
San Luis Obispo	929	767	18	1,714
San Mateo	258	390	17	665
Santa Barbara	874	448	33	1,355
Santa Clara	2,725	1,860	146	4,731
Santa Cruz	851	588	27	1,466
Shasta	825	151	34	1,010
Sierra	77	32	1	110
Siskiyou	852	218	44	1,114
Solano	620	449	74	1,143
Sonoma	2,737	2,012	23	4,772
Stanislaus	1,879	801	7	2,687
Sutter	696	154	23	873
Tehama	799	188	19	1,006
Trinity	235	55	18	308
Tulare	3,253	707	61	4,021
Tuolumne	241	143	2	386
Ventura	965	307	21	1,293
Yolo	934	255	66	1,255
Yuba	338	91	7	436
Totals	58,926	26,193	3,078	88,197



## PART II.

# AGRICULTURE.

### FARMS AND FARMERS.

#### Number and Value of Farms, Size of Farms, Mortgage Debt on Farms, Improved and Unimproved Farm Land.

### DOMESTIC ANIMALS.

Horses, Cattle, Sheep, Swine, 1869-1912; Domestic Animals by Counties; Poultry, Butter and Cheese; Honey and Wax; Wool and Mohair.

California ranks second in land area and twelfth in population among the states of continental United States. The soils vary from heavy clay like "adobe" soils to sandy and gravelly loams.

Over one fourth (28 per cent) of the land area of the State is in farms. The average value of farm land per acre for the State as a whole is \$47.16. Between 1900 and 1910 there was an increase of 21.6 per cent in the number of farms as compared with an increase of 60.1 per cent in the population.

During the same period farm property, which includes land, buildings, implements and machinery, and live stock (domestic animals, poultry and bees), increased in value \$818,167,000, or 102.7 per cent.

The average value of a fully equipped farm is \$18,308, an increase of \$7,328 as compared with the average in 1900. The average value per acre of land alone rose from \$21.87 in 1900 to \$47.16 in 1910.

There are 58,926 native white farmers in the State; 26,193 foreign born, white, and 3,078 negro and other non-whites, or a total of 88,197.

In addition to 11,389,894 acres of improved land in farms, there is 4,541,767 acres of woodland, and 11,999,783 acres of other unimproved lands in farms, or a total of 27,931,444 acres.

Number, Area, and Value of Farms in 1900 and 1910.

	1900	1910	Increased per cent
Population .....	1,485,053	2,377,549	60.1
Number of farms.....	72,542	88,197	21.6
Land area of State, acres.....	99,898,880	*99,617,280	-----
Land in farms, acres.....	28,828,951	27,931,444	†3.1
Improved land in farms, acres.....	11,958,837	11,389,894	†4.8
Average acre per farm.....	397.4	316.7	†20.3
Total value of farm property.....	\$796,527,955	\$1,614,694,584	102.7
Land .....	630,444,960	1,317,195,448	108.9
Buildings .....	77,468,000	133,406,040	72.2
Implements and machinery.....	21,311,670	36,493,158	71.2
Domestic animals, poultry and bees.....	67,303,325	127,599,938	89.6
Average value of all property per farm.....	\$10,980.00	\$18,308.00	66.7
Average value of land per acre.....	21.87	47.16	115.6

\*Due to the formation of the Salton Sea.

†Decreased. This apparent falling off is due in part to errors in the tabulation in the census of 1900, when certain tracts included in forest reserves in 1910 were included in farm land in 1900.

## Summary of Populations and Farms, 1850-1910.

Year	Population	Number of farms	Land on farms		Per cent of land area in farms
			All land	Improved	
1850 -----	92,597	872	3,893,985	32,454	3.9
1860 -----	379,994	18,716	8,730,034	2,468,034	8.8
1870 -----	560,247	23,724	11,427,105	6,218,133	11.5
1880 -----	864,694	35,934	16,593,742	10,669,698	16.7
1890 -----	1,213,398	52,894	21,427,293	12,222,839	21.5
1900 -----	1,485,053	72,542	28,828,951	11,958,837	28.9
1910 -----	2,377,549	88,197	27,931,444	11,389,894	28.0

The tracts included in forest reserves, probably used for grazing purposes, but included under farm lands in 1900, have increased during the decade from about 9,000,000 to 28,000,000 acres. There was also an enormous decrease in the acreage of wheat, amounting to 2,205,188 or 82.2 per cent, which would account for the falling off in the improved acreage. Many farmers reported such land in 1900 as "unimproved."

## Value of Farm Property.

The total wealth in the form of farm property is \$1,614,695,000 of which 89.8 per cent is contributed by land and buildings, 7.9 per cent by live stock, and 2.3 per cent by implements and machinery. The value of land and buildings is \$1,450,601,000, being a little more than double that for 1900. In 1850 the value was only \$3,874,000.

The value of the different classes of farm property in 1910 was as follows:

Farm property	Value
Land -----	\$1,317,195,448
Buildings -----	133,406,040
Implements and machinery -----	36,493,158
Domestic animals -----	123,024,652
Poultry -----	3,844,526
Bees -----	729,793
Total -----	\$1,614,694,584

## Summary of Values, 1850-1910.

Year	Total value	Land and buildings	Implements and machinery	Domestic animals, poultry, and bees
1850 -----	\$7,328,582	\$3,874,041	\$103,483	\$3,351,058
1860 -----	86,870,327	48,726,804	2,558,506	35,585,017
1870 -----	184,521,470	141,240,028	5,316,690	37,964,752
1880 -----	*311,997,443	262,051,282	8,447,744	*41,498,417
1890 -----	*777,381,767	697,116,630	14,689,710	*65,575,427
1900 -----	796,527,955	707,912,960	21,311,670	67,303,325
1910 -----	1,614,694,584	1,450,601,488	36,493,158	127,599,938

\*Includes estimated value of range animals.

## Size of Farms.

In California there is a great area of semiarid land utilized for grazing purposes only or left unutilized. Upon such lands are located many very large farms or ranches, and these explain the high average acreage per farm. Farms other than those used almost exclusively for grazing are not on the average unusually large, as compared with the average in other states. The average size of the California farm is 316.7 acres, compared with 4,465.6 in 1850; 466.4 acres in 1860; 481.7 in 1870, since which time it has decreased continually.

## Summary of Farms by Acreage in California.

Acreage	1850	1860	1870	1880
Under 3 acres.....				143
3 acres and under 10.....		829	2,187	1,064
10 acres and under 20.....		1,102	1,086	1,430
20 acres and under 50.....		2,344	3,064	3,475
50 acres and under 100.....		2,428	3,224	3,969
100 acres and under 500.....		6,541	12,248	20,214
500 acres and under 1,000.....		538	1,202	3,108
1,000 acres and over.....		262	713	2,531
Total number of farms.....	872	18,716	23,724	35,934
Average acres per farm.....	4,465.6	466.4	481.7	461.8

Acreage	1890	1900	1910
Under 3 acres.....	401	1,492	1,269
3 acres and under 10.....	2,827	5,354	9,324
10 acres and under 20.....	4,010	8,236	11,932
20 acres and under 50.....	7,691	13,110	20,614
50 acres and under 100.....	5,796	8,067	10,801
100 acres and under 500.....	24,531	26,201	24,566
500 acres and under 1,000.....	4,367	5,329	5,119
1,000 acres and over.....	3,672	4,753	4,693
Total number of farms.....	53,295	72,542	88,197
Average acres per farm.....	405.0	397.4	316.7

## Size of Farms, Improved and Unimproved, and Value.

Acreage	1850	1860	1870	1880
Total number of acres in farms.....	3,893,985	8,730,034	11,427,105	16,593,742
Acres of improved land.....	32,454	2,468,034	6,218,133	10,669,698
Acres of unimproved land.....	3,861,531	6,262,000	5,208,972	5,924,044
Per cent of farm land improved.....	0.8	28.3	54.4	64.3

Acreage	1890	1900	1910
Total number of acres in farms.....	21,427,293	28,828,951	27,931,444
Acres of improved land.....	12,222,839	11,958,837	11,389,894
Acres of unimproved land.....	9,204,454	16,870,114	16,541,550
Per cent of farm land improved.....	57.6	41.5	40.8

TABLE

## Number and Size of Farms

Counties	Under 3 acres	3 to 10 acres	10 to 20 acres	20 to 50 acres	50 to 100 acres
Alameda	148	589	405	424	204
Alpine				1	3
Amador	2	13	19	41	52
Butte	2	116	186	321	143
Calaveras		25	14	48	45
Colusa	1	31	35	85	42
Contra Costa	18	118	127	221	158
Del Norte		2	6	9	13
El Dorado		26	21	60	88
Fresno	6	267	598	3,240	951
Glenn		40	33	106	65
Humboldt	10	78	107	280	245
Imperial	51	46	56	182	227
Inyo	2	28	28	55	75
Kern	11	46	57	320	173
Kings	7	69	159	643	377
Lake	1	10	38	85	80
Lassen		9	4	12	32
Los Angeles	438	2,125	1,820	1,709	698
Madera		13	21	76	23
Marin	6	35	54	36	30
Mariposa		1	4	4	21
Mendocino		42	61	166	151
Merced	1	86	213	694	295
Modoc	5	18	13	21	44
Mono		3	1	1	4
Monterey	11	69	71	182	185
Napa	14	136	223	355	226
Nevada	7	61	36	77	69
Orange	28	531	802	1,043	351
Placer	2	52	109	289	206
Plumas		6	5	9	12
Riverside	42	462	596	614	262
Sacramento	12	167	237	321	170
San Benito	7	87	83	118	93
San Bernardino	76	567	918	703	278
San Diego	20	236	345	414	269
San Francisco	69	50	11	15	7
San Joaquin	9	204	531	797	397
San Luis Obispo	7	65	80	179	187
San Mateo	46	81	55	112	61
Santa Barbara	17	130	140	212	164
Santa Clara	68	773	1,186	1,317	562
Santa Cruz	18	226	198	384	293
Shasta	6	16	29	103	111
Sierra	1	6	3	4	5
Siskiyou	1	21	36	88	98
Solano	6	45	60	198	170
Sonoma	40	916	890	1,040	522
Stanislaus	13	153	319	1,046	439
Sutter		57	101	142	91
Tehama	7	34	119	198	102
Trinity	6	9	9	24	23
Tulare	9	171	390	1,247	647
Tuolumne	1	4	15	28	27
Ventura	13	87	120	199	214
Yolo	4	53	115	283	166
Yuba		13	20	33	34
Totals	1,269	9,324	11,932	20,614	10,680



## IX.

## In 1910, by Counties.

100 to 175 acres	175 to 260 acres	260 to 500 acres	500 to 1,000 acres	1,000 acres and over	Total number of farms	Cost of fertilizers	
						1900	1910
238	116	163	91	44	2,422	\$15,180	\$17,723
4	9	14	3	8	42		
145	64	105	58	38	537	2,140	208
220	127	171	116	98	1,500	21,150	24,935
171	60	127	80	62	632	840	694
90	36	129	104	120	667	8,640	266
256	147	206	140	74	1,465	10,990	1,879
31	11	23	10	9	114		77
212	100	122	52	35	716	2,010	467
609	142	202	119	111	6,245	39,870	34,491
79	31	101	89	119	663	60	906
334	118	147	84	131	1,534	8,750	1,680
400	98	201	51	10	1,322		681
113	41	54	22	20	438	90	221
222	55	116	82	85	1,167	4,420	1,430
287	77	133	42	43	1,837	920	790
144	60	84	53	48	603	170	40
117	51	130	84	63	502	8,700	63
531	192	207	114	85	7,919	200,310	669,152
151	27	66	59	137	573	300	608
35	40	72	111	79	498	4,000	35
97	15	101	51	36	330	420	60
334	131	193	124	154	1,356	5,330	866
165	46	89	100	167	1,856	4,730	3,609
229	68	171	92	75	736	4,280	5
27	12	16	10	17	91	500	
263	127	282	225	243	1,658	2,920	1,252
223	92	112	84	72	1,537	12,690	1,290
88	53	84	41	28	544	5,430	932
175	60	86	52	37	3,165	16,520	71,118
174	69	75	50	36	1,062	13,680	7,786
45	19	37	46	42	221	70	260
262	99	166	104	81	2,688	203,010	323,568
223	96	173	111	91	1,601	2,190	15,274
107	56	144	109	117	921	3,620	191
209	70	75	35	18	2,949	151,320	708,516
337	146	246	156	129	2,298	22,980	42,429
4	1				157	5,600	6,031
395	217	371	221	144	3,286	20,750	10,657
267	123	304	288	214	1,714	2,200	1,027
90	52	67	60	41	665	2,070	13,450
185	105	138	93	171	1,355	8,870	8,133
376	141	147	75	86	4,731	25,490	16,703
188	60	52	25	22	1,466	1,450	3,537
300	96	190	93	66	1,010	990	1,086
25	4	19	18	25	110	1,310	140
388	84	199	124	75	1,114	3,890	571
167	89	156	144	108	1,143	17,700	4,142
508	233	299	202	122	4,772	12,030	12,585
192	83	125	142	175	2,687	1,570	23,180
123	84	123	78	74	873	1,000	80
151	51	119	86	139	1,006	15,720	685
148	23	41	15	10	308	170	170
597	198	364	197	201	4,021	8,900	41,765
105	35	88	43	40	386	2,220	1,347
207	142	155	90	66	1,293	8,780	57,432
170	83	189	107	85	1,255	16,110	5,050
82	30	93	64	67	436	1,700	2,765
12,015	4,689	7,862	5,119	4,693	88,197	\$937,050	\$2,143,993



Of all the farms in California 23.4 per cent are from 20 to 49 acres in size, 13.6 per cent from 100 to 174 acres, 13.5 per cent from 10 to 19 acres, and 12.1 per cent from 50 to 99 acres. Thus over three fifths of all the farms are from 10 to 174 acres in size. About one fourth are 175 acres or more. The increase in the relative number of the smaller farms in conjunction with the decline in aggregate farm acreage during the last ten years indicates a tendency to subdivide the large farms into smaller ones.

The following table shows the increase or decrease in the size of farms in 1910, as compared with 1900:

Size	Number of farms		Increase or decrease	
	1900	1910	Number	Per cent
Under 3 acres.....	1,492	1,269	-223	-14.9
3 to 9 acres.....	5,354	9,324	+3,970	+74.2
10 to 19 acres.....	8,236	11,932	+3,696	+44.9
20 to 49 acres.....	13,110	20,614	+7,504	+57.2
50 to 99 acres.....	8,067	10,680	+2,613	+32.4
100 to 174 acres.....	13,196	12,015	-1,181	-8.9
175 to 259 acres.....	4,635	4,689	+54	+1.2
260 to 499 acres.....	8,370	7,862	-508	-6.1
500 to 999 acres.....	5,329	5,119	-210	-3.9
1,000 acres and over.....	4,753	4,693	-60	-1.3
Totals .....	72,542	88,197	+15,655	+21.6

#### Farm Tenure.

The number of all farmers is 88,197. Of these 66,632 are classed as owners, 3,417 as managers, and 18,148 as tenants.

Of the 66,632 owners, 56,500 operate land owned exclusively by them, while 10,132 operate land which they rent in addition to that which they own. The owners hold 75.5 per cent of all farms, tenants 20.6 per cent, and 3.9 per cent is operated by managers. The percentage of tenants for the State (20.6) is above the average for the Pacific States (17.2) but low in comparison with the percentage for the United States as a whole (37).

#### Farm Mortgages.

The number of mortgaged farms in 1910 amounted to 40.5 per cent of the total number of 66,632 owned by farmers who own all their land, exclusive of those for which no mortgage report was obtained. The percentage is considerably higher than it was in 1890 and 1900:

Owned farms	Number
Free from mortgage.....	39,368
Mortgaged .....	26,749
Unknown .....	515
Total .....	66,632

TABLE X.

## Mortgage Debt on Farms Operated by Owners in 1910.\*

Counties	Number free from mortgage	Number with mortgage	Number with no mortgage	Farms consisting of owned land only			
				Number reporting debt	Value of their land and buildings	Amount of mortgage	Per cent value of land and buildings
Alameda	1,204	467	19	384	\$3,691,870	\$958,687	26.0
Alpine	22	10	-----	8	87,050	30,800	35.4
Amador	364	72	1	62	347,628	86,515	24.9
Butte	745	470	15	385	3,325,191	807,233	24.3
Calaveras	456	95	5	71	357,205	95,080	26.6
Colusa	251	196	2	123	1,443,045	444,355	30.8
Contra Costa	642	243	5	184	2,122,140	574,965	27.1
Del Norte	59	20	-----	16	137,300	44,900	32.7
El Dorado	492	145	5	127	567,100	161,873	28.5
Fresno	2,072	3,128	27	2,734	24,983,327	6,388,563	25.6
Glenn	291	220	1	170	1,703,360	403,568	23.7
Humboldt	687	292	11	230	2,436,615	611,134	25.1
Imperial	584	236	4	194	2,867,600	697,384	24.3
Inyo	254	106	1	96	1,184,200	277,142	19.2
Kern	530	311	5	256	2,764,650	751,974	27.2
Kings	642	747	2	587	5,888,820	1,541,990	26.2
Lake	346	132	6	107	847,400	213,200	25.2
Lassen	290	122	2	108	1,464,400	272,163	18.6
Los Angeles	3,176	2,321	102	1,889	31,540,310	6,465,025	20.5
Madera	294	114	11	77	1,182,365	190,817	16.1
Marin	118	73	5	65	664,175	259,074	39.0
Mariposa	242	39	11	35	250,720	52,275	20.8
Mendocino	796	266	7	225	1,832,841	453,647	24.8
Merced	613	782	10	584	6,570,345	1,409,143	21.4
Modoc	432	159	3	130	1,786,230	354,669	19.9
Mono	63	12	-----	10	230,900	52,350	22.7
Monterey	749	295	19	222	3,002,171	755,391	25.2
Napa	750	411	5	358	2,905,375	745,253	25.7
Nevada	398	76	2	63	260,165	56,270	21.6
Orange	1,294	1,228	9	957	12,557,760	2,984,955	23.4
Placer	478	269	1	217	1,614,735	371,680	23.0
Plumas	131	51	1	43	566,940	113,354	20.0
Riverside	1,279	996	16	816	11,969,410	2,953,463	24.7
Sacramento	673	326	12	273	3,894,145	840,241	21.6
San Benito	385	262	6	210	2,354,830	767,233	32.6
San Bernardino	1,344	1,178	10	961	17,434,500	3,958,213	22.7
San Diego	1,339	501	5	342	3,235,500	732,270	22.6
San Francisco	57	14	11	9	126,600	30,250	23.9
San Joaquin	1,181	1,172	17	887	8,729,605	2,272,853	26.0
San Luis Obispo	710	341	5	193	1,779,070	489,925	27.5
San Mateo	249	47	6	39	610,350	103,505	17.0
Santa Barbara	533	227	4	134	2,790,140	706,315	25.3
Santa Clara	2,092	1,500	30	1,186	11,760,415	3,391,948	29.0
Santa Cruz	671	410	7	357	3,667,630	815,705	22.2
Shasta	658	177	4	147	919,980	211,200	23.0
Sierra	72	21	-----	17	160,500	48,350	30.1
Siskiyou	688	251	9	210	2,760,855	683,580	24.8
Solano	441	328	4	237	3,732,565	992,293	26.6
Sonoma	2,254	1,498	19	1,399	11,018,235	3,009,142	27.3
Stanislaus	890	1,301	9	972	9,721,155	2,394,773	24.6
Sutter	362	307	5	225	3,076,708	785,106	25.5
Tehama	518	288	4	241	2,061,515	543,342	26.4
Trinity	233	40	1	36	221,425	51,498	23.3
Tulare	1,778	1,511	18	1,197	15,911,023	3,263,701	20.5
Tuolumne	269	71	2	63	378,650	98,677	26.1
Ventura	497	393	5	229	6,013,275	1,098,618	18.3
Yolo	482	397	8	283	4,329,746	1,154,656	26.7
Yuba	248	83	1	50	417,430	114,374	27.4
Totals	39,368	26,749	515	21,430	\$250,199,190	\$60,036,660	24.0

\*No mortgage reports were secured for farms operated by tenants or managers.

Irrigation.<sup>1</sup>

Of the 88,197 farms in the State 39,352, or rather more than two fifths (44.6 per cent), are irrigated. The total acreage irrigated is 2,664,104 acres, or 23.4 per cent of the improved land in farms. The enterprises existing in 1910 were capable of supplying water to 3,619,378 acres, and the total acreage included in irrigation projects, completed or under way, was 5,490,360 acres.

The following table shows the number of farms irrigated in comparison with the total number of farms in the State, the total land area, the total land in farms, and the total acreage of improved land in farms, together with the areas not yet irrigated for which water was available, and the acreage included in projects completed or under way:

Land and farms	1900	1910	Increase or decrease	
			Amount	Per cent
Number of all farms.....	72,542	88,197	15,655	21.6
Approximate land area of State...	99,617,280	99,617,280	-----	-----
Land in farms.....	28,828,951	27,931,444	-897,507	-3.1
Improved land in farms.....	11,958,837	11,389,894	-568,943	-4.8
Number of farms irrigated.....	25,675	39,352	13,677	53.3
Acreage irrigated.....	1,446,114	2,664,104	1,217,990	84.2
Acreage enterprises capable of irrigating.....	*	3,619,378	-----	-----
Acreage included in projects.....	*	5,490,360	-----	-----
Percentage irrigated of number of all farms.....	35.4	44.6	9.2	-----
Approximate land area of State...	1.5	2.7	1.2	-----
Land in farms.....	5.0	9.5	4.5	-----
Improved land in farms.....	12.1	23.4	11.3	-----
Excess of acreage enterprises were capable of irrigating over acreage irrigated in 1910.....	-----	955,274	-----	-----
Excess of acreage included in projects over acreage irrigated in 1910.....	-----	2,826,256	-----	-----

<sup>1</sup>For complete details see Part VI.

\*No record.

TABLE XI.

Improved and Unimproved Farm Land by Counties, 1910.

Counties	Number of farms	Average acreage of farms	Improved land	Wood land in farms	Other unimproved land	Total land in farms
Alameda	2,422	128.5	177,314	51,484	82,529	311,327
Alpine	42	762.0	7,579	7,597	16,628	32,004
Amador	537	543.3	46,969	114,960	129,801	291,730
Butte	1,500	327.2	247,097	119,126	124,554	490,777
Calaveras	632	429.4	59,104	149,642	62,655	271,401
Colusa	667	783.2	336,509	38,252	147,615	522,376
Contra Costa	1,465	277.4	262,152	28,766	115,515	406,433
Del Norte	114	315.3	12,439	10,574	12,934	35,947
El Dorado	716	294.5	41,682	137,057	32,142	210,881
Fresno	6,245	177.2	590,205	93,194	423,217	1,106,616
Glenn	663	740.9	309,765	67,665	113,768	491,198
Humboldt	1,534	418.9	105,248	174,354	362,934	642,536
Imperial	1,322	169.1	176,069	1,138	46,395	223,602
Inyo	438	251.5	38,698	1,631	69,813	110,142
Kern	1,167	1,202.5	315,387	235,014	852,649	1,403,350
Kings	1,837	203.5	196,569	6,724	170,530	373,823
Lake	603	360.6	42,768	71,388	103,308	217,464
Lassen	502	589.1	122,057	27,688	145,983	295,728
Los Angeles	7,919	95.7	418,998	18,051	320,936	757,985
Madera	573	1,083.2	391,086	41,612	187,965	620,663
Marin	498	529.0	93,115	49,978	120,349	263,442
Mariposa	330	624.4	37,017	85,150	83,892	206,059
Mendocino	1,356	532.0	82,578	247,758	390,989	721,325
Merced	1,856	626.2	607,742	49,818	504,607	1,162,167
Modoc	736	557.2	164,784	75,668	169,682	410,134
Mono	91	1,271.1	43,382	8,303	63,987	115,672
Monterey	1,658	692.0	371,509	140,377	635,530	1,147,416
Napa	1,537	234.6	101,114	193,578	65,888	360,580
Nevada	544	322.4	24,542	48,449	102,407	175,398
Orange	3,165	117.4	189,463	4,476	177,753	371,692
Placer	1,062	233.6	98,608	32,194	117,278	248,080
Plumas	221	607.5	54,281	27,238	52,740	134,259
Riverside	2,688	193.8	278,151	30,231	212,424	520,806
Sacramento	1,601	295.5	275,682	20,964	176,398	473,044
San Benito	921	591.0	186,573	52,466	305,262	544,301
San Bernardino	2,949	70.7	136,625	23,137	48,634	208,396
San Diego	2,298	363.1	234,045	71,020	529,361	834,426
San Francisco	157	13.3	1,562	289	240	2,091
San Joaquin	3,286	232.2	611,762	35,387	115,899	763,048
San Luis Obispo	1,714	926.9	326,928	174,891	1,086,841	1,588,660
San Mateo	665	241.6	100,800	27,334	32,521	160,655
Santa Barbara	1,355	826.9	215,552	276,071	628,852	1,120,475
Santa Clara	4,731	155.3	237,170	153,835	343,814	734,819
Santa Cruz	1,466	107.3	66,875	44,157	46,276	157,308
Shasta	1,010	385.4	96,217	151,113	141,888	389,218
Sierra	110	765.6	30,794	18,168	35,258	84,220
Siskiyou	1,114	409.2	186,147	82,544	187,185	455,876
Solano	1,143	415.5	310,452	44,534	119,880	474,866
Sonoma	4,772	156.0	248,507	278,507	217,866	744,644
Stanislaus	2,687	241.7	512,189	18,756	118,447	649,392
Sutter	873	441.5	199,510	13,956	171,996	385,462
Tehama	1,066	909.8	186,642	206,234	522,351	915,227
Trinity	308	296.5	13,300	31,882	46,128	91,310
Tulare	4,021	259.9	507,024	161,360	376,847	1,045,231
Tuolumne	386	500.2	36,407	62,215	94,450	193,072
Ventura	1,293	425.5	213,868	56,061	280,270	550,199
Yolo	1,255	369.2	317,268	77,576	68,539	463,383
Yuba	436	571.3	94,250	70,175	84,683	249,108
Totals	88,197	av. 316.7	11,389,894	4,541,767	11,999,783	27,931,444



**Farm Animals in 1913.**

During the past year the number of farm horses decreased slightly, from 503,000 to 498,000, and the average price declined from \$109 to \$100, the number imported increased from 6,607 to 10,008, but the exports decreased from 34,828 to 28,707.

The number of mules remain about the same, but the average value declined from \$130 to \$120.

Milch cows increased from 510,000 to 515,000 and the average price advanced from \$54.50 to \$62.00.

The number of other cattle fell off from 1,454,000 to 1,410,000, but the average value increased from \$29.20 to \$33.00. The number imported for breeding purposes fell from 2,129 to 1,388, but the total number of other cattle imported made a total increase of 103,277, the figures being 421,649, compared with 318,372 for the year 1912.

The domestic cattle exported show a large decrease, viz: from 105,506 to 24,714.

Sheep numbered 2,551,000 against 2,603,000 in 1912, and the average value increased from \$3.70 to \$3.80. The imports for breeding purposes, as for cattle, show a heavy falling off, from 2,208 to 388; the total number of all kinds decreased from 23,588 to 15,428; but the number of domestic sheep exported increased about 30,000, from 157,263 to 187,132.

Swine declined (for the third year in succession) from 822,000 to 797,000, but the average value increased from \$9.20 to \$10.50 and the exports declined from 19,038 to 15,332.

**Great Increase in the Number and Value of Horses—1909-1910.\***

When street cars began to be generally used, horses were increasing at the most rapid rate ever known. There was more breeding carried on then than at any other time, and between 1884 and 1895 the supply began to overtake the demand. The cable and the electric system of street railways followed, and by 1895 had practically displaced horses.

The introduction of bicycles, a few years later followed by automobiles, caused it to be predicted that horses would not be in general use much longer, and that breeding could never be made to pay in the future. Statistics, however, prove that these fears were unfounded. The census reports show that in 1910 horses and colts had a greater value than any other class of domestic animals, whereas cattle had the greater value in 1900, being then nearly twice as valuable as horses and colts.

The total value of horses and colts in 1910 was \$47,999,196, compared with \$17,845,000 in 1900, or an increase of \$29,254,203, or 163.9 per cent.

Mules and mule colts were valued at \$9,016,444, an increase of \$4,405,535 since 1900, an increase of 95 per cent.

Asses and burros in 1910 were valued at \$347,315 as against \$147,000 in 1900, an increase of \$200,618, or 136 per cent.

The introduction of the Norman, Percheron, English Draft, and other breeds of stallions, and the crossing of these with native stock, have, since 1870, greatly improved the average effectiveness of the American horse.

\*For a description of the various breeds of horses, see Report for 1912, pages 23-24.



About 1896 a large demand began for American horses abroad. Exportation was at first stimulated by the exceedingly low prices of horses in the United States, and later by the demand for South Africa during the Boer war of 1899-1902, during which period there was a great demand, and also for mules, as the accompanying figures show, and prices consequently increased rapidly.

The average price of mules exported increased from \$76.52 in 1899, to \$121.47 in 1903, and to \$162.50 in 1911, the highest ever touched.

#### Registration of Stallions.

Within the past seven years eighteen different states have passed laws requiring that all owners of stallions or jacks, before standing them for public service, shall obtain a license for each animal from the state board created for that purpose. This board examines all pedigree certificates and veterinarians' certificates of soundness submitted, and enrolls and issues license certificates for all stallions and jacks entitled to such enrollment in accordance with the law.

The details of these laws vary somewhat in different states, but all are more or less founded on the Wisconsin act, which was the pioneer state in this matter, and all require the submission of certificates of registration in studbooks certified by the United States Department of Agriculture, as evidence of the purity of breeding of stallions licensed as purebred, except that some provide in addition that stallions shall be accepted as purebred which are registered in studbooks of any American studbook or registry association which recognizes and records stallions having five pure top crosses.

That the state stallion law marks a distinct step in advance in our horse-breeding industry is hardly to be questioned. One of the first results of the operation of these laws was to provide data which show the actual facts with regard to the stallions being used for breeding purposes. Other important beneficial results are the rapid elimination of unfit animals and greater care with regard to breeding and registration. The various breeds and the numbers are of considerable interest. No pony-stallions have been registered.

The following summary shows the changes that have taken place during the years 1912-1913:

Breed	Number		Breed	Number	
	1912	1913		1912	1913
Mongrel .....	766	707	Crossbred .....	10	6
Percheron .....	419	463	Norman .....	3	5
Standard .....	165	279	Non-Standard .....	2	4
American Trotter .....	150	2	Hackney .....	2	4
Belgian .....	146	159	Suffolk .....	1	1
Shire .....	94	88	Cleveland Bay .....	1	1
German Coach .....	65	53	Not classified .....		13
French Draft .....	57	57			
Clydesdale .....	29	33	Total .....	1,957	1,920
French Coach .....	26	23	Jacks .....	77	358
Thoroughbred .....	11	15			
American Saddle .....	10	7	Grand total .....	2,034	2,278

The total number of registered stallions in the State is 1,920, a decrease of 37 compared with last year. On the other hand, the number of jacks registered shows the remarkable increase of 281, the number

being 358, compared with 77 last year. There are 707 classed as mongrels, a decrease of 59 during the year, which is satisfactory. The principal breeds are Percheron, Standard, and Belgian in the order named. Only two counties have more than one hundred stallions—San Joaquin 121, and Fresno 109, Tulare being third with 99.

#### Neat Cattle.\*

Considerable attention has been given to breeding cows for dairy purposes only, and with this object in view large importations have been made of the Jerseys, Guernseys and Alderneys.

The Shorthorns, Herefords, and Polled Angus comprise practically all of the pure-blooded cattle in the United States used for breeding and for grading up native cattle for beef purposes. There are now also a number of Holstein-Friesian and Durhams.

#### Working Oxen.

In the early days oxen were largely employed in farming operations. In 1860, they numbered upward of 26,000, but the number declined rapidly during the next ten years, and after 1890 they dwindled away.

During forty years the numbers varied as follows:

Years	Number
1850-----	4,780
1860-----	26,004
1870-----	5,944
1880-----	2,288
1890-----	1,122

#### Asses and Burros.

In 1832, Henry Clay, who was a great advocate of the use of mules, brought the first pure-blooded Catalonian jack to Kentucky, and from then until the civil war quite a number of jacks were imported. With the revival of business after the war, there was a great demand for jacks, and they were imported from all the Mediterranean countries.

Until this time there had been but two breeds of asses generally recognized in this country, the Maltese and Spanish. The importations into Tennessee and Kentucky have resulted in the production of a native type that is regarded by some breeders as better than any now imported.

There are also a large number of small donkeys, or burros, descendants of the small asses brought into Mexico and New Mexico at the early settlement of that section by the Spaniards, and are used principally by the Spanish and Mexican element. They are most useful in the mountainous sections.

#### Sheep.

In 1565, Spanish sheep were introduced into Florida, and those in that state to-day preserve traces of their Spanish origin. In 1773 they were introduced into California, and under the care of the Missions rapidly increased until, in 1825, it was estimated that seventeen of these Missions, extending from San Diego to San Francisco, held an aggregate of 1,003,970 sheep, exclusive of flocks owned by ranchers.

It was claimed by earlier authorities that these sheep were Merinos, but more recent authorities affirm that they were the Churro, or common, sheep of Spain. The Merino is supposed to have originated in

\*For a description of the various breeds of cattle, see Report for 1912, pages 26-27.

Asia Minor. The period from 1845 to 1855 marks the transition from fine wool sheep to coarse wool and mutton sheep.

The principal breeds now are Southdown, Shropshire, Leicestershire, Cotswold, Oxford Down, Hampshire Down, Dorset Horns, Spanish and French Merino, and Persian.

Sheep, of which at one time there were very large flocks, have fallen off since the year 1880, when they numbered 4,152,349; in 1910 there were 2,417,477, or a decrease of 1,734,872 since the former year.

#### Goats.

The Angora goat, a native of Asia Minor, was introduced into this country in 1849, and has been bred extensively in the United States. It crosses readily with the common goat, and the cross-breed frequently becomes the foundation of a good flock of fleece-bearing animals. The common goat has often been described as the poor man's cow. The Angora goat has been found to be of great service in clearing land of brush and low growths that sheep and cattle will not touch. The meat of the kids is said to be fully equal to the best young lamb, from which it is difficult to distinguish it.

High land is the native home of the goat, and it invariably seeks it when left to itself. It will feed with cattle and sheep, and also with horses, though in some danger of being kicked.

In southern California, the goats are sheared both in the spring and fall, as is customary with sheep in the same regions. The reason for this is that if the hair is allowed to grow the goats shed it and the production is in consequence much less in amount. The double shearing results in the production of a fibre of shorter length than if the fleeces were allowed a full year's growth, and averages about 5 inches for the spring and 7 inches for the fall clip. In northern California the hair is shorn only once in the year and will average 8 to 9 inches in length. Angoras are among the most useful of domestic animals. Their fleeces, called the mohair, furnish material for the manufacture of some of the finest fabrics, their flesh is exceedingly delicate and nutritious, and their milk is richer than that of a cow.

The number of goats of all kinds in 1910 was 138,000, the lead being taken by Tehama County, with 28,000, and Shasta, with 18,000. Lake and Mendocino counties lead in Angora goats, having upward of 5,000 each.

#### Swine.

The swine introduced into the United States by the early colonists were of inferior stock. Between 1818 and 1830, the Chester White was evolved. The Berkshire was introduced from England about 1830, but did not come into general favor until 1870 to 1880. The Poland-China originated in Ohio between 1838 and 1840. Other breeds are Yorkshires and Hampshires. The interest in swine breeding in recent years is illustrated by the dates of first registration of the different Swine Breeders' Associations, which were as follows: American Berkshire, 1875; Standard Poland-China, 1877; Central Poland-China, 1879; American Chester White, 1884; American Essex, 1887; American Duroc-Jersey, and Standard White, 1890.

As a result of this interest, swine in this country have attained a high standard, with regard to form, bone, and line of maturity.



## Sheep.

Sheep, of which at one time there were very large flocks, have fallen off since the year 1880, when they numbered 4,152,349; in 1910 there were 2,417,477, or a decrease of 1,734,872 since the former year.

The following statement shows at a glance the changes that have taken place in the number of domestic animals during the last sixty years:

Summary of the Number of Domestic Animals, 1850-1910.

Year	Horses and colts	Mules and colts	Cows and calves	Other cattle	Sheep and lambs	Swine
1850 -----	21,719	1,666	4,280	258,379	17,574	2,776
1860 -----	160,610	3,681	205,407	974,735	1,088,002	456,396
1870 -----	192,273	17,533	164,093	467,305	2,768,187	444,617
1880 -----	237,710	28,343	210,078	604,966	5,727,349	*868,419
1890 -----	*455,073	*53,627	317,201	*1,291,217	3,373,036	*594,009
1900 -----	421,293	96,190	307,245	*1,137,379	2,803,509	598,336
1910 -----	468,886	69,761	467,332	1,609,693	2,417,477	766,551

Prior to 1890, asses and burros were included with mules.

\*Including estimated number of range animals separately reported.

## RECOGNIZED BREED AND PUREBRED ANIMALS IMPORTED.

(Under an act of Congress, approved August 5, 1909, effective on and after February 1, 1912.)

## HORSES.

Belgian Draft.  
Clydesdale.  
French Draft.  
Hackney.

Percheron.  
Shetland Pony.  
Shire.  
Suffolk.

Thoroughbred.  
Welsh Pony and Cob.

## CATTLE.

Aberdeen-Angus.  
Alderney.  
Ayrshire.  
Devon.  
Galloway.

Guernsey.  
Hereford.  
Highland.  
Holstein-Friesian.  
Jersey.

Kerry and Dexter.  
Red Polled.  
Shorthorn.  
Sussex.  
Welsh.

## SHEEP.

Cheviot.  
Cotswold.  
Dorset Horn.  
Hampshire Down.  
Kent or Romney Marsh.

Kerry Hill.  
Leicester.  
Leicester [Border].  
Lincoln.  
Oxford Down.

Shropshire.  
Southdown.  
Suffolk.  
Wensleydale.

## HOGS.

Berkshire.  
Large Black.

Tamworth.

Yorkshire.

## Breeding Horses and Cattle Imported in 1913.

The Bureau of Animal Industry has listed all horses imported for breeding purposes in 1913, for which certificates of pure breeding have been issued by the Federal department. This list includes names of animals, their registration number, the name of the importer, and the department number of the various breeds.

## Horses.

Breed	Stallions	Mares	Total
Belgian -----	621	362	983
Clydesdale -----	45	53	98
Hackney -----	14	29	43
Percheron -----	882	600	1,482
Shetland Pony -----	4	26	30
Shire -----	128	57	185
Standardbred -----	1	2	3
Suffolk -----	12	26	38
Thoroughbred -----	14	14	28
Welsh Pony -----	12	95	107
Totals -----	1,733	1,264	2,997

## Cattle.

The following table shows the number of certificated cattle imported for breeding purposes during 1913:

Breed	Bulls	Cows	Total
Aberdeen-Angus -----	4	-----	4
Alderney -----	2	98	100
Ayrshire -----	23	103	186
Galloway -----	11	2	13
Guernsey -----	40	738	778
Hereford -----	35	33	68
Holstein-Friesian -----	10	16	26
Jersey -----	35	608	643
Shorthorn -----	84	122	206
Totals -----	244	1,780	2,024

Cattle not being native to America, there are no strictly American breeds, but owing to difference in climate, care and ideals of American breeders, the European breeds which have been brought to America have changed to some extent.

## \*Summary of All Domestic Animals and Their Value, 1910.

Kind	On farms		Not on farms		Total	
	Number	Value	Number	Value	Number	Value
All cattle -----	2,077,025	\$52,785,068	46,176	\$1,604,717	2,123,201	\$54,389,785
Dairy cows -----	467,332	18,597,328	29,962	1,321,897	497,294	19,919,225
Horses -----	468,886	47,099,196	132,521	15,142,841	601,407	62,242,037
Mules -----	69,761	9,016,444	10,612	1,638,381	80,373	10,654,825
Asses and burros -----	2,592	347,315	1,057	45,114	3,649	392,429
Swine -----	766,551	5,106,803	12,168	100,761	778,719	5,207,564
Sheep -----	2,417,477	8,348,997	64,631	232,572	2,482,108	8,581,569
Goats -----	138,413	320,829	7,113	32,629	145,526	353,458
Totals -----	-----	\$123,024,652	-----	\$18,797,015	-----	\$141,821,667

\*Most of the domestic animals not on farms are found in cities, towns, and villages.



## CLASSIFIED SUMMARY OF DOMESTIC ANIMALS ON FARMS IN 1910.

Description	Number	Value	Average value
<b>Cattle—</b>			
Dairy cows (cows and heifers kept for milk, born before January 1, 1909)-----	467,332	\$18,597,328	\$39 79
Other cows (cows and heifers not kept for milk, born before January 1, 1909)-----	576,909	14,798,012	25 65
Heifers born in 1909-----	218,480	3,448,595	15 78
Calves born after January 1, 1910-----	267,799	1,883,523	7 03
Steers and bulls born in 1909-----	163,728	2,889,503	17 65
Steers and bulls born before January 1, 1909-----	321,984	9,941,169	30 87
Unclassified cattle-----	60,793	1,226,938	20 18
Totals-----	2,077,025	\$52,785,068	av. \$25 41
<b>Horses and colts—</b>			
Mares, stallions and geldings born before January 1, 1909-----	402,584	\$43,770,557	\$108 72
Colts born in 1909-----	41,927	2,389,191	56 98
Colts born after January 1, 1910-----	23,037	767,648	33 32
Unclassified horses-----	1,338	171,800	128 40
Totals-----	468,886	\$47,099,196	av. \$100 45
<b>Mules and mule colts—</b>			
Mules born before January 1, 1909-----	61,997	\$8,552,021	\$137 94
Mule colts born in 1909-----	4,913	351,667	71 58
Mule colts born after January 1, 1910-----	2,851	112,756	39 55
Totals-----	69,761	\$9,016,444	av. \$129 25
Asses and burros (all ages)-----	2,592	\$347,315	av. \$133 99
<b>Swine—</b>			
Hogs and pigs born before January 1, 1910-----	482,810	\$4,346,824	\$9 00
Pigs born after January 1, 1910-----	283,741	759,979	2 68
Totals-----	766,551	\$5,106,803	av. \$6 66
<b>Sheep and lambs—</b>			
Ewes born before January 1, 1910-----	1,217,515	\$4,914,783	\$4 04
Rams and wethers born before January 1, 1910-----	307,773	1,326,699	4 31
Lambs born after January 1, 1910-----	892,189	\$2,107,515	av. \$2 36
Totals-----	2,417,477	\$8,348,997	av. \$3 45
Goats and kids (all ages)-----	138,413	\$320,829	av. \$2 32
Grand total-----		\$123,024,652	

## Sheep and Wool, Goats and Mohair, in 1909-1910.

According to the Census Bureau, the total number of sheep of shearing age in California on April 15, 1910, was 1,525,000, representing a decrease of 11.6 per cent as compared with the number in 1900. The approximate production of wool during 1909 was 2,563,000 fleeces, weighing 14,065,000 pounds and valued at \$2,424,000.

Although 1,714 farmers reported 138,413 goats and kids on their farms in 1910, only 367 reported the production of goat hair or mohair during 1909. These farmers reported 102,134 fleeces, weighing 282,596 pounds and valued at \$60,821. The production shows a considerable increase between 1899 and 1909, but it is believed that the figures are somewhat short of the actual production.

# NUMBER AND VALUE OF FARM ANIMALS IN CALIFORNIA, 1869-1913, IMPORTS AND EXPORTS.

(Compiled from the reports of the United States Department of Agriculture.)

## HORSES.

Year	Number December 31	Average farm price December 31	Farm value December 31
1869	226,684	\$52 71	\$11,945,878
1870	238,000	36 50	8,687,000
1871	204,800	50 26	10,293,248
1872	202,700	43 59	8,835,693
1873	250,000	44 15	11,037,500
1874	232,500	47 48	11,039,100
1875	230,100	41 61	9,574,461
1876	209,300	45 46	9,514,778
1877	260,000	39 50	10,270,000
1878	262,000	40 94	10,750,844
1879	273,000	43 95	11,998,350
1880	273,000	46 18	12,673,500
1881	281,990	45 03	12,698,010
1882	240,087	47 30	11,356,115
1883	240,567	54 89	13,204,723
1884	252,595	61 33	15,491,651
1885	265,225	62 05	16,457,211
1886	275,834	63 00	17,377,542
1887	289,626	64 00	18,534,948
1888	307,004	71 00	21,797,255
1889	368,400	70 19	25,857,259
1890	372,084	63 60	23,664,984
1891	360,921	67 22	24,262,579
1892	415,059	62 67	26,010,045
1893	518,824	57 48	29,821,982
1894	513,636	41 98	21,562,949
1895	513,636	31 94	16,404,965
1896	482,818	27 16	13,114,254
1897	439,364	27 40	12,037,918
1898	417,396	28 96	12,085,909
1899	342,265	27 54	9,426,483
1900	321,729	38 61	12,422,429
1901	363,982	49 66	18,074,805
1902	353,063	56 28	19,869,542
1903	370,716	60 66	22,485,881
1904	367,000	65 66	24,099,139
1905	363,339	67 48	24,518,741
1906	399,673	76 32	30,505,037
1907	391,680	92 00	36,120,721
1908	396,000	94 00	37,224,000
1909	412,000	90 00	37,080,000
1910	483,000	105 00	49,245,000
1911	493,000	117 00	57,681,000
1912	503,000	109 00	54,827,000
1913	498,000	100 00	49,800,000

## Horses Imported.

Year	For breeding purposes*		Other horses		Total horses	
	Number	Value	Number	Value	Number	Value
1902	2,944	\$1,273,607	1,888	\$303,627	4,832	\$1,577,234
1903	2,803	1,191,611	2,196	344,685	4,999	1,536,296
1904	2,634	1,090,596	2,092	369,691	4,726	1,460,287
1905	2,853	1,169,011	2,327	422,072	5,180	1,591,083
1906	3,377	1,266,987	2,644	449,688	6,021	1,716,675
1907	3,644	1,574,020	2,436	404,085	6,080	1,978,105
1908	3,562	1,325,784	1,925	278,608	5,487	1,604,392
1909	4,953	1,658,640	2,131	348,636	7,084	2,007,276
1910	7,867	2,660,241	3,753	635,781	11,620	3,296,022
1911	6,331	2,055,418	3,662	636,656	9,993	2,692,074
1912	3,849	1,579,377	2,758	343,648	6,607	1,923,025
1913	5,713	1,653,713	4,295	472,162	10,008	2,125,875

\*Including teams of immigrants.

## Horses Exported.

Year	Number	Value
1902	103,020	\$10,048,046
1903	34,007	3,152,159
1904	42,001	3,189,100
1905	34,822	3,175,259
1906	40,087	4,365,981
1907	33,882	4,359,957
1908	19,000	2,612,587
1909	21,616	3,386,617
1910	28,910	4,081,157
1911	25,145	3,845,253
1912	34,828	4,764,815
1913	28,707	3,960,102

*Duty on Imported Horses.*—For breeding purposes and of purebred and teams of immigrants, free. All others, 10 per cent ad valorem on October 4, 1913, and after.

## MULES.

Year	Number December 31	Average farm price December 31	Farm value December 31
1869	24,249	\$73 92	\$1,792,486
1870	30,000	66 66	1,999,800
1871	21,400	65 64	1,404,696
1872	20,500	59 76	1,225,080
1873	25,000	71 06	1,776,500
1874	23,000	63 74	1,466,020
1875	23,200	66 49	1,542,568
1876	19,400	77 20	1,497,680
1877	26,500	67 75	1,795,375
1878	25,400	68 98	1,752,092
1879	25,700	66 24	1,702,368
1880	25,700	67 54	1,735,778
1881	25,700	68 79	1,767,903
1882	28,910	69 20	2,000,572
1883	30,066	70 98	2,134,085
1884	29,765	80 18	2,386,558
1885	31,551	84 30	2,659,749
1886	31,551	77 65	2,450,081
1887	36,284	83 67	3,035,912
1888	38,824	85 03	3,301,389
1889	40,765	83 78	3,415,201
1890	42,803	78 21	3,347,496
1891	43,659	79 41	3,467,093
1892	54,574	74 72	4,077,548
1893	60,031	67 90	4,076,130
1894	63,033	56 38	3,553,899
1895	63,033	46 25	2,915,041
1896	59,251	35 02	2,074,789
1897	57,473	36 89	2,120,329
1898	56,898	38 33	2,180,836
1899	52,915	34 15	1,807,174
1900	48,682	48 49	2,300,713
1901	77,452	60 44	4,681,555
1902	72,030	69 23	4,986,745
1903	67,708	72 02	4,876,600
1904	67,031	72 68	4,871,487
1905	66,361	76 39	5,069,044
1906	69,679	91 30	6,361,689
1907	80,750	106 00	8,599,875
1908	82,000	113 00	9,266,000
1909	83,000	107 00	8,881,000
1910	71,000	122 00	8,540,000
1911	72,000	136 00	9,792,000
1912	73,000	130 00	9,490,000
1913	73,000	120 00	8,760,000

## Mules Imported.

(Included in "All Other" Animals.)

## Mules Exported.

Year	Number	Value
1902	27,586	\$2,692,298
1903	4,294	521,725
1904	3,658	412,971
1905	5,826	645,464
1906	7,167	989,639
1907	6,781	850,901
1908	6,609	990,667
1909	3,432	472,017
1910	4,512	614,094
1911	6,585	1,070,051
1912	4,901	732,095
1913	4,744	733,795

*Duty on Imported Mules.*—Teams of immigrants, free. All others, 10 per cent ad valorem on October 4, 1913, and after.

## MILCH COWS.

Year	Number December 31	Average farm price December 31	Farm value December 31
1869	214,318	\$50 31	\$10,782,338
1870	350,000	47 62	16,667,000
1871	186,800	46 36	8,660,048
1872	186,800	44 66	8,342,488
1873	270,000	43 44	11,728,800
1874	310,500	35 28	10,954,440
1875	340,000	32 19	10,944,600
1876	363,800	31 46	11,445,148
1877	381,900	30 64	11,701,416
1878	389,500	28 23	10,955,585
1879	459,600	25 90	11,903,640
1880	473,400	28 65	13,562,910
1881	473,400	31 67	14,992,578
1882	214,280	32 70	7,006,956
1883	214,280	36 17	7,750,508
1884	220,708	38 00	8,386,904
1885	231,743	38 50	8,922,106
1886	236,378	38 75	9,159,648
1887	243,469	33 22	8,088,040
1888	250,773	33 00	8,275,509
1889	258,296	31 38	8,105,328
1890	268,628	27 75	7,454,427
1891	282,059	29 00	8,179,711
1892	290,521	26 95	7,829,541
1893	299,237	27 25	8,154,208
1894	329,161	25 82	8,498,937
1895	339,036	23 78	8,062,276
1896	335,646	23 75	7,971,593
1897	339,002	25 57	8,668,281
1898	342,392	28 65	9,809,531
1899	318,425	28 00	8,915,900
1900	308,872	33 75	10,424,430
1901	321,227	37 10	11,917,522
1902	327,652	40 05	13,122,463
1903	337,482	40 43	13,664,397
1904	344,232	38 55	13,270,144
1905	354,559	36 57	12,966,223
1906	390,015	34 65	13,514,020
1907	405,616	35 00	14,196,560
1908	410,000	36 00	14,760,000
1909	430,000	36 00	15,480,000
1910	495,000	38 40	17,933,000
1911	505,000	53 00	26,765,000
1912	510,000	53 50	27,285,000
1913	515,000	62 00	31,930,000



## OTHER CATTLE.

Year	Number December 31	Average farm price December 31	Farm value December 31
1869	323,112	\$27 86	\$9,001,900
1870	550,000	26 22	14,421,000
1871	490,000	26 92	13,190,800
1872	465,500	23 80	11,078,900
1873	442,200	22 71	10,042,362
1874	428,900	19 52	8,372,128
1875	660,000	18 92	12,487,200
1876	1,075,000	20 08	21,586,000
1877	1,053,500	16 52	17,403,820
1878	1,600,800	17 23	17,243,784
1879	1,010,000	18 91	19,099,100
1880	999,900	18 47	18,468,153
1881	999,900	20 35	20,347,965
1882	422,433	21 77	9,196,366
1883	575,000	27 48	15,801,000
1884	609,500	29 15	17,766,925
1885	615,595	30 38	18,701,776
1886	627,907	28 66	17,994,559
1887	659,302	20 64	13,607,595
1888	692,267	20 50	14,194,447
1889	726,880	19 37	14,080,181
1890	697,805	16 80	11,719,707
1891	558,244	17 73	9,895,321
1892	602,904	17 39	10,481,663
1893	916,414	17 12	15,690,840
1894	925,578	16 17	14,962,157
1895	916,322	15 28	14,003,785
1896	888,832	15 82	14,057,319
1897	853,279	16 93	14,448,828
1898	810,615	18 91	15,328,334
1899	664,704	18 01	11,970,981
1900	604,881	24 57	14,864,947
1901	1,048,046	22 25	23,315,670
1902	1,089,968	23 48	25,593,770
1903	1,111,767	24 51	27,244,079
1904	1,089,532	21 98	23,944,214
1905	1,122,218	19 29	21,648,258
1906	1,167,107	17 52	20,453,549
1907	1,167,107	18 00	21,474,767
1908	1,155,000	19 00	21,945,000
1909	1,155,000	17 50	20,212,000
1910	1,546,000	20 10	32,361,000
1911	1,515,000	26 70	40,450,000
1912	1,454,000	29 20	42,457,000
1913	1,410,000	33 00	46,530,000

## Cattle Imported

Year	For breeding purposes*		Other cattle		Total cattle	
	Number	Value	Number	Value	Number	Value
1902	1,928	\$375,096	94,099	\$1,233,626	96,027	\$1,608,722
1903	1,481	225,375	64,694	935,673	66,175	1,161,548
1904	684	79,986	15,372	230,751	16,056	310,737
1905	2,314	93,084	25,541	365,488	27,855	458,572
1906	829	118,368	28,190	430,062	29,019	548,430
1907	835	122,230	31,567	442,892	32,402	565,122
1908	3,188	149,142	89,168	1,358,168	92,356	1,507,310
1909	3,049	140,713	136,135	1,858,709	139,184	1,999,422
1910	2,611	291,139	193,327	2,708,685	195,138	2,999,824
1911	2,441	362,220	180,482	2,590,857	182,923	2,953,077
1912	2,129	305,222	316,243	4,500,352	318,372	4,805,574
1913	1,388	234,489	420,261	6,406,179	421,649	6,640,668

\*Including teams of immigrants.



## Cattle Exported.

Year	Number	Value
1902	392,884	\$29,902,212
1903	402,178	29,848,936
1904	593,409	42,256,291
1905	567,806	40,598,048
1906	584,239	42,081,170
1907	423,051	34,577,392
1908	349,210	29,339,134
1909	207,542	18,046,976
1910	139,430	12,200,154
1911	150,160	13,163,920
1912	105,506	8,870,075
1913	24,714	1,177,199

*Duty on Imported Cattle.*—Free October 4, 1913, and after.

## SHEEP.

Year	Number December 31	Average farm price December 31	Farm value December 31
1869	2,200,400	\$2 53	\$5,567,012
1870	3,750,000	2 56	9,600,000
1871	3,636,000	2 59	9,417,000
1872	3,672,300	2 78	10,208,994
1873	4,002,800	2 97	11,888,316
1874	4,683,200	2 31	10,818,192
1875	4,683,200	2 53	11,848,496
1876	6,750,000	2 02	13,635,000
1877	7,290,000	1 40	10,206,000
1878	6,561,000	1 52	9,972,720
1879	6,889,000	1 61	11,091,290
1880	7,646,800	1 62	12,387,816
1881	7,493,864	1 70	12,739,569
1882	6,352,344	1 65	10,481,368
1883	5,907,680	2 02	11,933,514
1884	6,203,064	1 90	11,785,822
1885	5,892,911	1 89	11,137,602
1886	6,069,698	1 81	10,961,268
1887	6,069,698	1 77	10,728,192
1888	5,462,728	1 88	10,291,779
1889	3,956,000	1 88	7,453,104
1890	4,035,120	2 08	8,409,190
1891	3,712,310	2 20	8,157,801
1892	4,083,541	2 42	9,884,211
1893	4,124,376	2 32	9,559,479
1894	3,918,157	1 81	7,074,625
1895	3,526,341	1 65	5,817,052
1896	2,962,126	1 85	5,483,784
1897	2,577,050	1 86	4,800,787
1898	2,589,935	2 23	5,785,915
1899	2,175,545	2 64	5,742,352
1900	2,001,501	2 85	5,710,282
1901	2,342,923	3 00	7,033,221
1902	2,319,494	2 90	6,729,085
1903	2,365,884	2 92	6,915,716
1904	2,271,249	2 75	6,237,758
1905	2,180,399	2 67	5,824,718
1906	2,398,439	3 03	7,273,266
1907	2,422,423	3 30	8,006,107
1908	2,422,000	3 47	8,404,000
1909	2,325,000	2 80	6,510,000
1910	2,683,000	3 30	8,994,000
1911	2,656,000	3 60	9,562,000
1912	2,603,000	3 70	9,631,000
1913	2,551,000	3 80	9,694,000

## Sheep Imported.

Year	For breeding purposes		Other sheep		Total sheep	
	Number	Value	Number	Value	Number	Value
1902 -----	2,059	\$46,663	264,894	\$910,047	266,953	\$956,710
1903 -----	1,737	38,037	299,886	998,897	301,623	1,036,934
1904 -----	1,253	23,298	236,841	791,991	238,094	815,289
1905 -----	2,200	45,319	184,742	659,402	186,942	704,721
1906 -----	2,679	53,951	238,068	966,408	240,747	1,020,359
1907 -----	3,081	67,555	221,717	1,052,870	224,798	1,120,425
1908 -----	5,609	104,509	219,156	978,097	224,765	1,082,606
1909 -----	4,860	89,272	97,803	413,368	102,663	502,640
1910 -----	6,335	135,019	119,817	561,860	126,152	696,879
1911 -----	5,341	116,277	48,114	261,348	53,455	377,625
1912 -----	2,208	29,106	21,380	128,151	23,588	157,257
1913 -----	388	8,903	15,040	81,118	15,428	90,021

## Export of Domestic Sheep.

Year	Number	Value
1902 -----	358,720	\$1,940,060
1903 -----	176,961	1,067,860
1904 -----	301,313	1,954,604
1905 -----	268,365	1,687,321
1906 -----	142,690	804,090
1907 -----	135,344	750,242
1908 -----	101,000	589,285
1909 -----	67,656	365,155
1910 -----	44,517	209,000
1911 -----	121,491	636,272
1912 -----	157,263	626,985
1913 -----	187,132	605,725

*Duty on Imported Sheep.*—Free October 4, 1913, and after.

## SWINE.

Year	Number December 31	Average farm price December 31	Farm value December 31
1869	429,007	\$5 52	\$2,368,118
1870	750,000	4 47	3,352,500
1871	459,000	5 94	2,726,460
1872	440,600	5 05	2,225,030
1873	427,300	6 11	2,610,803
1874	448,600	6 16	2,763,376
1875	403,700	5 77	2,329,349
1876	363,300	7 17	2,604,861
1877	417,700	6 20	2,589,740
1878	438,500	6 27	2,749,395
1879	565,000	5 95	3,361,750
1880	661,000	3 97	2,624,170
1881	667,600	4 98	3,324,648
1882	585,443	6 20	3,629,747
1883	856,000	7 14	6,111,840
1884	950,160	5 66	5,377,906
1885	978,665	5 80	5,676,257
1886	1,027,598	4 15	4,266,586
1887	1,017,322	3 78	3,841,409
1888	1,047,842	4 62	4,836,000
1889	647,000	5 59	3,616,213
1890	647,000	4 91	3,175,476
1891	517,600	5 26	2,723,611
1892	512,424	5 35	2,741,675
1893	399,691	6 12	2,446,110
1894	435,663	5 57	2,427,342
1895	487,943	5 54	2,702,812
1896	507,461	4 03	2,045,677
1897	487,163	4 13	2,013,738
1898	467,676	4 08	1,906,247
1899	374,141	4 47	1,673,907
1900	329,244	6 26	2,061,068
1901	521,906	6 61	3,449,172
1902	506,249	6 79	3,439,457
1903	511,311	7 63	3,901,303
1904	526,650	6 55	3,449,558
1905	521,384	6 10	3,180,442
1906	573,522	5 45	3,125,695
1907	550,581	7 10	3,909,125
1908	551,000	7 20	3,967,000
1909	562,000	6 50	3,653,000
1910	790,000	8 20	6,289,000
1911	830,000	8 30	6,289,000
1912	822,000	9 20	7,562,000
1913	797,000	10 50	8,368,000

## Swine Exported.\*

Year	Number	Value
1902	8,368	\$88,330
1903	4,031	40,923
1904	6,345	53,780
1905	44,496	416,692
1906	59,170	630,998
1907	24,262	309,440
1908	30,818	307,202
1909	18,655	144,605
1910	4,410	46,955
1911	8,551	74,032
1912	19,038	159,370
1913	15,332	151,747

\*Swine imported are not given separately, but included under "All Other" Animals.  
*Duty on Imported Swine.*—Free October 4, 1913, and after.

## Swine Imported.

(Included under "All Other" Animals.)

TABLE XII.  
Horses and Mules by Counties, 1910.

Counties	Mature horses	Yearling colts	Spring colts	Total	Mature mules	Yearling colts	Spring colts	Total
Alameda	9,266	842	536	10,644	223	4		227
Alpine	376	38	12	426	18			18
Amador	2,291	218	176	2,685	212	10	17	239
Butte	6,608	645	402	7,655	1,719	151	91	1,961
Calaveras	3,143	302	203	3,648	25	13	25	63
Colusa	3,992	481	259	4,732	4,607	437	247	5,291
Contra Costa	9,494	1,095	644	11,233	564	63	24	651
Del Norte	382	45	14	441	3			3
El Dorado	2,274	180	90	2,544	93	9	10	112
Fresno	22,063	1,399	1,047	25,009	3,498	298	183	3,979
Glenn	3,319	339	262	3,946	3,033	207	122	3,362
Humboldt	5,851	421	131	6,403	189			189
Imperial	6,277	580	372	7,229	1,533	69	20	1,672
Inyo	4,074	555	403	5,032	249	55	33	337
Kern	8,670	987	530	10,347	1,099	103	46	1,248
Kings	9,417	1,174	882	11,473	855	142	72	1,069
Lake	2,172	216	104	2,492	182	45	36	263
Lassen	7,548	1,406	561	9,515	414	185	103	702
Los Angeles	20,375	1,376	673	22,424	2,459	76	35	2,570
Madera	3,498	334	238	4,070	2,928	154	59	3,141
Marin	2,338	166	54	2,558	11			11
Mariposa	1,896	218	126	2,240	201	46	49	296
Mendocino	5,300	510	184	5,994	298	10	1	309
Merced	10,308	1,453	795	12,556	3,673	198	204	4,075
Modoc	12,247	2,212	976	*15,636	565	441	126	1,132
Mono	1,655	310	132	2,097	73	46	17	136
Monterey	14,172	1,993	1,268	*17,444	546	66	30	642
Napa	5,145	528	237	5,910	345	18	9	372
Nevada	1,830	124	70	*2,074	57	11		68
Orange	9,580	760	225	10,565	2,223	38	7	2,268
Placer	3,762	294	137	4,193	459	13	26	498
Plumas	1,770	206	68	2,044	41			43
Riverside	8,969	943	403	10,315	1,303	83	43	1,429
Sacramento	6,870	773	426	9,969	703	30	10	743
San Benito	6,921	955	599	8,475	74	19	3	96
San Bernardino	6,339	372	167	6,878	757	18	3	778
San Diego	9,663	1,130	705	11,498	683	60	23	766

	318	1	*319	319
San Francisco	18,256	1,089	*20,972	217
San Joaquin	12,641	987	15,274	83
San Luis Obispo	3,940	102	4,295	2
San Mateo	10,621	971	13,034	56
Santa Barbara	14,405	899	15,816	7
Santa Clara	3,914	116	4,290	4
Santa Cruz	4,516	488	5,217	57
Shasta	1,199	40	1,394	13
Sierra	7,690	423	9,150	20
Siskiyou	6,993	362	8,050	76
Solano	12,611	384	13,728	84
Sonoma	11,818	619	*14,357	8
Stanislaus	5,073	228	5,684	236
Sutter	1,150	278	1,409	107
Tehama	1,150	39	1,306	163
Trinity	18,917	1,250	*22,900	19
Tulare	2,053	186	2,491	288
Tuolumne	9,955	589	*11,480	7
Ventura	7,127	374	8,315	66
Yolo	2,803	153	3,244	265
Yuba				48
Totals	402,584	23,037	*468,886	4,913
			61,997	2,851
				69,761

\*Includes animals, age or sex not specified.



TABLE XIII.

## Cattle by Counties in 1910.

Counties	Dairy cows	Other cows	Yearling heifers	Calves	Yearling steers and bulls	Other steers and bulls	Total
Alameda	9,172	5,827	2,609	4,113	1,107	1,491	*24,319
Alpine	759	661	485	426	400	23	2,754
Amador	2,747	7,985	2,175	3,444	1,970	3,945	22,266
Butte	4,713	8,359	2,605	3,772	2,109	4,660	*26,584
Calaveras	1,824	8,407	2,432	3,355	2,057	2,902	20,977
Colusa	3,128	6,571	2,140	2,606	1,556	2,619	*18,750
Contra Costa	9,469	6,567	3,240	4,479	1,123	1,651	26,529
Del Norte	3,575	620	849	1,306	273	234	6,857
El Dorado	2,823	4,338	1,683	2,154	1,138	912	13,048
Fresno	22,241	42,001	13,117	12,682	15,354	22,230	127,625
Glenn	3,688	3,601	1,410	2,409	1,925	2,051	*16,214
Humboldt	21,572	7,837	5,531	8,334	3,413	6,590	*53,775
Imperial	9,653	2,728	2,560	2,772	1,379	1,817	*22,741
Inyo	2,267	8,970	2,583	2,255	2,445	1,788	20,308
Kern	6,917	38,101	8,441	7,372	6,459	24,271	*118,320
Kings	18,593	21,655	7,281	8,793	3,745	14,908	74,975
Lake	1,487	2,113	821	1,133	574	1,286	7,414
Lassen	2,890	18,444	5,975	4,906	5,456	6,161	43,832
Los Angeles	20,524	8,027	5,561	6,211	1,666	1,106	43,095
Madera	1,592	12,406	2,425	2,975	2,252	3,946	*27,905
Marin	24,803	3,564	2,880	6,509	567	641	*39,266
Mariposa	905	7,477	1,602	2,115	1,683	2,876	*16,671
Mendocino	6,454	9,280	3,054	3,980	2,503	4,883	30,154
Merced	19,678	43,250	14,858	14,625	11,036	34,767	*150,467
Modoc	2,903	18,502	6,937	4,608	6,517	7,449	46,916
Mono	450	2,270	803	666	685	427	5,301
Monterey	14,066	27,626	11,046	13,806	7,502	13,133	*88,889
Napa	6,270	3,945	1,403	2,518	758	937	*15,866
Nevada	2,395	2,950	832	1,069	495	865	8,606
Orange	6,184	4,473	2,124	2,231	1,168	2,040	18,220
Placer	2,421	2,283	602	1,204	428	532	*7,510
Plumas	3,437	1,954	1,561	1,586	1,468	1,395	11,401
Riverside	5,235	4,449	2,493	2,203	1,333	3,755	19,468
Sacramento	11,979	5,484	3,195	5,568	1,529	1,961	*31,188
San Benito	4,828	11,064	4,459	5,864	4,151	8,987	*39,703
San Bernardino	3,043	4,389	1,075	926	481	2,847	12,761
San Diego	10,633	15,815	7,874	8,088	6,490	9,877	58,777
San Francisco	1,645	10	581	174	75	25	2,510
San Joaquin	11,904	6,861	3,636	4,960	1,937	1,998	31,296
San Luis Obispo	24,193	22,903	10,345	15,635	8,948	33,180	*118,704
San Mateo	8,119	2,305	1,848	2,375	369	272	15,288
Santa Barbara	11,690	23,752	6,891	11,524	8,666	24,578	*87,576
Santa Clara	12,181	12,251	4,449	5,443	3,133	7,552	*46,030
Santa Cruz	4,210	1,811	1,113	1,779	438	749	10,100
Shasta	2,923	15,433	3,678	3,308	3,197	5,580	34,119
Sierra	1,563	2,268	850	874	831	1,401	7,787
Siskiyou	7,018	14,781	5,965	4,919	5,359	6,513	*45,079
Solano	9,279	4,257	1,933	3,720	1,187	1,408	21,784
Sonoma	24,961	5,835	4,804	9,517	1,805	1,705	*48,727
Stanislaus	20,678	9,047	5,294	7,252	2,922	3,765	*49,132
Sutter	6,728	3,254	1,939	2,623	1,012	823	*16,604
Tehama	3,462	10,691	2,646	3,520	2,590	2,400	25,309
Trinity	804	5,143	1,415	1,126	1,308	2,089	11,885
Tulare	26,765	29,478	11,911	16,092	8,784	10,429	*104,484
Tuolumne	1,773	8,415	2,040	2,977	1,531	1,223	*18,659
Ventura	2,666	5,887	2,139	2,442	2,095	10,850	*29,929
Yolo	7,197	3,761	2,654	2,649	1,194	1,522	18,977
Yuba	2,255	4,773	1,628	1,827	1,152	1,959	13,594
Totals	467,332	576,909	218,480	267,799	163,728	321,984	2,077,025

\*Includes animals, age or sex not specified.

TABLE XIV.

Sheep, Lambs, and Swine, 1910.

Counties	Rams, ewes and wethers	Spring lambs	Total	Mature hogs	Spring pigs	Total
Alameda	5,680	3,507	9,187	3,640	2,770	6,410
Alpine	9,832	6,808	16,640	309	208	517
Amador	3,919	2,726	6,645	3,623	1,673	5,296
Butte	29,137	15,940	45,077	9,317	5,016	14,333
Calaveras	10,145	5,215	15,360	2,588	1,586	4,174
Colusa	39,801	24,791	64,592	17,646	10,418	28,064
Contra Costa	14,132	5,463	19,595	3,887	3,054	6,941
Del Norte	1,341	500	1,841	1,153	617	1,770
El Dorado	1,763	1,399	3,162	1,428	973	2,401
Fresno	94,757	47,254	142,011	20,134	13,016	33,150
Glenn	70,210	41,153	111,363	12,483	5,827	18,310
Humboldt	62,423	24,650	87,073	7,688	4,945	12,633
Imperial	13,786	9,553	23,339	45,764	24,798	70,562
Inyo	17,240	26,106	43,346	1,795	1,560	3,355
Kern	19,801	10,516	30,317	13,376	7,137	20,513
Kings	40,483	21,891	62,374	22,775	17,858	40,633
Lake	7,436	3,511	10,947	5,301	2,737	8,038
Lassen	42,490	30,225	72,725	3,079	1,955	5,034
Los Angeles	22,261	8,830	31,091	18,418	10,524	28,942
Madera	6,269	3,837	10,106	4,444	2,409	6,853
Marin	1,930	1,025	2,955	8,812	7,287	16,099
Mariposa	877	304	1,181	6,160	2,722	8,882
Mendocino	88,760	41,010	129,770	14,600	7,469	22,069
Merced	28,044	11,724	39,768	19,414	10,121	29,535
Modoc	46,078	30,484	76,562	5,328	3,160	8,488
Mono	40,805	22,241	63,046	179	244	423
Monterey	17,029	11,845	28,874	12,567	7,464	20,031
Napa	5,794	5,084	10,878	5,160	3,184	8,344
Nevada	6,853	4,309	11,162	1,067	749	1,816
Orange	31,802	11,876	43,678	2,265	2,183	4,448
Placer	15,142	9,326	24,468	1,822	1,565	3,387
Plumas	845	314	1,159	665	744	1,409
Riverside	5,589	1,420	7,009	3,892	2,258	6,150
Sacramento	25,828	21,129	46,957	6,421	4,034	10,455
San Benito	10,635	4,511	15,146	5,572	2,560	8,132
San Bernardino	7	-----	7	2,562	1,187	3,749
San Diego	220	69	289	4,261	3,130	7,391
San Francisco	3	-----	3	181	100	281
San Joaquin	14,807	10,012	24,819	13,473	9,981	23,454
San Luis Obispo	54,717	32,236	86,953	11,750	6,118	17,868
San Mateo	767	562	1,329	8,692	3,990	12,682
Santa Barbara	60,205	20,328	80,533	15,113	6,960	22,073
Santa Clara	4,449	5,606	10,055	4,165	3,184	7,349
Santa Cruz	876	703	1,579	2,165	1,509	3,674
Shasta	11,449	5,574	17,023	12,832	5,968	18,800
Sierra	3,005	93	3,098	370	294	664
Siskiyou	18,013	11,909	29,922	6,116	3,396	9,512
Solano	96,921	73,232	170,153	8,836	4,732	13,568
Sonoma	44,095	21,220	65,315	10,995	7,428	18,423
Stanislaus	15,874	7,378	23,252	13,610	9,417	23,027
Sutter	51,135	38,530	89,665	9,121	6,008	15,129
Tehama	185,023	112,713	297,736	10,915	4,025	14,940
Trinity	2,732	1,081	3,813	2,594	1,457	4,051
Tulare	14,014	7,170	21,184	23,942	14,250	38,192
Tuolumne	1,795	671	2,466	2,590	1,303	3,893
Ventura	16,113	15,658	31,771	6,984	3,514	10,498
Yolo	49,807	29,639	79,446	15,483	8,714	24,197
Yuba	40,344	27,318	67,662	3,288	2,251	5,539
Totals	1,525,288	892,189	2,417,477	482,810	283,741	766,551

TABLE XVI.

Wool Produced by Counties, 1860-1900.

(Compiled from reports of the Census Bureau.)  
(Pounds.)

Counties	1860	1870	1880	1890	1900
Alameda	284,735	138,975	205,955	156,065	148,810
Alpine		281,700	90	2,015	6,480
Amador	20,650	73,010	64,808	53,879	30,385
Butte	92,400	351,023	323,483	307,739	551,590
Calaveras	10,335	129,025	161,351	130,761	120,090
Colusa	66,900	1,086,599	661,782	603,822	113,040
Contra Costa	74,108	58,800	27,293	92,415	20,900
Del Norte		3,471	6,462	7,524	3,520
El Dorado	1,130	50,096	73,233	2,251	980
Fresno		191,594	1,477,000	1,802,043	425,862
Glenn					328,020
Humboldt		51,867	647,492	997,649	948,970
Imperial					
Inyo			35,382	139,252	264,290
Kern		281,100	666,427	1,163,056	792,700
Kings		72			678,630
Lake		58,046	185,418	139,584	41,940
Lassen		75	92,748	152,232	269,180
Los Angeles	209,869	962,603	1,499,895	544,660	244,380
Madera					279,810
Marin	17,820	6,692	2,080	153	2,947
Mariposa		87,816	163,896	225,895	15,290
Mendocino	18,794	178,493	990,264	1,048,020	1,089,490
Merced	28,500	231,072	631,725	984,505	712,310
Modoc			71,378	86,499	310,725
Mono		7,000	350	15,888	176,520
Monterey	485,167	1,054,310	523,612	267,247	56,100
Napa	31,390	20,789	157,085	156,368	17,810
Nevada			8,002	6,816	15,750
Orange				1,110,112	293,620
Placer	31,330	169,033	233,901	439,723	145,810
Plumas		13,023	23,608	5,833	27,290
Riverside					76,650
Sacramento	67,005	515,213	509,834	254,263	227,900
San Benito			323,285	128,247	59,740
San Bernardino	4,000	71,075	250,338	176,100	38,574
San Diego	5,150	9,250	811,308	130,180	91,040
San Francisco					
San Joaquin	36,477	86,700	466,960	111,585	176,160
San Luis Obispo	260,100	903,863	643,853	146,740	77,800
San Mateo	7,535	12,625	2,819	4,040	4,510
Santa Barbara	150,200	996,200	692,415	71,600	509,250
Santa Clara	19,000	179,465	73,024	1,103	15,920
Santa Cruz	24,875	3,100	3,640	3,760	4,410
Shasta		15,820	88,142	68,164	126,900
Sierra			3,625		8,310
Siskiyou	1,150	43,858	135,164	62,024	85,920
Solano	240,937	306,817	290,996	208,385	412,140
Sonoma	78,223	230,394	664,721	547,120	335,010
Stanislaus	38,249	749,263	787,516	176,807	216,990
Sutter	83,062	126,657	152,367	181,489	305,150
Tehama	32,675	445,456	484,763	1,408,818	1,648,750
Trinity			80,115	64,189	62,290
Tulare	16,900	660,645	460,080	1,112,091	355,142
Tuolumne	150	48,525	58,535	39,170	9,930
Ventura			728,932	281,504	10,000
Yolo	146,806	437,048	276,721	280,977	456,870
Yuba	97,487	63,425	194,163	258,155	232,960
Totals	2,683,109	11,391,743	16,798,036	216,353,547	13,680,495

\*Exclusive of wool obtained from range sheep.

†In a summary issued in 1900, the total wool produced is stated at 24,092,954.



TABLE XV.

## Goats, Wool, Mohair, and Goat Hair.

Counties	Number of goats, 1900	Number of goats, 1910	Number of wool fleeces shorn, 1910	Mohair and goat hair fleeces shorn, 1910	Value of wool and mohair produced, 1910
Alameda	66	64	5,783		\$4,930
Alpine		10	6,790		9,561
Amador	1,584	1,597	7,253	449	5,882
Butte	1,562	3,215	38,261	1,749	33,991
Calaveras	1,142	3,348	15,677	517	11,551
Colusa	4,289	2,154	73,221	4,009	56,620
Contra Costa	79	17	14,715		10,869
Del Norte		465	1,238	40	2,070
El Dorado	591	3,315	3,808	933	3,504
Fresno	517	4,558	107,802	1,900	109,982
Glenn	4,571	2,813	131,612	5,177	101,749
Humboldt	920	3,747	85,212	2,540	104,430
Imperial		147	12,755	26	17,067
Inyo	8,382	2,846	17,847	505	27,761
Kern	3,364	930	24,177	355	26,540
Kings	870	507	73,393	26	58,836
Lake	10,512	9,018	10,372	6,603	12,922
Lassen	45	586	36,768	2,088	55,154
Los Angeles	13,580	8,238	31,754	230	32,366
Madera	83	278	4,905	60	2,272
Marin	25	147	2,823		2,816
Mariposa	1,026	931	355	154	376
Mendocino	3,627	3,927	149,260	2,315	158,918
Merced	1,878	5,246	46,908	8,400	39,400
Modoc	1,280	549	39,538	1,356	55,583
Mono	651	25	29,160		41,209
Monterey	3,127	3,983	24,884	3,000	26,549
Napa	632	556	9,955	153	7,196
Nevada	989	2,198	10,607	1,043	8,382
Orange	396	423	62,072		51,474
Placer	945	1,542	28,841	177	21,728
Plumas	23	10	593		767
Riverside	384	924	1,536	13	2,600
Sacramento	67	89	41,103	7	35,449
San Benito	139	489	19,457	33	18,974
San Bernardino	126	81			
San Diego	2,290	1,147	155	60	195
San Francisco	19	9	3		4
San Joaquin	132	260	20,477	37	14,114
San Luis Obispo	1,502	7,390	64,719	4,758	52,868
San Mateo	363	154	1,013	26	1,162
Santa Barbara	1,118	558	27,787	68	26,308
Santa Clara	5,143	163	4,765		3,596
Santa Cruz	1,505	1,043	799	630	1,444
Shasta	8,792	18,403	17,862	11,606	25,705
Sierra	104	73	2,333		3,940
Siskiyou	3,772	384	14,975	134	23,038
Solano	56	392	157,499	3	161,312
Sonoma	1,544	2,991	75,925	2,330	74,951
Stanislaus	159	217	22,837	50	22,700
Sutter	173	511	149,821	800	110,738
Tehama	10,667	28,473	336,373	36,119	349,689
Trinity	108	845	2,603	44	1,892
Tulare	1,190	2,979	33,150	510	35,218
Tuolumne	1,119	1,609	1,408	177	996
Ventura	1,022	621	21,465	400	14,306
Yolo	322	716	82,602	316	76,497
Yuba	298	502	63,383	208	45,777
Indian reservation	151				
Totals	109,021	138,413	2,275,389	102,134	\$2,205,928

TABLE XVII

Counties	Domestic animals on farms and				
	Horses and colts	Cattle	Mules and colts	Asses and burros	Swine, all ages
Alameda	10,644	24,319	227	3	6,410
Alpine	426	2,754	18	14	517
Amador	2,685	22,266	239	23	5,296
Butte	7,655	*26,584	1,961	18	14,333
Calaveras	3,648	20,977	63	27	4,174
Colusa	4,732	*18,750	5,291	65	28,064
Contra Costa	11,233	26,529	651	6	6,941
Del Norte	441	6,857	3	-----	1,770
El Dorado	2,544	13,048	112	17	2,401
Fresno	25,009	127,625	3,979	101	33,150
Glenn	*3,946	*16,214	3,362	29	18,310
Humboldt	6,403	*53,775	189	11	12,633
Imperial	7,229	*22,741	1,672	56	70,562
Inyo	5,032	20,308	337	309	3,355
Kern	*10,347	*118,320	1,248	130	20,513
Kings	11,473	74,975	1,069	23	40,633
Lake	2,492	7,414	263	10	8,038
Lassen	9,515	43,832	702	119	5,034
Los Angeles	22,424	43,095	2,570	84	28,942
Madera	4,070	*27,905	3,141	49	6,853
Marin	2,558	*39,266	11	-----	16,099
Mariposa	2,240	*16,671	296	83	8,882
Mendocino	5,994	30,154	309	29	22,069
Merced	12,556	*150,467	4,075	107	29,535
Modoc	*15,636	46,916	1,132	98	8,488
Mono	2,097	5,301	136	62	423
Monterey	*17,444	*88,889	642	26	20,031
Napa	5,910	*15,866	372	10	8,344
Nevada	*2,074	8,606	68	10	1,816
Orange	10,565	18,220	2,268	25	4,448
Placer	4,193	*7,510	498	66	3,387
Plumas	2,044	11,401	43	5	1,409
Riverside	10,315	19,468	1,429	88	6,150
Sacramento	9,969	*31,188	743	19	10,455
San Benito	8,475	*39,703	96	29	8,132
San Bernardino	6,878	12,761	778	88	3,749
San Diego	11,498	58,777	766	181	7,391
San Francisco	319	2,510	-----	-----	281
San Joaquin	*20,972	31,296	3,530	62	23,454
San Luis Obispo	15,274	*118,704	877	19	17,868
San Mateo	4,295	15,288	12	2	12,682
Santa Barbara	13,034	*87,576	443	24	22,073
Santa Clara	15,816	*46,030	274	11	7,349
Santa Cruz	4,290	10,100	88	6	3,674
Shasta	5,217	34,119	294	23	18,800
Sierra	1,394	7,787	20	4	664
Siskiyou	9,150	*45,079	503	22	9,512
Solano	8,050	21,784	2,319	23	13,568
Sonoma	13,728	*48,727	398	28	18,423
Stanislaus	*14,357	*49,132	5,442	31	23,027
Sutter	5,684	*16,604	2,096	20	15,129
Tehama	5,876	25,309	1,675	23	14,940
Trinity	1,306	11,885	168	8	4,051
Tulare	*22,200	*104,484	3,655	103	38,192
Tuolumne	2,491	*18,659	91	26	3,893
Ventura	*11,480	*29,929	2,362	60	10,498
Yolo	8,315	18,977	3,955	46	24,197
Yuba	3,244	13,594	800	31	5,539
Totals	*468,886	*2,077,025	69,761	2,592	766,551

\*Including animals, age or sex not specified.



## SUMMARY.

Ranges, 1910.

Domestic animals in inclosures (not on farms), 1910.

Sheep—rams, ewes, wethers and lambs	Goats	Cattle	Horses	Mules, asses and burros	Swine	Sheep and goats
9,187	64	2,938	11,439	289	429	3,065
16,640	10	7	16	2	5	22
6,645	1,597	303	492	34	56	-----
45,077	3,215	686	1,835	16	201	23
15,360	3,348	1,056	746	22	107	32
64,592	2,154	479	726	291	172	131
19,595	17	726	1,378	48	103	92
1,841	465	75	114	1	1	-----
3,162	3,315	709	473	20	137	-----
142,011	4,558	1,428	4,525	674	341	58
111,363	2,813	313	694	115	43	5
87,073	3,747	1,363	1,549	20	1,132	165
23,339	147	244	1,278	559	878	435
43,346	2,846	315	902	761	140	16,111
30,317	930	820	3,565	1,482	108	7,597
62,374	507	243	1,005	24	124	5
10,947	9,018	365	395	24	193	34
72,725	586	7,528	25,297	3,425	807	3,025
31,091	8,238	313	743	26	87	18,064
10,106	278	155	436	76	30	1
2,955	147	361	1,227	81	1	26
1,181	931	42	256	75	-----	-----
129,770	3,927	806	1,280	27	348	4
39,768	5,246	130	520	30	69	11,028
76,562	549	433	811	21	156	-----
63,016	25	65	170	16	-----	-----
28,874	3,983	505	1,535	112	53	7
10,878	556	251	899	14	38	91
11,162	2,198	799	946	36	350	89
43,678	423	885	1,923	179	90	649
24,468	1,542	1,076	1,442	162	252	78
1,159	10	162	451	14	79	6
7,009	924	1,163	2,815	249	131	2,833
46,957	89	646	3,917	74	164	80
15,146	489	148	407	4	20	-----
7	81	1,671	2,977	757	409	1,324
289	1,147	1,210	3,303	434	15	118
3	9	2,280	21,184	320	1,243	2,924
24,819	260	840	2,405	67	150	84
86,953	7,390	1,144	1,301	18	52	18
1,329	154	913	1,424	23	964	114
80,533	558	1,010	2,801	73	40	61
10,055	163	1,105	5,156	66	125	116
1,579	1,043	536	1,543	66	65	79
17,023	18,403	948	1,274	60	486	529
3,098	73	180	312	55	35	42
29,922	384	745	1,393	130	229	28
170,153	392	579	1,108	19	24	31
65,315	2,991	959	2,166	23	164	27
23,252	217	653	1,454	99	157	3
89,665	511	387	386	19	83	1,903
297,736	28,473	273	568	6	35	12
3,813	845	508	277	48	106	-----
21,184	2,979	831	1,765	137	100	16
2,466	1,609	740	923	108	319	473
31,771	621	576	1,374	93	280	41
79,446	716	371	834	30	195	43
67,662	502	179	386	15	47	2
2,417,477	138,413	46,176	132,521	11,669	12,168	71,744

## POULTRY.

With the exception of the turkey, all the different species of poultry now kept on American farms are of European or Asiatic origin. The fowl, or chicken, is unquestionably of Asiatic origin.

## VARIETIES.

The chickens of the United States may be divided into ten classes:

*The American class* includes the—

Plymouth Rock.  
Wyandotte.  
Java.  
American Dominique.  
Jersey Blue.

*The Asiatic class*—

Brahma.  
Cochin.  
Langshans.

*The Mediterranean class*—

Leghorn.  
Minorca.  
Andalusian.  
Spanish.

*The Polish class*—

White Crested.  
Black.  
Golden.  
Silver.  
White and Bearded Golden.  
Bearded White.  
Bearded Silver.  
Buff Laced.

*The Dutch or Hamburg class*—

Hamburgs.  
Red Caps.  
Campines.

*French class*—

Houdans.  
Creve Cœurs.  
La Flèche.

*Game and Game Bantam class*—

Black-breasted Red.  
Brown Red.  
Golden and Silver Duckwing.  
Red Pyle.  
White, Black, Birchen, Cornish, and  
Indian Games.  
Malays.

*Bantams other than Game*—

Bebrights.  
Rose Combed.  
Booted.  
White.  
Cochin.  
Japanese.  
Polish.

*English class*—

Dorkings.  
Orpingtons.

*Miscellaneous class*—

Russian.  
Sumatra.  
Silky.  
Sultan.  
Frizzles.  
Rumples.  
Yokohama.  
Naked Neck.

Classified according to their prominent characteristics, they may be divided into four classes. The egg breeds, which are the greatest egg producers, are the Leghorns, Spanish, Minorcas, and Hamburgs.

The meat breeds, whose chief value is as meat producers: Brahma, Cochin, and Langshan. The general utility fowls furnish fair quantities of eggs and meat. The Plymouth Rock and Wyandotte belong to this class.

The fancy breeds are reared chiefly on account of their appearance; the Polish, Games, Bantams, and some miscellaneous breeds are the chief representatives of this class.

For general purposes the Plymouth Rock and Wyandotte are the most popular of all fowls, the Plymouth Rock in particular being in great favor.

The turkey is an American bird. The wild turkey was once found all along the Atlantic coast, throughout Mexico, Central America, and the great interior plains of North America. The recognized varieties of the domestic turkey are the Bronze, Narragansett, White, Holland, Buff, Slate, and Black.

### DUCKS.

The six leading varieties are the White Pekin, White Aylesbury, Colored Rouen, Black Cayuga, Colored Muscovy, and White Muscovy.

The most prominent breeds of geese are the Toulouse, African, Embden, Chinese, Wild, and Egyptian.

The raising of poultry in California is carried on successfully and on a large scale, the center of this industry being at Petaluma, in Sonoma County.

### THE OSTRICH INDUSTRY.

In January, 1910, there were at least 6,100 breeding or feather-producing ostriches in this country, of which Arizona had 80 per cent, California 17 per cent, Arkansas 2 per cent, the small remainder being in Texas and Florida.

The question of the nature of the country most favorable for ostriches is largely affected by the kind of vegetation peculiarly suited to the soil, which in turn is undoubtedly affected by the amount of rainfall. Alfalfa pasture makes an ideal run for the birds, furnishing a large percentage of their food; hence a soil which is or can be made suitable for alfalfa is one of the essentials to success in ostrich farming. A dry, sandy soil, made suitable by drainage and irrigation for raising alfalfa, has proved best adapted to successful ostrich farming. Such a soil is generally peculiarly adapted for raising large crops of alfalfa, and makes an ideal soil for an alfalfa pasture. Under such conditions, it is essential to have some shade.

The demand for ostrich feathers in this country is constantly increasing, while the quantity produced here scarcely affects importations, which are steadily increasing. The demand for information concerning ostriches indicates that the number of individuals who are interested in ostrich farming is rapidly increasing.

The profit to be derived from the business will depend on the management, on the success secured in the raising of the young birds, and on the production of feathers of good quality. The average yearly yield of feathers from an ostrich is 1½ pounds. Birds produce from 12 to 20 ounces of feathers at each plucking, with an average of 16 ounces. The total weight of an average yield is divided about as follows: "Wings," 48 per cent; "short stuff," 25 per cent; and "tails," 27 per cent. The amount received from the feathers of each bird varies from \$20 to \$30, depending upon the yield and the price of the product. The average return during the year 1909 was \$25.93 per bird. While both ostrich eggs and flesh may be used for human consumption, the amount to be derived from these products is hardly worth considering. As each pair of breeding birds is worth about \$800, and chicks 6 months old are valued at \$100, any deaths from accidents or any inability to raise chicks greatly lessens the profit to be derived from the business. Allowing for some loss in these ways, and charging a fair interest on the investment, the business can be operated to return a fair profit.

There were nine ostrich farms, returning 974 ostriches valued at \$224,000. There were also reported peafowls valued at \$1,431, pheasants valued at \$342, and India Jungle fowls valued at \$150. The number of farms reporting poultry increased 10,772 since 1900.

**Poultry in California—1880-1910.**

	1880	1890	1900	1910	Value 1910
Chickens -----	1,425,991	3,504,251	3,947,200	5,665,964	\$3,237,049
Turkeys -----		287,799	158,356	116,602	258,033
Ducks -----		157,514	62,293	40,061	28,325
Geese -----		37,659	28,419	14,195	18,609
Guinea fowls -----			<sup>1</sup>	2,920	1,993
Pigeons -----			<sup>2</sup>	246,065	69,254
Ostriches -----			198	1,082	229,340
All other fowls -----	184,176	482,972	249,068	378	1,923
Totals -----	1,610,167	4,470,195	4,196,466	6,087,267	\$3,844,526

<sup>1</sup>Included with chickens. <sup>2</sup>Not reported.

**Eggs.\***

The production of eggs in California in 1909 was 41,022,000 dozen, valued at \$10,263,000.

Number of eggs—	Dozens	Value
In 1899 -----	24,443,540	\$3,864,679
In 1909 -----	41,022,395	10,262,694
Increase 1889 to 1909 -----	16,578,855	6,398,015
Per cent of increase -----	67.8	165.6

\*The center of the poultry industry in California is at Petaluma, in Sonoma County.



TABLE XVIII.  
Poultry and Eggs—1909-1910.

Counties	Number of poultry raised in 1909	Number of poultry in 1910	Dozens of eggs pro- duced in 1909
Alameda	230,417	240,914	1,391,728
Alpine	2,547	2,159	8,904
Amador	23,628	23,630	142,824
Butte	94,183	74,982	377,598
Calaveras	31,410	23,242	107,387
Colusa	73,034	61,113	249,229
Contra Costa	154,332	118,944	664,951
Del Norte	3,357	3,911	13,767
El Dorado	28,499	24,308	132,910
Fresno	266,221	213,108	1,267,840
Glenn	67,529	50,336	252,286
Humboldt	67,310	54,834	332,115
Imperial	84,062	72,252	264,826
Inyo	50,007	30,132	146,952
Kern	89,520	75,900	394,130
Kings	153,839	102,747	687,052
Lake	37,976	27,435	135,001
Lassen	28,907	19,297	106,897
Los Angeles	586,566	513,965	2,332,397
Madera	28,137	23,246	67,932
Marin	141,629	209,277	1,465,911
Mariposa	19,583	12,217	49,728
Mendocino	64,985	56,807	337,781
Merced	136,305	83,998	454,115
Modoc	38,112	23,789	134,731
Mono	2,559	2,515	4,541
Monterey	123,743	128,325	751,177
Napa	105,428	108,777	662,159
Nevada	35,776	23,482	150,596
Orange	239,536	186,746	1,198,290
Placer	62,151	43,619	235,606
Plumas	15,163	9,649	48,511
Riverside	95,767	84,226	438,099
Sacramento	144,704	116,556	666,906
San Benito	79,550	95,289	696,264
San Bernardino	105,606	91,098	579,685
San Diego	174,778	130,158	921,117
San Francisco	196,020	42,649	110,057
San Joaquin	212,434	175,456	955,501
San Luis Obispo	109,871	119,822	840,405
San Mateo	43,946	47,625	236,642
Santa Barbara	91,159	89,995	407,168
Santa Clara	233,729	209,093	1,166,782
Santa Cruz	79,015	85,705	577,989
Shasta	52,607	35,873	199,858
Sierra	6,993	4,458	24,877
Siskiyou	57,444	43,413	254,107
Solano	66,403	74,683	426,261
Sonoma	1,512,601	1,362,399	9,470,880
Stanislaus	121,677	128,905	648,248
Sutter	101,908	68,861	420,198
Tehama	96,134	59,852	306,452
Trinity	10,800	7,712	31,776
Tulare	204,167	191,965	1,033,110
Tuolumne	22,710	15,989	94,507
Ventura	61,703	60,921	372,111
Yolo	84,010	76,972	347,209
Yuba	44,202	27,936	111,892
Totals	7,096,339	6,087,267	35,907,973



## DAIRY PRODUCTS.

Dairy products in general are somewhat less accurately reported than the principal crops. This is particularly the case as regards the quantity of milk produced. Less than one third of the milk produced was sold as such. Large quantities of milk and cream were sold on the butter fat basis. The butter made on farms in 1909, was valued at \$4,086,000.

(From report of Census Bureau.)

Dairy cows and products	Number	Value
Dairy cows on farms April, 1910.....	467,332 head	-----
On farms reporting dairy products in 1909.....	408,812 head	-----
On farms reporting milk produced in 1909.....	315,385 head	-----
Specified dairy products, 1909:		
Milk .....	154,901,956 gals.	
Butter .....	15,301,871 lbs.	\$4,085,992
Cheese .....	2,777,873 lbs.	383,494
Milk sold .....	45,333,432 gals.	7,346,176
Cream sold .....	3,397,061 gals.	2,861,921
Butter fat sold.....	19,176,719 lbs.	5,766,394
Butter sold .....	10,285,583 lbs.	2,763,392
Cheese sold .....	2,513,815 lbs.	345,414
Total receipts from sales, 1909.....	-----	\$19,083,297
Total value of milk, cream, and butter fat sold, and butter and cheese made.....	-----	20,443,977

## CHEESE AND BUTTER.

The production of cheese and butter as given by counties by the Census Bureau, is that made on farms only, the production by creameries in 1909 was 37,283,450, and full cream cheese 1,567,640 pounds. The decrease from 1904, when it amounted to 3,601,051, is, no doubt, due in part to the increasing practice of separating the cream on the farm, as it is now more profitable to sell the separated cream to the butter factories. The figures issued by the State Dairy Bureau are also given. The cheese produced is, with a few exceptions, only that made by the ordinary Cheddar process. There is a considerable amount of fancy and handmade cheese which has not been reported. That the production of cheese in the State is far below the demand, is proved by the fact that 11,758,680 pounds of cheese, more than double the amount manufactured in this State, is received in the San Francisco market alone. We have the finest land for pasture and conditions favorable for the production of this article. All we need is more good cheese factories and 500 or 1,000 more families to produce the milk.

The amount of the output of cheese reported is much below the actual production in the State, and it is impossible to estimate it, as the owners of factories constantly change from making cheese to the production of cream. It has never been attempted to get a report on other than that made by the ordinary Cheddar process.

TABLE XIX.

## Butter and Cheese Produced on Farms.\* 1910.

(Compiled from the returns of the Bureau of the Census.)

(Pounds.)

Counties	1889		1899		1909	
	Butter	Cheese	Butter	Cheese	Butter	Cheese
Alameda	509,614	62,132	526,978	6,716	252,603	675
Alpine	25,075	110	12,495	-----	28,613	500
Amador	168,436	4,395	91,584	5,184	68,812	32,517
Butte	178,329	1,143	149,200	40	124,437	-----
Calaveras	35,546	550	66,946	1,155	51,841	2,787
Colusa	177,100	100	107,222	-----	75,829	272
Contra Costa	315,181	27,802	449,511	21,046	226,976	9,790
Del Norte	455,960	-----	300,990	-----	461,303	-----
El Dorado	216,790	9,125	162,072	9,200	176,354	3,734
Fresno	382,744	11,370	609,676	122,058	514,946	41,210
Glenn	-----	-----	-----	-----	86,762	-----
Humboldt	1,922,282	9,712	791,850	81	475,773	-----
Imperial	-----	-----	-----	-----	71,581	1,400
Inyo	55,316	3,373	47,813	185	116,364	5,426
Kern	104,633	88,850	142,392	12,403	73,839	30,051
Kings	-----	-----	145,704	2,575	78,295	139,000
Lake	119,349	350	121,186	102	92,723	200
Lassen	200,691	5,650	235,258	69,763	279,685	160
Los Angeles	676,575	250,890	509,757	5,243	323,374	1,643
Madera	-----	-----	-----	-----	48,459	-----
Marin	3,928,009	3,000	3,234,320	4,870	2,289,217	101,743
Mariposa	21,158	695	35,760	196	12,753	-----
Mendocino	375,445	22,000	349,840	3,924	355,048	1,357
Merced	153,467	4,420	138,243	98,595	94,602	200,840
Modoc	142,057	10,150	127,930	-----	153,175	3,680
Mono	55,093	870	29,832	1,325	30,202	-----
Monterey	1,743,162	101,600	712,845	559,923	286,450	59,680
Napa	405,587	43,070	395,494	51,260	381,930	35,826
Nevada	147,042	100	119,236	-----	158,271	1,970
Orange	295,146	3,480	220,218	938	333,283	50
Placer	195,507	520	217,508	-----	108,876	30,545
Plumas	531,549	15,378	474,599	30,170	237,330	2,500
Riverside	-----	-----	298,345	208	312,248	650
Sacramento	725,404	230,455	551,020	543,356	164,427	497,064
San Benito	215,545	572,262	223,333	124,351	74,131	137,685
San Bernardino	303,420	1,460	249,439	-----	207,745	362
San Diego	468,915	4,472	448,076	7,204	575,662	2,895
San Francisco	7,805	200	104,150	10	144	-----
San Joaquin	326,880	1,755	351,312	3,713	341,820	93,630
San Luis Obispo	3,322,918	417,791	1,286,289	135,023	1,369,563	169,350
San Mateo	655,008	521,936	349,421	509,714	91,997	64,751
Santa Barbara	1,055,380	94,235	821,804	57,773	244,632	25,665
Santa Clara	351,248	491,876	484,856	514,563	320,236	577,350
Santa Cruz	425,071	383,165	405,504	372,749	224,392	227,905
Shasta	111,484	6,000	122,610	148	137,723	-----
Sierra	123,598	170	114,546	-----	135,938	1,318
Siskiyou	312,814	27,000	279,776	35,065	254,999	39,470
Solano	579,422	650	505,128	2,364	381,903	873
Sonoma	2,971,664	234,000	2,093,892	121,695	1,192,532	211,319
Stanislaus	143,231	25,160	153,026	228,363	154,998	2,125
Sutter	160,612	45,300	151,809	249,638	183,527	-----
Tehama	125,425	430	160,711	7,599	182,953	-----
Trinity	15,509	-----	34,433	-----	46,277	-----
Tulare	354,368	35,738	329,018	1,407	201,880	16,850
Tuolumne	27,716	525	60,150	60	35,522	155
Ventura	226,792	84,840	270,109	624	267,905	-----
Yolo	195,879	-----	233,345	326,706	88,338	-----
Yuba	93,153	11,320	83,695	-----	40,673	900
Totals	26,776,704	3,871,575	20,853,360	4,249,588	15,301,871	2,777,873

\*This is made on farms, and does not include the amount made in creameries or factories, which is very much larger.

## SUMMARY OF BUTTER AND CHEESE PRODUCED ON FARMS.

(Compiled from the returns of the Bureau of the Census.)

## Butter.

Year	Made on farm (pounds)	Made in factories (pounds)	Total (pounds)
1850 -----	705	-----	705
1860 -----	3,095,035	-----	3,095,035
1870 -----	7,969,744	-----	7,969,744
1880 -----	14,084,405	2,074,344	16,158,749
1890 -----	26,776,704	271,767	27,048,471
1900 -----	20,853,360	13,147,137	34,000,497
1910 -----	15,301,871	37,283,450	52,585,321

## Cheese.

Year	Made on farm (pounds)	Made in factories (pounds)	Total (pounds)
1850 -----	150	-----	150
1860 -----	1,343,689	-----	1,343,689
1870 -----	3,395,074	-----	3,395,074
1880 -----	2,566,618	1,154,121	3,720,739
1890 -----	3,871,575	1,091,222	4,962,797
1900 -----	4,249,588	2,676,543	6,926,131
1910 -----	2,777,873	1,567,640	4,345,513

TABLE XX.

## Production of Butter and Cheese in California, 1911-1913.

(Compiled from the returns of the State Dairy Bureau. For year ending September 30.)

Counties	Butter, pounds			Cheese, pounds		
	1911	1912	1913	1911	1912	1913
Alameda	233,136	689,774	300,330			
Alpine	38,000	40,000	30,000			
Amador	150,000	145,000	142,208			11,043
Butte	847,645	772,629	769,740			78,840
Calaveras	37,125	80,875	161,666			
Colusa	493,326	490,000	443,089			
Contra Costa	630,025	445,121	502,163			
Del Norte	699,434	740,664	746,637			
El Dorado	200,000	146,548	145,786	100		
Fresno	3,803,644	4,144,404	3,878,289	54,904	129,615	130,600
Glenn	285,105	284,028	590,365			
Humboldt	5,238,382	5,095,014	5,168,990	12,500	199,157	372,000
Imperial	2,885,941	4,110,736	5,398,228	60,000	66,580	110,000
Inyo	174,404	179,742	217,595	7,378	8,175	
Kern	693,413	732,059	566,965			54,700
Kings	3,552,542	3,069,880	2,313,963	66,850	139,375	136,850
Lake	70,770	51,760	54,420	55,250		
Lassen	201,020	225,000	208,000	96,890	115,535	232,808
Los Angeles	482,000	295,018	311,437			
Madera	87,860	163,784	156,606			
Marin	1,835,983	1,709,603	2,119,071	664,500	678,825	554,180
Mariposa						
Mendocino	662,334	549,429	462,061			26,192
Merced	3,102,222	3,351,049	3,910,815	215,000	342,720	227,760
Modoc	30,300	54,400	30,000		6,000	46,936
Mono	9,948	4,200	10,800	2,500	18,800	12,000
Monterey	706,208	664,930	589,467	609,417	697,671	886,183
Napa	498,089	602,756	624,273	18,853	23,000	24,620
Nevada	106,375	90,290	63,554			
Orange	158,851	104,965	75,000			
Placer	205,000	186,500	93,554	20,000		
Plumas	199,299	240,940	243,965			
Riverside	105,933	92,676	104,770			
Sacramento	1,405,054	1,900,417	1,936,560	349,000	266,900	656,260
San Benito	350,595	317,250	249,000	342,770	419,959	382,322
San Bernardino	53,661	89,613	95,866			
San Diego	621,785	593,236	411,888			
San Francisco		10,000	6,600			
San Joaquin	941,430	1,336,344	1,215,644	93,176	84,970	103,327
San Luis Obispo	2,350,820	2,070,619	1,846,828	233,353	254,403	156,380
San Mateo	135,727	224,570	207,829	190,510	142,740	134,878
Santa Barbara	510,527	568,795	269,262			
Santa Clara	131,792	333,839	375,614	475,248	426,864	379,709
Santa Cruz	224,146	182,500	293,136	140,954	173,518	187,150
Shasta	118,000	123,400	90,804			
Sierra	212,719	140,550	140,000	200		
Siskiyou	500,000	506,929	566,309	12,704	10,852	14,921
Solano	1,144,681	1,031,137	1,102,756			
Sonoma	2,106,349	2,881,889	2,478,008	389,000	163,000	158,750
Stanislaus	5,166,515	6,894,225	7,541,900		30,000	82,500
Sutter	579,068	822,046	842,417	464,336	268,370	339,563
Tehama	132,665	144,284	321,165			
Trinity						
Tulare	3,955,583	3,947,284	3,971,217			63,750
Tuolumne						
Ventura	60,295	48,286	52,887			
Yolo	1,096,718	1,104,509	1,034,902	1,147	45,588	14,850
Yuba	106,342	112,390	118,310	63,875	73,000	21,900
Totals	50,880,736	54,940,886	55,542,709	4,640,495	4,785,617	5,600,972



## Summary of Butter, Cheese, and Condensed Milk Production, 1897-1912.

(Compiled from the reports of the State Dairy Bureau.)

Year	Butter, pounds	Cheese, pounds	Condensed milk, cases
1897	28,678,439	6,399,625	
1898	23,691,028	5,148,372	
1899	24,868,084	5,294,938	52,558
1900	28,782,859	4,989,960	66,302
1901	29,730,882	5,681,366	100,140
1902	31,528,762	6,503,441	146,860
1903	34,786,289	7,218,639	126,874
1904	35,636,969	6,133,898	186,905
1905	41,961,047	6,020,672	244,878
1906	44,044,578	6,418,480	113,025
1907	44,599,211	5,928,942	134,907
1908	48,469,585	6,262,194	100,069
1909	43,899,018	4,431,194	83,476
1910	45,989,141	4,648,348	172,916
1911	50,380,736	4,580,495	116,384
1912	54,940,886	4,785,617	172,309
1913	55,542,709	5,600,972	170,976

## Receipts of Butter in San Francisco.

Year	Pounds
1901	15,222,951
1902	14,823,048
1903	15,511,214
1904	15,713,992
1905	17,936,782
1906	*
1907	15,384,137
1908	14,610,522
1909	14,328,000
1910	13,934,200
1911	19,033,600
1912	23,548,850
1913	23,905,100

\*Not available.

## Annual Value of Dairy Products.

1912	Value
Butter, 54,940,886 pounds	\$16,905,310
Cheese, 4,785,617 pounds	739,856
Condensed, evaporated, and powdered milk, 9,770,784 pounds	961,662
Casein, 1,065,000 pounds	53,250
Market milk and cream	10,000,000
Calves produced on dairies	2,000,000
Skim milk and butter milk	1,500,000
Total	\$32,160,078
1913	
Butter, 55,542,709 pounds	\$17,840,318
Cheese, 5,600,972 pounds	899,516
Condensed, evaporated and powdered milk, 8,637,928 pounds	777,468
Casein, 665,000 pounds	33,250
Market milk, cream and ice cream	11,000,000
Calves produced on dairies	2,000,000
Skim milk and butter milk	1,500,000
Total	\$34,050,552



## Imports and Exports.

About 40,000,000 pounds of cheese is imported, and 3,000,000 of domestic cheese exported. The duty on imported butter is  $2\frac{1}{2}$  cents per pound, and cheese 20 per cent ad valorem on October 4, 1913, and after.

## Butter and Cheese Prices in the San Francisco Market.

Month	1911-1912		1912-1913	
	Butter	Cheese	Butter	Cheese
October -----	\$30 68	\$14 57	\$34 00	\$16 92
November -----	31 39	16 50	33 04	17 93
December -----	33 03	15 96	33 66	15 89
January -----	35 38	16 15	34 28	15 44
February -----	34 60	16 42	35 10	16 63
March -----	31 42	18 85	35 43	15 47
April -----	27 71	16 92	29 10	15 88
May -----	25 29	13 59	26 98	14 22
June -----	27 60	13 69	27 72	14 79
July -----	27 82	14 12	28 95	15 54
August -----	31 31	14 04	32 43	17 16
September -----	33 08	14 65	34 78	16 82
Average for twelve months -----	\$30 77	\$15 46	\$32 12	\$16 06

## Receipts of Butter and Cheese in San Francisco for the Two Years Ending September 30, 1912-1913.

Month	Butter, pounds		Cheese, pounds	
	1911-1912	1912-1913	1911-1912	1912-1913
October -----	1,946,800	2,035,900	728,080	956,000
November -----	1,300,350	1,819,900	619,500	700,500
December -----	1,114,900	1,696,500	496,400	757,800
January -----	1,236,400	1,767,500	594,500	599,700
February -----	1,723,400	1,378,100	780,200	482,800
March -----	1,645,900	2,008,100	552,900	792,000
April -----	2,183,600	2,694,700	987,800	657,600
May -----	2,883,600	2,614,000	1,762,200	915,500
June -----	2,309,400	2,106,200	1,584,600	958,100
July -----	2,620,400	1,711,100	1,391,400	919,300
August -----	2,626,400	2,593,600	1,504,200	1,214,000
September -----	1,957,700	1,479,500	756,900	570,400
Totals -----	23,548,850	23,905,100	11,758,680	9,523,700

## BEES, HONEY, AND WAX.

In the earlier years the parent stock of the honey bee in this country was the common brown or black bee of Germany. In 1860 the Department of Agriculture introduced the Italian bee, about twenty years later the Cyprian, and still later the Carniolan.

## Summary of Honey and Wax.

(From census reports.)

Year	Honey, pounds	Wax, pounds
1860 -----	12,276	584
1870 -----	294,326	4,903
1880 -----	574,029	14,672
1890 -----	3,929,889	60,237
1900 -----	3,667,738	115,330
1910 -----	10,264,715	126,445

The number of farms reporting bees decreased from 6,915 in 1900 to 6,870 in 1910, while the colonies of bees increased from 129,444 to 201,023, or 55.3 per cent, and the value increased from \$363,885 to \$729,793, or 100.6 per cent.

The average production of honey is 70 pounds to the colony, and the average value 6 cents per pound. The price varies according to color and quality, the extracted honey from 4 to 7½ cents, and comb honey from 10 to 18 cents per pound. In many portions of the State great loss is caused by American foul brood, and European foul brood, commonly called black brood, the percentage of damage having steadily risen from 7 per cent in 1909 to 20 per cent in 1912, and 25 per cent in southern California during the past year.

In 1913 the honey crop was a failure in the southern part of the State, except in Imperial County. Taking the average yield of honey and wax as 70 pounds per colony, the crop averaged 70 to 80 per cent in other parts of the State.

Water-white orange extracted honey brought from 9 to 10 cents a pound, comb honey 17½ to 20 cents, and dark extracted "River Honey" (Sacramento Valley) 3½ to 4 cents a pound.

Years	Pounds	Years	Pounds
1902 -----	5,125,000	1908 -----	5,250,000
1903 -----	8,400,000	1909 -----	10,500,000
1904 -----	1,040,000	1910 -----	4,500,000
1905 -----	9,500,000	1911 -----	5,600,000
1906 -----	5,250,000	1912 -----	4,800,000
1907 -----	6,550,000	1913 -----	3,200,000

TABLE XXI.

## Bees, Beeswax, and Honey by Counties.

(From the census reports.)

Counties	Colonies, 1909	Honey, pounds, 1909	Beeswax, pounds, 1909
Alameda	610	9,848	179
Alpine	49	220	---
Amador	170	2,402	100
Butte	1,384	9,702	170
Calaveras	362	8,413	118
Colusa	1,406	67,689	798
Contra Costa	698	15,950	284
Del Norte	78	1,395	---
El Dorado	464	8,105	75
Fresno	9,242	616,609	7,261
Glenn	420	10,982	250
Humboldt	1,803	23,481	367
Imperial	4,740	514,125	4,453
Inyo	5,868	312,620	2,131
Kern	4,501	204,920	2,832
Kings	4,690	238,791	3,148
Lake	276	5,105	43
Lassen	298	5,642	5
Los Angeles	25,930	1,289,820	15,501
Madera	375	16,439	370
Marin	20	205	55
Mariposa	34	300	25
Mendocino	441	6,090	34
Merced	4,072	204,098	3,150
Modoc	839	19,796	232
Mono	438	20,355	425
Monterey	3,669	177,279	2,619
Napa	524	8,939	204
Nevada	260	5,452	42
Orange	5,159	325,656	2,764
Placer	657	7,338	80
Plumas	121	2,280	5
Riverside	18,900	902,106	12,915
Sacramento	1,835	55,272	160
San Benito	1,777	68,253	773
San Bernardino	8,073	363,025	5,983
San Diego	30,566	1,559,607	18,589
San Francisco	6	---	---
San Joaquin	3,014	104,645	3,459
San Luis Obispo	3,936	177,342	1,983
San Mateo	289	5,458	193
Santa Barbara	4,072	288,875	4,060
Santa Clara	2,542	77,252	842
Santa Cruz	693	11,032	98
Shasta	689	8,466	185
Sierra	49	2,081	10
Siskiyou	2,775	85,322	324
Solano	256	2,873	---
Sonoma	824	7,014	44
Stanislaus	2,554	61,592	1,371
Sutter	2,055	76,812	745
Tehama	786	15,779	115
Trinity	98	1,605	15
Tulare	9,568	290,435	4,743
Tuolumne	363	12,310	65
Ventura	23,714	1,839,986	20,918
Yolo	2,442	106,982	1,125
Yuba	149	545	10
Totals	201,023	10,264,715	126,445

## CALIFORNIA HONEY CROP, AND IMPORTS AND EXPORTS.

(Duty on imported honey, 10 cents per gallon.)

Year	California crop, pounds	Exports of domestic honey, value	Imports, gallons	Value
1885		\$224,212	151,786	\$67,527
1886		44,735	126,724	45,551
1887	3,200,000	67,154	147,216	47,679
1888	3,500,000	7,579	157,818	46,210
1889	2,200,000	93,888	80,748	26,624
1890	5,000,000	113,101	63,119	27,191
1891	4,000,000	83,325	47,740	20,808
1892	1,240,000	78,048	70,103	31,418
1893	2,680,000	15,115	176,147	79,396
1894	4,275,000	127,282	152,643	56,156
1895	4,000,000	118,873	67,444	22,993
1896	5,350,000	90,969	79,985	30,609
1897	7,878,000	22,368	66,432	27,599
1898	1,820,000	98,504	96,604	38,158
1899	2,822,000	55,900	126,217	51,599
1900	2,208,000	30,191	146,860	70,857
1901	8,112,000	55,574	182,196	83,599
1902	5,125,000	106,112	167,301	56,383
1903	8,400,000	64,220	287,696	115,400
1904	1,040,000	69,317	206,292	69,053
1905	9,500,000	63,367	198,617	76,719
1906	5,250,000	111,945	138,221	50,651
1907	6,500,000	93,690	175,672	70,854
1908	5,250,000	78,102	211,992	98,425
1909	10,500,000	85,578	145,691	60,884
1910	4,500,000	159,401	103,640	52,968
1911	9,500,000	81,649	112,553	62,942
1912	4,800,000	212,652	115,040	62,684
1913	3,200,000			

## PART III.

# AGRICULTURE.

(CONTINUED.)

## FARMS AND FARM CROPS.

CALIFORNIA FARM CROPS FOR FORTY-SIX YEARS, 1868-1913. PRINCIPAL CROPS BY COUNTIES.

Cereals, Hay and Forage, Beet Sugar, Hops, Cotton, Rice, Tobacco, and Vegetables, Plants, and Nursery Products.

### FARM CROPS.

In comparing one year with another it should be borne in mind that acreage is, on the whole, a better index of the general change or tendencies of agriculture than either the quantity or the value of the crops, since variations in quantity may be due largely to temporarily favorable or unfavorable climatic conditions, and variations in the value of the crops are largely affected by changes in prices. The acreage in fruits and nuts can not be given, as the extent of the industry has always been calculated by the number of trees only.

Crops	Acreage 1909	Value
Cereals .....	1,970,492	\$28,039,826
Other grains and seeds .....	163,776	6,517,453
Hay and forage .....	2,533,347	42,187,215
Tobacco* .....	4	479
Cotton (including cotton seed) .....	324	12,776
Hemp .....	300	39,000
Hops .....	8,391	1,731,110
Broom corn .....	1,023	32,509
Sugar crops .....	79,604	4,335,358
Sundry minor crops .....	7	840
Potatoes and sweet potatoes and yams .....	72,799	5,235,073
Other vegetables .....	79,163	6,886,885
Flowers, plants, and nursery products .....	5,816	3,601,301
Small fruits .....	9,687	1,789,214
<b>Totals .....</b>	<b>4,924,733</b>	<b>\$100,409,039</b>
Seeds .....		\$800,758
Fruits and nuts .....		48,917,655
Forest products of farm .....		2,949,732
Miscellaneous .....		33,829
<b>Totals .....</b>		<b>\$52,701,974</b>

\*This is an error; the production in 1909 was almost 9,000 pounds.



The total value of crops in 1909 was \$153,111,000, or 60.6 per cent greater than in 1899, this increase being no doubt due in part to higher prices. The general character of California agriculture is indicated by the fact that somewhat less than one fifth (18.3 per cent) of the total value of crops in 1909 was contributed by the cereals, somewhat less than one third (31.9 per cent) by fruits and nuts, and more than one fourth (27.6 per cent) by hay and forage. The remainder, representing 22.2 per cent of the total, consisted mostly of potatoes and other vegetables, grains and seeds other than cereals, sugar crops, and flowers and plants and nursery products. The combined acreage of the cereals is hardly four fifths that of hay and forage. Barley is the leading cereal, both its acreage and value being almost three fifths those of all cereals combined. Wheat ranks second, with oats, corn and Kaffir corn and Milo maize ranking in the order named in both acreage and value. Of the hay and forage crops, by far the most important is "grains cut green." Dry edible beans, potatoes, and hops are among the principal crops when value is considered.

**BEE SWAX.**

(Duty free.)

Year.	Exported domestic		Imported	
	Pounds	Value	Pounds	Value
1882	124,227	\$32,325		\$5,312
1883	59,455	17,604	168,879	41,681
1884	51,748	16,042	48,123	9,323
1885	30,877	9,758	91,754	21,211
1886	136,179	36,626	26,546	5,718
1887	90,350	24,997	10,843	2,371
1888	78,070	20,554	51,702	9,411
1889	99,917	23,918	75,951	11,773
1890	171,391	19,727	126,319	20,282
1891	120,548	30,027	379,135	80,485
1892	127,470	31,898	271,068	65,487
1893	77,434	22,048	248,000	62,024
1894	469,463	118,093	318,660	80,024
1895	309,212	90,875	288,001	78,776
1896	222,612	65,844	273,464	75,970
1897	195,048	56,462	174,017	43,339
1898	151,094	41,827	272,097	72,473
1899	152,494	41,916	452,016	109,957
1900	319,379	91,913	213,813	51,526
1901	140,276	39,464	213,773	55,884
1902	125,283	36,541	408,706	115,937
1903	70,811	21,337	488,576	127,220
1904	55,631	16,545	425,168	116,878
1905	85,406	24,966	373,569	101,121
1906	101,726	29,894	587,617	168,014
1907	117,169	36,392	917,088	264,637
1908	90,506	28,659	671,526	194,769
1909	77,547	23,293	764,937	231,559
1910	89,890	27,740	972,145	282,905
1911	101,735	31,404	902,904	270,112
1912	109,478	32,556	1,076,741	328,752

## WOOL.

The following estimates are taken from the annual report of the National Association of Wool Manufacturers, Boston:

	1910	1911	1912	1913
Sheep of shearing age on April 1st----	1,900,000	1,700,000	1,700,000	1,600,000
Average weight of fleece, pounds-----	7	7	7	7
Per cent of shrinkage-----	66	67	67	67
Wool, washed and unwashed, pounds--	13,300,000	11,900,000	11,900,000	11,200,000
Equivalent quantity of scoured wool, pounds -----	4,522,000	3,927,000	3,927,000	3,696,000
Average value per scoured pound				
October 1st -----	\$0 46	\$0 42	\$0 56	\$0 45
Total value October 1st-----	\$2,080,120	\$1,649,340	\$2,199,120	\$1,663,200

The comparative prices of California wool at Boston has been as follows on the scoured basis per pound:

Year	Cents		Year	Cents	
	Spring	Fall		Spring	Fall
1898 -----	41	41	1906 -----	70	60
1899 -----	49	44	1907 -----	68	58
1900 -----	49	41	1908 -----	50	40
1901 -----	43½	38½	1909 -----	70	53
1902 -----	50	43	1910 -----	55	45
1903 -----	52	42½	1911 -----	48	40
1904 -----	62	53	1912 -----	54	45
1905 -----	74	62	1913 -----	48	40

## CALIFORNIA WOOL PRODUCTION.

(Commercial estimates.) (Duty—Free on and after December, 1913.)

Year	Pounds	Year	Pounds
1851-1853-----		1883-----	40,484,690
1854-----	175,000	1884-----	37,415,330
1855-----	300,000	1885-----	36,561,390
1856-----	600,000	1886-----	38,509,160
1857-----	1,100,000	1887-----	31,564,231
1858-----	1,428,000	1888-----	32,567,972
1859-----	2,378,000	1889-----	34,008,770
1860-----	3,055,325	1890-----	34,917,320
1861-----	3,721,998	1891-----	33,183,475
1862-----	5,990,300	1892-----	35,802,930
1863-----	6,268,480	1893-----	33,169,375
1864-----	7,923,670	1894-----	36,968,400
1865-----	8,949,931	1895-----	35,856,690
1866-----	8,532,047	1896-----	27,195,550
1867-----	10,288,600	1897-----	32,534,230
1868-----	14,232,657	1898-----	28,063,240
1869-----	15,413,970	1899-----	22,000,000
1870-----	20,072,660	1900-----	21,360,000
1871-----	22,187,188	1901-----	22,040,500
1872-----	24,255,468	1902-----	25,835,700
1873-----	32,455,169	1903-----	22,500,000
1874-----	39,356,781	1904-----	21,500,000
1875-----	43,532,223	1905-----	22,000,000
1876-----	56,550,970	1906-----	24,000,000
1877-----	53,110,742	1907-----	15,750,000
1878-----	40,862,061	1908-----	14,560,000
1879-----	46,903,360	1909-----	15,000,000
1880-----	46,074,154	1910-----	13,500,000
1881-----	42,204,769	1911-----	12,000,000
1882-----	32,448,349	1912-----	11,900,000
		1913-----	11,200,000

The imports of wool are given under so many classifications of camel, goat, alpaca, etc., unmanufactured and manufactured, that space will not allow the details to be given here.

**Summary of California Crops Harvested in 1909.**  
(Compiled from reports of the Bureau of the Census.)

Crop cereals	Number of farms reporting	Acres	Amount, bushels	Value
Corn -----	5,728	51,935	1,273,901	\$1,077,411
Oats -----	2,477	192,158	4,143,688	2,637,047
Wheat, total -----		478,217	6,203,206	6,323,983
Common winter -----	3,628	413,687	5,168,210	5,311,387
Common spring -----	1,075	64,070	1,029,907	1,006,819
Durum or macaroni -----	7	460	5,089	5,777
Emmer and spelt -----	19	840	19,755	13,758
Barley -----	7,597	1,195,158	26,441,954	17,184,508
Buckwheat -----	26	849	14,681	11,569
Rye -----	193	7,027	70,683	65,846
Kaffir corn and Milo maize -----	2,521	44,308	938,049	725,704
<b>Total cereals -----</b>		<b>1,970,492</b>	<b>39,105,917</b>	<b>\$28,039,826</b>
Hay and forage—			Tons	
Timothy alone -----	370	13,725	20,001	\$185,579
Timothy and clover mixed -----	958	46,661	73,183	629,575
Clover alone -----	703	8,519	20,380	213,289
Alfalfa -----	19,904	484,134	1,639,707	13,088,530
Millet or Hungarian grasses -----	101	2,142	2,688	27,483
Other tame or cultivated grasses -----	2,274	90,414	119,415	1,253,428
Wild, salt or prairie grasses -----	3,679	253,127	281,033	2,028,494
Grains cut green -----	39,397	1,604,745	2,019,526	24,056,727
Coarse forage -----	2,175	25,868	60,611	438,095
Root forage -----	1,021	4,012	90,586	266,015
<b>Totals -----</b>	<b>53,760</b>	<b>2,533,347</b>	<b>4,327,130</b>	<b>\$42,187,215</b>
Sundry crops—			Bushels	
Potatoes -----	12,533	67,888	9,824,005	\$4,879,449
Sweet potatoes and yams -----	1,133	5,111	572,814	355,624
Tobacco -----	12	4	14,502	479
Cotton -----	18	324	183	11,741
Cotton seed (estimated), 92 tons -----				1,032
Hops -----	273	8,391	11,994,953	1,731,110
Hemp -----	2	300	1600,000	39,000
Broom corn -----	24	1,023	1614,250	32,509
Sundry minor crops -----		7		840
Other grains and seeds—			Bushels	
Dry edible beans -----	3,054	157,987	3,328,218	\$6,295,457
Horse beans -----	67	150	5,534	5,659
Dry peas -----	262	2,959	57,468	101,016
Peanuts -----	42	99	2,991	2,889
Flaxseed -----	8	240	1,882	3,224
Mustard seed -----	66	1,964	63,365	100,731
Sorghum cane seed -----	14	103	1,147	1,997
Sunflower seed -----	21	257	6,855	6,264
Timothy seed -----	4		357	1,065
Clover seed -----	10		310	2,823
Alfalfa seed -----	347		23,791	200,823
Other tame grass seed -----	5		1,077	1,323
Flower and garden seeds -----	109			594,724
<b>Totals -----</b>		<b>163,776</b>	<b>3,467,885</b>	<b>\$6,517,453</b>

<sup>1</sup>Pounds. <sup>2</sup>Bales.

## Size of Cereal Crops.

The acreage sown to wheat and other cereal crops in California has greatly decreased in recent years, the land being devoted to orchards and vineyards, which yield a much higher profit. California, however, has held the first place in the production of barley for a number of years, as far back as the year 1852. The area in barley has been upwards of 1,000,000 acres since 1901, the largest area being in 1910, with 1,195,000 acres. The yield per acre varied from 16.7 bushels in 1900 to 31.0 in 1910, when the production was 46,500,000 bushels, or the largest on record.

Buckwheat has never been grown to any extent in California, therefore, the production being so small, regular records have not been kept. The area under cultivation is but a few hundred acres, and the production from 10,000 to 15,000 bushels.

The production of corn has also fallen off; the acreage was between 100,000 and 161,000 in former years, the highest production being in 1891, when it amounted to upward of 5,570,000 bushels. In 1910 it amounted to only 1,273,000 bushels.

In oats the production has increased from 153,000 acres in 1900 to 192,000 in 1910.

Rye has always been a small crop in California, and the area and production have fallen off greatly in recent years, the acreage being 62,925 in 1900 and 7,027 in 1910 and the production 524,451 and 70,683 bushels, respectively.

In wheat, the production has decreased heavily between 1900 and 1910, while potatoes, hay, and hops all show an increase.

## Broom Corn.

This crop has never been grown to any extent in California. The production from 1880 to 1910 has been: In 1880, 191,600 pounds; 1890, 815 acres and 611,975 pounds; 1900, 1669 acres, 1,146,000 pounds, and 1910, 1023 acres and 614,250 pounds.

Certain varieties have been cultivated for different purposes in India, China, and parts of Africa for some centuries, but the United States, Italy, France, and Germany are the only countries which produce it solely for broom straw.

Illinois has long been the leading state in production, the amount in California being comparatively small.

## Increase or Decrease in Counties, Between 1900-1910.

Of the different counties of the State, more than one half show increases in the acreage of hay and forage. With three exceptions, all the counties reporting decreases in such acreage are located in the northern half of the State. The largest absolute increase is found in San Joaquin County and the largest absolute decrease in Los Angeles County. Although an increase in the acreage of barley is reported for the State as a whole, more than one half of the counties show decreases. As in the case of hay and forage, the decreases are found principally in the northern half of the State. The greatest absolute increase is reported from Riverside County and the greatest absolute decrease from Santa Clara County. More than one half of the total acreage of the State is reported from San Joaquin County.



In the acreage of wheat only five counties show increases. Two of these, Alpine and Mono, are located near the middle of the eastern boundary line; two, Modoc and Lassen, are in the extreme northeast corner; and the remaining one, Ventura, is on the southwest coast, northwest of Los Angeles. The greatest decrease in the acreage of wheat reported for any county was 272,116 acres for Stanislaus County. Slightly more than one half of the total acreage of dry edible beans is reported from Santa Barbara and Ventura counties on the southwest coast. All the counties reporting increases in the acreage of oats belong to one of four distinct groups, the first consisting of four counties, Modoc, Lassen, Trinity and Shasta, in the northern part of the State; the second, of two counties, Glenn and Sutter, just north of the center; the third, of ten counties in the central and east central parts of the State; and the fourth, of six counties in the extreme southern part of the State. The largest absolute increase is recorded for Stanislaus County and the largest absolute decrease for Sonoma County. Hops are reported from less than one third of the counties, and two of these, Sonoma and Mendocino, situated on the northwest coast, together report more than one half of the total acreage. Nearly one fifth of the corn acreage is reported from Los Angeles County, about one half of the potato acreage from Contra Costa and San Joaquin counties, and about one fourth of the acreage of Kaffir corn and Milo maize is reported from Tulare County.

## SUMMARY OF FARM CROPS, 1850-1910.\*

(Compiled from the reports of the Bureau of the Census.)

Year	Barley		Buckwheat		Corn	
	Acres	Bushels	Acres	Bushels	Acres	Bushels
1850		9,712				12,236
1860		4,415,426		76,887		510,708
1870		8,783,490		21,928		1,221,222
1880	586,350	12,463,561	1,012	22,307	71,781	1,993,325
1890	815,995	17,548,386	664	10,388	70,303	2,381,270
1900	1,029,647	25,149,335	395	7,835	53,930	1,477,093
1910	1,195,158	26,441,954	849	14,681	51,935	1,273,901

Year	Oats		Rye		Wheat	
	Acres	Bushels	Acres	Bushels	Acres	Bushels
1850						17,328
1860		1,043,006		52,140		5,928,470
1870		1,757,507		26,275		16,676,702
1880	49,947	1,341,271	20,281	181,681	1,832,429	29,017,707
1890	57,569	1,463,068	27,413	243,871	2,840,807	40,869,337
1900	153,734	4,972,356	62,925	524,451	2,683,405	36,534,407
1910	192,158	4,143,688	7,027	70,683	478,217	6,203,206

Year	Potatoes		Hay		Hops	
	Acres	Bushels	Acres	Tons	Acres	Pounds
1850		9,292		2,038		
1860		1,789,463		305,655		80
1870		2,049,227		551,773		625,064
1880		4,550,565	758,024	1,045,119		1,444,077
1890	38,178	3,664,920	1,431,574	2,218,285	3,974	6,547,338
1900	42,098	5,242,596	2,339,601	3,035,266	6,890	10,124,660
1910	67,688	9,824,005	2,533,347	4,327,130	8,391	11,994,953

\*When blank, the acreage or production, if any, was not reported.



## High Average Production of Farm Crops in California.

Crop	Average yield per acre in 1912, bushels		Average yield per acre in 1913, bushels		Average price per bushel to producers December 1, 1912, cents		Average price per bushel to producers December 1, 1913, cents	
	United States	California	United States	California	United States	California	United States	California
Barley .....	29.7	30	23.8	26	50.5	70	53.7	68
Buckwheat .....	22.9	†	17.2	-----	66.1	-----	75.5	-----
Corn .....	29.2	37	23.1	33	48.7	85	69.1	88
Oats .....	37.4	39	29.2	32	31.9	55	39.2	60
Rye .....	16.8	17.6	16.2	15	66.3	90	63.4	75
Wheat .....	15.1	17	16.5	14	80.9	93	82.9	95
Potatoes .....	113.4	130	90.4	119	50.5	65	68.7	70
Sweet potatoes .....	95.2	156	92.5	170	72.6	94	72.6	100
Hay* .....	1.47	1.53	1.31	1.50	11.79	13.70	12.43	13.50

\*Tons. †Production very small, only 14,681 bushels in 1909.

It is a remarkable fact, and worthy of notice, that both in the average yield and average price of the above crops, the figures for California are considerably above the average for the United States.

## THE BEST COUNTIES FOR CERTAIN CROPS.

The six leading counties in the production of cereals, hay and forage, potatoes, sweet potatoes, beans, peas, and other vegetables, and sugar beets are as follows, and may be taken to show the districts in which experience has proved that they are best suited.

## Barley.

County	Acreage	County	Acreage
San Joaquin .....	125,114	Colusa .....	89,985
Monterey .....	98,923	Merced .....	88,145
Madera .....	90,341	Stanislaus .....	57,529

## Corn.

Los Angeles .....	9,084	Tulare .....	2,527
San Diego .....	4,554	San Joaquin .....	2,547
Orange .....	3,054	Ventura .....	2,409

## Oats.

Stanislaus .....	38,546	San Mateo .....	16,125
San Joaquin .....	23,208	Madera .....	10,569
Merced .....	19,843	Santa Barbara .....	9,494

## Rye.

Merced .....	2,108	Lassen .....	526
San Joaquin .....	1,843	Modoc .....	406
Plumas .....	704	Siskiyou .....	306

## Wheat.

County	Acreage	County	Acreage
Tulare -----	66,567	San Joaquin -----	24,786
Madera -----	39,468	Monterey -----	22,924
San Luis Obispo -----	33,608	Stanislaus -----	22,068

## Kaffir Corn and Milo Maize.

Tulare -----	10,987	Kings -----	3,931
Imperial -----	9,789	San Joaquin -----	2,968
Stanislaus -----	4,448	Kern -----	2,813

## Hay and Forage.

Los Angeles -----	154,048	Fresno -----	95,265
San Joaquin -----	104,916	Contra Costa -----	88,937
Tulare -----	91,595	Riverside -----	88,430

## Potatoes.

San Joaquin -----	9,895	Los Angeles -----	2,799
Sacramento -----	5,036	Monterey -----	2,374
Sonoma -----	3,260	Alameda -----	1,854

## Sweet Potatoes.

Merced -----	780	San Joaquin -----	88
Los Angeles -----	218	Orange -----	75
Sacramento -----	117	Sutter -----	48

## Beans.

Ventura -----	58,744	San Joaquin -----	13,954
Santa Barbara -----	22,355	San Luis Obispo -----	11,169
Orange -----	21,186	Sacramento -----	7,801

## Peas.

Ventura -----	756	Alameda -----	215
Humboldt -----	517	San Mateo -----	186
Stanislaus -----	415	Monterey -----	154
San Joaquin -----	362		

## All Other Vegetables.

Los Angeles -----	13,385	Sacramento -----	6,367
Alameda -----	7,459	Santa Clara -----	4,241
San Joaquin -----	6,728	Orange -----	3,785

## Sugar Beets.

Ventura -----	14,333	Orange -----	10,275
Los Angeles -----	14,191	Monterey -----	9,900
Santa Barbara -----	11,320	Yolo -----	5,714

## Value of Farm Crops by Counties.

The leading counties in the production of various crops classed according to value, are as follows:

## Cereals.

(Value of \$1,000,000 and upward.)

County	Value	County	Value
San Joaquin -----	\$3,238,000	Solano -----	\$1,292,000
Monterey -----	1,695,000	Madera -----	1,220,000
Merced -----	1,691,000	Yolo -----	1,032,000
Colusa -----	1,578,000	Tulare -----	1,442,000
Stanislaus -----	1,315,000		

## Hay and Forage.

(Value of \$1,000,000 and upward.)

Los Angeles -----	\$3,430,000	Stanislaus -----	\$1,424,000
San Joaquin -----	1,763,000	Tulare -----	1,362,000
Fresno -----	1,702,000	Merced -----	1,355,000
Riverside -----	1,624,000	Kings -----	1,171,000
Contra Costa -----	1,617,000	Sonoma -----	1,170,000
Santa Clara -----	1,587,000	Monterey -----	1,125,000
Alameda -----	1,547,000	San Diego -----	1,110,000

## Vegetables.

County	Value
San Joaquin -----	\$2,149,000
Los Angeles -----	1,255,000
Contra Costa -----	1,125,000

## BEET-SUGAR.

The first experiment in beet-sugar in the United States was made in 1830, but until 1879 the industry was a failure.

California is recognized as the principal beet-sugar producing state in the Union. All the coast valleys of California are favorably situated, in respect to temperature, for the production of sugar beets, and the same may be said of certain lands in other parts of the State. The first factory successfully operated in this country was established at Alvarado in 1879. In that year, four factories were in operation, two in California, one in Maine and one in Delaware; but with the exception of the Alvarado factory all were failures. With the building of a factory at Watsonville by Claus Spreckels, and others by the Oxnard Bros., the industry rapidly developed. The bounty paid under the provisions of the tariff act of 1890, amounting to two cents a pound, proved a powerful stimulus to investments in beet-sugar manufacture. Since the repeal of this act, protective tariff has favored the domestic manufacture of sugar. In California there is a larger acreage that is well adapted to the growing of sugar beets than is found in any other state in the Union.

## California Sugar Crops, 1899 and 1909.

(From the Reports of the Census.)

(Sugar beets and sorghum cane.)

Product	Number of farms	Acres	Production		
			Amount	Unit	Value
Sugar beets—					
1899 -----	863	41,242	356,535	tons	\$1,550,346
1909* -----	1,113	78,957	845,191	tons	4,320,532
Sorghum cane—					
Total cane, 1899 -----					3,788
In 1899 cane grown -----	54	140	1,085	tons	
In 1899 cane sold as such -----			6	tons	10
In 1899 syrup made -----			8,671	gallons	3,778
Total cane, 1909 -----					14,826
In 1909 cane grown -----	48	647	3,021	tons	
In 1909 syrup made -----	8		4,330	gallons	2,340

\*Includes beets and cane used as forage.

The cultivation of the beet greatly improves the land. According to a Leipzig University professor, the following was the average increase in ten years on one estate:

	Yield before beet culture (bushels per acre)	Yield after beet culture (bushels per acre)	Per cent increase because of beet culture
Wheat -----	24.5	41.3	68.6
Rye -----	28.4	40.8	43.7
Oats -----	61.8	75.3	21.8
Barley -----	23.2	42.5	87.5
Potatoes -----	218.6	238.0	8.97
Rape -----	23.2	48.8	110.0

In southern California the acreage in sugar beets in 1912 was between 45,000 and 50,000; and the production of sugar about 1,500,000 bags of 100 pounds each. The quantity of beets raised was 475,000 tons, and the price of beets from \$4.50 to \$9.90 per ton.\*

\*For production of sugar beets by counties, see page 104.

## Beet-sugar.

(Duty on beets, 15 per cent ad valorem; sugar-beet seed free.)

Year	California production	Imported raw beet-sugar	
	Pounds	Pounds	Value
1885	1,343,150		
1886	1,688,260		
1887	3,750,000		
1888	4,280,500	61,949,752	\$1,594,776
1889	5,170,350	243,473,321	6,957,883
1890	9,250,200	601,119,476	18,348,417
1891	8,175,450	658,994,380	18,232,277
1892	8,624,890	293,134,261	8,081,170
1893	21,801,330	436,333,843	12,846,509
1894	40,204,100	510,350,276	15,793,041
1895	49,232,700	347,376,732	6,993,282
1896	64,510,000	604,686,985	14,048,914
1897	70,740,000	1,865,577,495	33,689,158
1898	36,180,000	140,641,485	2,717,955
1899	64,890,000	723,336,352	15,269,397
1900	60,638,000	701,539,452	14,800,609
1901	137,400,000	908,683,078	20,028,575
1902	147,535,000	255,030,219	4,202,044
1903	131,080,000	87,130,805	1,223,023
1904	118,394,000	2,414,454	50,525
1905	122,500,000	223,944,976	4,797,278
1906	178,000,000	48,548,919	1,032,040
1907	154,800,000	397,745,046	8,203,309
1908	195,000,000	221,036,900	5,401,378
1909	245,000,000	98,625,908	2,521,798
1910	289,493,000	1,148	43
1911	325,076,000	24,669,287	593,037
1912	317,363,000	6,504,260	239,484
1913	338,135,600	182,647,582	\$4,169,523

The following table gives a complete list of beet-sugar plants in California, with their names and the location of factories. It also shows the daily slicing capacity, expressed in tons of beets, for each factory.

## Beet-sugar Companies and Factories of California.

Manufacturing companies in California	Factory location	Daily slicing capacity, tons of beets
Alameda Sugar Company	Alvarado, Alameda County	800
Los Alamitos Sugar Company	Los Alamitos, Orange County	700
Spreckels Sugar Company	Spreckels, Monterey County	3,000
Union Sugar Company	Betteravia, Santa Barbara Co.	600
American Beet Sugar Company	Chino, San Bernardino County	900
	Oxnard, Ventura County	2,000
The Southwestern Sugar Company	Corcoran, Kings County	600
Sacramento Valley Sugar Company	Hamilton City, Glenn County	700
Holly Sugar Company	Huntington Beach, Orange Co.	750
Anaheim Sugar Company	Anaheim, Orange County	600
Santa Ana Co-operative Sugar Company	Santa Ana, Orange County	600
San Joaquin Valley Sugar Com- pany	Santa Ana, Orange County	*
Southern California Sugar Com- pany	Visalia, Tulare County	400
Total		10,850

\*Did not run.



In 1912 there were eleven factories working, which used 1,004,328 tons of beets, producing 158,904 tons of sugar, the percentage of sucrose being 18.95 per cent, or higher than in any other state. The acreage harvested amounted to 99,545. In the Sacramento Valley the acreage was 7,800, from which 74,500 tons were harvested. The lowest price paid for beets in 1912 was \$4.00 per ton and the highest \$5.80. In 1911 the prices were \$4.57 to \$6.05. The reason for the lower price in 1912 was due to the rains of September and October, which affected the sugar contents of the beets.

The average sugar percentage was not as great in 1913 as in previous year, nor were the beets of as good quality.

Sugar Beets and Beet-sugar Produced in California, 1901-1912.

Year	Number factories in operation	Sugar beets			Sugar made (chiefly refined)	
		Area harvested, acres	Beets used for sugar, short tons	Average per acre, short tons	Pounds	Short tons
1904	-----	32,801	395,452	12.06	93,311,900	46,656
1905	-----	51,857	514,391	9.92	147,786,900	73,893
1906	8	60,141	671,571	11.17	185,480,000	92,740
1907	8	47,387	484,816	10.23	146,045,500	73,023
1908	8	62,302	647,085	10.39	179,780,000	89,890
1909	10	83,000	882,084	10.63	254,544,000	127,272
1910	8	90,500	923,100	10.20	279,780,000	139,890
1911	10	99,545	1,037,283	10.42	322,600,000	161,300
1912	11	111,416	1,004,328	9.01	317,808,000	158,904

The beet-sugar industry in the United States is not localized, as is the cane-sugar industry. Beets are grown and beet-sugar is made in localities more or less scattered, from Ohio to California, including in the north Minnesota and Montana and in the south Arizona. About two thirds of the beet-sugar made in the United States comes from the factories of California, Colorado, and Michigan. In 1912, the year of highest production up to date, 73 factories were in operation, with an average output of 9,500 short tons per factory for the campaign. The year before, the 66 factories then in operation made an average of about 9,000 tons each. The beet-sugar campaign averages from 80 to 90 days a year.

Area and Production of Sugar Beets, and Sugar by States, 1912-1913.

State	Beets used				Sugar made	
	Area		Production		1912-13, short tons	1913-14 (preliminary), short tons
	1912, acres	1913 (preliminary), acres	1912, short tons	1913 (preliminary), short tons		
California	111,416	120,000	1,004,328	1,094,000	158,904	160,000
Colorado	144,999	157,000	1,641,861	1,800,000	216,010	215,000
Idaho	19,952	22,000	170,619	244,000	24,761	32,000
Michigan	124,241	113,000	838,784	937,000	95,049	119,000
Ohio	27,062	27,000	263,005	234,000	28,503	27,000
Utah	37,000	40,000	445,130	507,000	59,571	57,000
Other states	90,630	98,000	860,650	1,018,000	109,758	117,000
United States	555,300	577,000	5,224,377	5,834,000	692,556	727,000

## Beet-sugar Produced in the United States, 1852-1913.

Period	Beet-sugar pounds	Period	Beet-sugar pounds	Period	Beet-sugar pounds
1852-60	-----	1895-96	65,452,800	1904-05	484,226,430
1861-70	896,000	1896-97	84,080,640	1905-06	625,841,228
1871-80	851,200	1897-98	90,491,520	1906-07	967,224,000
1881-90	2,353,568	1898-99	72,735,040	1907-08	927,256,430
1890-91	7,748,160	1899-00	163,458,075	1908-09	851,768,000
1891-92	11,997,440	1900-01	172,164,160	1909-10	1,024,938,000
1892-93	26,920,320	1901-02	369,211,733	1910-11	1,020,344,000
1893-94	44,688,000	1902-03	436,811,685	1911-12	1,199,000,000
1894-95	45,006,080	1903-04	481,209,087	1912-13	-----

There was a great increase in the consumption of sugar in the United States between 1881 and 1912. The average consumption per capita in the latter part of this period was nearly double that of the early eighties. The average annual consumption, which between 1881 and 1885 was 46 pounds per capita, was more than 78 pounds in 1906-1910.

## Sorghum Syrup.

Sorghum was first introduced into the United States in 1853; in 1857, about 16 varieties of African sorghum were introduced and grown in Georgia and South Carolina. It was at first thought that the crop would supply a large part of the nation's sugar, on account of its wider distribution than sugar cane or sugar beets, its large yield per acre, and ease and cultivation. It was found, however, to contain a large percentage of gummy material which prevented crystallization.

Tennessee, Missouri, and Kentucky are the largest producers.

The following table shows the production in California from 1860 to 1910:

Year.	Gallons
1860	552
1870	333
1880	2,459
1890	1,670
1900	8,671
1910	4,330

## HOPS.

The United States is one of the three leading hop-producing countries of the world, the others being the United Kingdom and Germany. The leading states in the production of hops are California, Oregon, Washington, and New York.

As in other crops, there are many varieties; the seedless variety is grown most in Austria and Germany, while in the United States and England the seed hop is cultivated almost exclusively.

The total area devoted to the production of hops in California in 1909 was 8,391 acres, producing about 11,994,953 pounds of hops, valued at \$1,731,110. The climatic conditions and soil of California are more perfectly adapted to this crop than any other state in the Union, and its average production per acre is greater. The average production per acre in other hop-producing countries of the world has been estimated as follows: England, 905 pounds; Germany, 510 pounds; in the United States, 885 pounds, and in California, 1,469 pounds.

The cultivation of hops in California has increased rapidly, as shown by the following figures:

**California Hop Crop.**  
(From the Bureau of the Census.)

Year	Acres	Pounds
1860	-----	80
1870	-----	625,064
1880	1,119	1,444,077
1890	3,974	6,547,338
1900	6,890	10,124,660
1910	8,391	11,994,953

NOTE.—The acreage was not reported prior to 1880.

The highest and lowest prices per pound paid to growers during the last six years have been as follows:

Year	Highest, cents	Lowest, cents
1908	14	7
1909	25	12
1910	30	15
1911	45	25
1912	22	13
1913	26	13

**Hops.**  
(Duty, 16 cents per pound.)

Year	California crop		Exports		Imports	
	Bales*	Pounds	Pounds	Value	Pounds	Value
1885	26,000	4,810,000	7,055,289	\$1,391,854	1,642,086	\$433,706
1886	28,000	5,180,000	13,665,661	1,714,488	2,672,762	444,989
1887	32,600	5,936,000	260,721	54,970	18,538,049	3,404,669
1888	35,000	6,860,000	6,793,818	1,203,060	5,585,033	1,017,495
1889	35,400	6,938,000	12,589,262	2,823,832	4,176,158	1,155,472
1890	28,400	5,566,000	7,540,854	1,110,571	6,539,516	1,053,616
1891	36,150	7,085,400	8,736,080	2,327,474	4,019,603	1,797,406
1892	39,800	7,800,000	12,604,686	2,420,502	2,506,224	883,701
1893	51,400	10,074,400	11,367,030	2,695,867	2,691,244	1,085,407
1894	67,500	13,230,000	17,472,975	3,844,232	828,022	484,415
1895	52,000	10,192,000	17,523,388	1,872,597	3,133,664	599,744
1896	35,000	6,860,000	16,765,254	1,478,919	2,772,045	600,419
1897	45,000	8,820,000	11,426,241	1,304,183	3,017,821	629,987
1898	44,500	8,722,000	17,161,669	2,642,779	2,375,922	648,155
1899	59,000	11,564,000	21,145,512	3,626,144	1,319,319	591,755
1900	36,000	7,056,000	12,639,474	1,707,660	2,589,725	713,701
1901	48,000	9,360,000	14,963,676	2,466,515	2,606,708	851,008
1902	53,000	10,176,000	10,715,151	1,550,657	2,805,293	833,702
1903	56,000	10,752,000	7,794,705	1,909,951	6,012,510	1,088,491
1904	63,000	12,222,000	10,985,988	2,116,180	21,758,163	1,374,327
1905	67,500	13,095,000	14,858,612	4,480,666	4,339,379	1,980,804
1906	80,000	15,520,000	13,026,904	3,125,843	10,113,989	2,326,982
1907	82,000	16,072,000	16,809,534	3,531,972	6,211,983	1,974,900
1908	68,000	13,260,000	22,920,480	2,963,167	8,493,265	1,989,261
1909	69,000	12,765,000	10,446,884	1,271,629	7,386,574	1,337,099
1910	71,000	13,135,000	10,589,254	2,062,140	3,200,560	1,499,354
1911	87,000	16,095,000	13,104,774	2,130,972	8,557,531	2,706,600
1912	117,000	21,645,000	12,190,663	4,648,505	2,991,125	2,231,348
1913	118,500	21,922,500	17,591,195	4,764,713	8,494,144	2,852,865

\*A bale averages from 185 to 190 pounds net, the variation depending upon the quality and the compression of the hops.



The importation of hops is small, nearly all from Germany and Austria-Hungary. The exports of domestic hops in 1913 amounted to 17,591,195 pounds, value \$4,764,713, of which the bulk, or 15,409,093 pounds, was taken by the United Kingdom.

#### CALIFORNIA COTTON.

Cotton is one of the most important crops grown in the United States, but it is only in the last three or four years that it became a recognized crop in California.

The first cotton grown in the United States was in Virginia, about 1721. The production of cotton, which was 4,000 bales of 500 pounds net in 1790, had increased in 1905 to 10,339,807 bales.

The acreage in the United States in 1912 was 34,766,000, the four leading states being: Texas, 11,390,000 acres; Georgia, 5,390,000 acres; Alabama and Mississippi nearly equal, with upward of 3,000,000 acres each.

At the fair held by the State Agricultural Society in 1863, Jackson & Johnson of Sacramento County exhibited samples of cotton from a field of 25 acres. The only county growing cotton on a commercial scale within the last three years is Imperial County.

The first cotton produced in Imperial County was in 1909-1910, and amounted to 350 bales. In 1910, the acreage reported was 10,000, and 12,000 acres in 1911. In 1910-1911 the production was 4,000 bales of 500 pounds and 5,258,000 pounds of lint. In 1911-1912 the production was 9,420 bales and 4,302,000 pounds of lint. In the season of 1912-1913 the acreage was 8,450 and the production 7,250 bales. The yield per acre was 390 pounds in 1911 and 430 pounds in 1912. This is the highest average in the United States, the next being Missouri in 1911 with 360 pounds, and North Carolina in 1912 with 271 pounds.

Ever since Imperial Valley was first settled, ten years ago, cotton has been raised experimentally. These experiments had been carried on with all varieties of seed, Upland, Long Staple, Bottom Land, and Egyptian. Finally, in 1909, the farmers incorporated and formed a ginning company. The results were most profitable to the planters, and the fact that cotton could be raised profitably in Imperial Valley was proven without a shadow of a doubt.

Durango cotton, which is long-staple Upland variety, was first grown in the Imperial Valley in 1911 by Mr. W. E. Wilsie on 3 acres of land near El Centro. In 1912 about 200 acres were planted by six growers from seed grown by Mr. Wilsie.

The highest price paid for cotton during 1911-1912 was 11 cents and the lowest 8.20 cents. In 1910-1911 the highest was 14 cents and the lowest 11.50 cents. These prices are for "middling" cotton; the price for higher and lower grades varied according to grade. The acreage in 1913 was 22,000, and the yield 21,500 bales of 500 pounds each, very close to a bale per acre, the value amounting to one and a half million dollars. The staple cotton (or Durango) crop, amounted to 6,000 bales. The price for short cotton ranged from \$12.00 to \$13.70 per hundredweight; Durango or staple, \$15 to \$16.50.

In addition to this, the value of cotton seed, and cotton seed products, amounted to about \$250,000. Ginning is done at ten gins, each with a capacity of forty bales per day, located at Brawley, Imperial, El Centro, Heber, Calexico, and other places, and more will be built this year.

There is a cotton mill at El Centro, with a capacity of 75 tons per diem, built at a cost of \$100,000.

The effort of some of the farmers to grow Long Staple cotton has not met with much success, however, and most of those growers who favored this Long Staple variety have gone back to the Short Staple cotton. The two reasons for the failure in this particular variety are: first, the fact that it is almost impossible to get a good variety Long Staple cotton when grown in a locality where there is a great deal of Short Staple cotton, as the plants interpollenize; and, secondly, that the market for Long Staple cotton is not nearly as steady as the market for Short Staple.

The great amount of low-grade cotton this season in the southern states, and the scarcity of the better grades, has greatly benefited Imperial Valley, where practically all the cotton is of a uniformly fine quality. The acreage for 1914 is estimated at between 40,000 and 60,000, of which 25,000 will be in Durango cotton.

#### SILK.

The production of silk in California is named in the Census of 1870, when 3,587 pounds of silk cocoons were reported. In 1880 a State Silk Culture Association was organized, but later became dormant until revived in 1908 as the Ladies' Silk Culture Society of California. The society has established a farm at Rutherford, Napa County, where they have nearly 800 white and red mulberry trees, and distribute cuttings free to all parts of the State. A ten thousand dollar building has been constructed for hatching worms, and other purposes.

Silk-worm eggs have been secured from France and Italy, and in the course of time it is hoped that the work will develop into an important industry. At the San Francisco Land Show, in October, 1913, a gold medal and the blue ribbon were awarded for raw silk produced at the Rutherford farm.

#### RICE.

If its importance as a food product is to be measured by the number of persons who consume it, rice must, without a doubt, be considered the greatest cereal, as it is more widely and generally used as a food material than any other. It was introduced for cultivation into the United States in 1647, when Sir Wm. Berkeley, then Governor of Virginia, received half a bushel of the grain from England. Up to 1860, the Carolinas and Georgia produced the entire commercial crop. Half a century ago experiments were made in the cultivation of rice in California, but they were not successful. In 1860, small quantities were raised in Alameda, Tehama, San Mateo, Santa Cruz, and Sonoma, but the total amount produced was only 2,140 pounds. The acreage in the United States in 1913 was 827,100, the leading states being: Louisiana, 405,500 acres, and Texas, 303,000.



Experiments in California have been conducted on three types of soil, covering a large area in the Sacramento Valley. Three years' results indicate the possibility of growing rice in this region on a commercial scale, the important thing now being to determine the varieties best adapted to the region. In the spring of 1909 the office of Grain Investigations of the Bureau of Plant Industry inaugurated tests to determine the adaptability of rice to the climate and soil of the Sacramento Valley on the east side of Butte Creek, 9 miles west of Biggs. Some of these tests yielded as much as 122, 131, and 154 bushels to the acre. In the Sacramento Valley rice requires a longer time to mature and produces smaller plants than when grown on the plains of the Gulf coast, but it exhibits a greater capacity for tilling, with resultant larger yields.

The results from a two-year test of 300 varieties of rice on black adobe soil near Biggs, Cal., indicate the possibility of rice culture in the Sacramento Valley. The successful introduction of this crop is dependent upon an abundant supply of water, which must always be available during the growing season. The soil area adapted to rice in this valley is sufficiently large to produce many times the 55,000,000 pounds of cleaned rice which are consumed each year on the Pacific coast. How much of this area has sufficient available water for proper irrigation is uncertain, though for a good portion of it there is apparently an abundant supply. Increase in the rice acreage should therefore be made with care.\*

The first crop was produced four years ago on the Balfour-Guthrie ranch, west of Biggs, Butte County, by Wm. Grant, the manager. Each year since then more acreage has been devoted to it, and it has been found that it can be successfully grown and made to produce more per acre than any other grain.

Its culture has opened up a new industry for lands which have hitherto been deemed unfit for anything but wheat, on account of the adobe conditions of the soil. The time of harvest varies, according to the variety, from August to November. The yield per acre varies a great deal according to the variety sown; in 1910, from 2,000 pounds to 6,700 pounds per acre were produced, and but for blackbirds the yield would have been heavier.

In 1911, from four acres of the Jap variety, 361 sacks, or over 90 sacks to the acre, was harvested; each sack contained 110 pounds. This rice was sold for seed, netting a return of over \$300 per acre. In 1911 about 180,000 pounds were grown on 55 acres of black adobe land in Butte County. There is no question that rice growing will be profitable on the shallower clay soils of the State, where the water supply is sufficient for the requirements of the crop.

In 1912 the area planted in the Biggs section was increased to 900 acres, which produced 2,500,000 pounds of rice, which brought 2 cents a pound. In 1913 there were 6,250 acres of rice in California, all but about 150 acres in the Sacramento Valley. The results obtained were very good, the yield ranging from 2,500 to 5,000 pounds per acre, averaging about 3,200. About 1,000 acres were late and could not be threshed before the rains started last fall. Most of this rice stood in the

\*Report on Rice Growing, Circular No. 97, U. S. Department of Agriculture.

shock all winter, and was to some extent damaged. The price of rice last fall was between \$1.75 and \$2.25 per cwt, the average being about \$2.00. The acreage in 1914 will not be nearly as large as at first estimated, owing to the wet winter, which made it impossible for the canal companies to extend their laterals, and the farmers to prepare their land for seeding, and therefore the area will probably not exceed 10,000 acres.

Rice was grown successfully last year near Pond, in the northern part of Kern County, on heavily laden alkali land which had hitherto been regarded as practically worthless. From 15 acres 349 sacks, weighing from 100 to 110 pounds, were produced, valued at 3 cents per pound.

### TOBACCO.

The first tobacco cultivated in the United States was at Jamestown, Va., in 1612. In those early days it was the medium of exchange and standard of value. The Virginians who settled Kentucky and Tennessee grew tobacco as early as 1810; since then the cultivation has spread enormously, twenty-four states now producing tobacco, some with only a few hundred acres, Kentucky with 370,000. In 1913, the total acreage in the United States was 1,216,100, producing 953,734,000 pounds. In 1870 California appears to have first experimented with tobacco, Monterey raising 59,120 pounds, Colusa 1,000 pounds, and Fresno 40 pounds. Ten counties produced only 63,809 pounds. In 1880 San Benito headed the list with 64 acres and 59,100 pounds, Los Angeles 10 acres with 8,200 pounds, and nine other counties, the total amounting to 84 acres, with 73,317 pounds. In 1890 there were only 27 acres, which produced 12,907 pounds, San Benito again taking the lead, with 10,000 pounds.

The growing of tobacco in California during the last two years has developed considerably, and is now fully established as one of the industries of the State, and (dependent upon the farmer) the crop may become one of the largest in the San Joaquin Valley. There appears to be no reason why this section should not eventually produce tobacco on a scale comparative to other states and on a basis of at least corresponding profits.

For over four years extensive and exhaustive experiments in the production of tobacco from Turkish seed have been carried on at the Exeter Tobacco Ranch in Tulare County. There have been a number of types of tobacco experimented with, but the types that have been attended with the greatest success are such as are suitable for cigarette manufacture. The tobacco raised during the last four years has been produced about equally by Fresno and Tulare counties, the total quantity being 7,500 pounds in 1909; 15,000 in 1910; 45,000 in 1911, and 150,000 in 1912. The 1912 crop sold at from 30 cents to 60 cents per pound; most of it averaged  $47\frac{1}{2}$  cents. Some tobacco is also from Los Angeles County and the southern part of the State.

In 1913 the crop of leaf tobacco amounted to about 175,000 pounds, some of which it is stated was purchased by the eastern market. According to a leading authority, the crop was not as good as in former years, owing to the farmers planting too large an acreage and not being familiar with the culture of tobacco.

## VEGETABLES.

The potato is the most important vegetable raised; the acreage in 1912 was 78,000, and the production 10,140,000 bushels, valued at \$6,591,000, an average of 130 bushels to the acre.

Next to the Irish potato, the sweet potato is the most extensively grown vegetable in the United States. In California it is not cultivated on a large scale. In 1909, the acreage amounted to 5,111, with a production of 572,814 bushels.†

## Beans and Peas Produced, 1850-1910.\*

(From the Bureau of the Census.)

Year	Beans, bushels	Peas, bushels
1850 -----	2,292 -----	
1860 -----	165,574 -----	
1870 -----	380,010 -----	
1880 -----	378,971 -----	40,806
1890 -----	713,480 -----	32,364
1900 -----	658,515 -----	57,299
1910 -----	3,323,608 -----	57,468

The acreage in beans in 1910 was 157,825, producing beans of the value of \$6,292,955; the acreage in dry peas was 2,959, valued at \$101,016.

## Lima Beans.

Lima beans are only grown in any quantity in five counties, and have come into great favor in recent years. They were first cultivated in Carpinteria Valley about forty years ago, and after 1884 the growing extended. The bulk of the crop is raised in Santa Barbara and Ventura counties, Orange, Los Angeles, and San Diego counties being next in order. The average yield is 14 sacks of 80 pounds, or 1,120 pounds to the acre, but in the best sections 25 sacks, or 2,000 pounds, to the acre are considered good.

Beans have become one of the most important vegetable crops in the State.

## California Beans, 1907-1913.

(Sacks.)

Variety	1908	1909	1910	1911	1912	1913
Limas -----	1,000,000	1,050,000	1,175,000	1,300,000	1,200,000	1,050,000
Blackeyes -----	120,000	80,000	100,000	225,000	204,000	80,000
Large whites -----	350,000	300,000	150,000	75,000	63,000	115,000
Small whites -----	100,000	225,000	250,000	215,000	215,000	40,000
Bayos -----	110,000	100,000	75,000	150,000	65,000	60,000
Pinks -----	400,000	325,000	250,000	710,000	298,000	250,000
Various -----	125,000	100,000	100,000	150,000	118,000	120,000
Totals -----	2,205,000	2,180,000	2,100,000	2,825,000	2,163,000	1,715,000

†For the production of potatoes and sweet potatoes by counties, see page 101.

\*Beans and peas were reported as one product in 1850, 1860, and 1870.



**Beans.\***

(Duty—beans, 25 cents per bushel of 60 pounds; dried peas, 10 cents per bushel; split peas, 20 cents per bushel.)

Year	California bean crop, bags	Exported†		Imported	
		Bushels	Value	Bushels	Value
1900	947,200	617,355	\$983,401	967,031	\$1,049,443
1901	1,221,000	468,670	862,088	1,099,640	1,306,405
1902	975,200	324,481	636,345	881,966	1,152,177
1903	1,160,000	232,841	530,875	1,088,665	1,420,334
1904	1,337,000	248,805	546,479	978,187	1,223,309
1905	1,921,400	330,321	730,922	472,572	628,775
1906	1,779,000	447,474	960,710	458,041	667,214
1907	1,060,000	435,490	932,264	406,679	656,898
1908	1,929,000	306,939	708,201	1,657,401	2,406,935
1909	2,340,000	298,209	702,819	3,355,405	4,926,199
1910	1,950,000	365,721	973,231	1,015,157	1,621,207
1911	2,825,000	288,638	814,663	1,037,371	1,733,697
1912	2,013,000	341,268	1,011,466	1,004,930	1,857,220
1913					

**Celery.**

Celery is an important crop and is grown on a large scale in Orange County, but owing to the fact that the blight has damaged the celery to some extent in this county, and that a large quantity is being raised near El Monte, in Los Angeles County, and also a large acreage near Stockton, in San Joaquin County, the growers are turning to lima beans and sugar beets, which are more certain and less expensive to raise.

According to the figures of the California Vegetable Union, Los Angeles County leads in the production of cauliflower, cabbage, lettuce, tomatoes and mixed vegetables; San Joaquin in potatoes and onions; San Mateo in artichokes, and Sacramento in asparagus.

The annual average shipments are approximately as follows:

Vegetables	Number of cars	Average price paid to growers
Artichokes	150	25 cents to \$1.00 per dozen.
Asparagus	350	3 cents to 4 cents per pound.
Celery	2,500	15 cents to 40 cents per dozen.
Cauliflower	1,000	15 cents to 60 cents per dozen.
Cabbage	1,000	\$8.00 to \$40.00 per ton.
Potatoes	10,000	50 cents to \$2.00 per cwt.
Lettuce	300	8 cents to 25 cents per dozen.
Tomatoes	300	\$15.00 to \$30.00 per ton.
Onions	2,000	50 cents to \$2.00 per cwt.
Mixed vegetables	1,000	

**CANNED VEGETABLES.**

California ranks first among the states in the production of canned asparagus, and sixth in that of canned tomatoes. The case which is used as the unit of measure consists of 24 standard-size cans No. 2 (also called 2-pound cans) for beans, peas, and No. 3 (also called 3-pound cans) for all other vegetables. Where the output has been reported in other forms by the canneries, the quantities have been reduced to standard cases.

†In the exports dried peas are included in the total with beans. The imports of dried peas in 1913 was \$1,134,346; value, \$1,835,775.

\*For the production of dried beans and peas by counties, see page 102.

The value of the vegetables canned increased throughout during the decade of 1899-1909; the rate of increase from 1904 to 1909 being much higher than that during the preceding five-year period. The value of canned asparagus formed over half of the value of all canned vegetables in 1909.

(Compiled from the Reports of the Census Bureau.)

Product	1899		1904		1909	
	Cases	Value	Cases	Value	Cases	Value
Asparagus -----					198,123	\$1,794,346
Beans -----	34,209	\$56,797	65,641	\$133,494	47,525	87,059
Peas -----	72,760	145,987	68,142	144,033	123,349	250,624
Pumpkins -----	1,033	1,860	18,852	30,156	11,694	15,165
Tomatoes -----	794,566	2,068,997	541,776	845,805	545,131	1,120,632
All other -----	148	396	286,172	1,213,173	65,812	202,795
Totals -----		\$2,274,037		\$2,366,661		\$3,470,621

#### Duty on Imported Preserved Vegetables.

All kinds 25 per cent ad valorem.

#### Canned Vegetables.

Year	California pack, cases	Exported value	Year	California pack, cases	Exported value
1900 -----	803,617	\$603,288	1907 -----	1,941,755	\$598,628
1901 -----	1,076,058	528,914	1908 -----	1,501,885	621,987
1902 -----	1,151,268	560,612	1909 -----	1,242,720	728,111
1903 -----	1,343,574	597,759	1910 -----	2,250,645	782,973
1904 -----	961,783	719,580	1911 -----	2,293,000	1,061,259
1905 -----	1,192,455	580,048	1912 -----	2,271,700	1,822,357
1906 -----	1,747,595	658,739	1913 -----	2,809,000	1,819,281

#### California Vegetable Pack by Varieties, 1909-1913.

(Cases.)

	1909	1910	1911	1912	1913
Tomatoes -----	672,260	1,350,310	1,500,000	1,500,000	1,490,000
Peas -----	104,010	167,775	185,000	270,000	200,000
Asparagus -----	410,965	617,275	700,000	730,000	710,000
Spinach -----				16,500	16,000
Squash -----				21,000	19,000
Beans and other vegetables -----	55,485	115,285	130,000	172,500	156,000
Total vegetables -----	1,242,720	2,250,645	2,515,000	2,809,000	2,591,000
Total fruits and vegetables -----	3,289,721	6,259,893	6,684,023	7,739,150	6,606,500

The total value of all vegetables imported was \$11,358,761, which includes upward of 8,000,000 pounds of mushrooms; and the total value of domestic vegetables exported, \$7,353,537.

#### GINSENG IN CALIFORNIA.

Many demands are made for information regarding the cultivation of this plant, many appearing to believe that owing to its high price it must be an exceedingly profitable crop, but it offers little inducement



for inexperienced growers looking for quick profits from a small investment. It is a native of Manchuria and Korea and has long been valued by the Chinese for medicinal use, and the dry roots have been exported from this country for a long period, almost all of it being shipped from San Francisco to Hongkong. The plant takes eighteen months to germinate, and six years to mature; it requires good soil, shade, and careful cultivation. Last year in the San Francisco market it brought from \$4 to \$7 per pound, according to grade.

The preference for wild ginseng over the American cultivated root in the Chinese ginseng markets greatly increased during the past year, and the general situation calls for more care by American producers in growing and shipping their root to comply with Chinese ideas and preferences. The trade was dominated entirely by the wild root, which increased materially in price, while the cultivated variety declined.

During the year receipts in Hongkong, which usually represent about three fourths the imports into all China, amounted to 165,462 pounds, 103,264 pounds of which were wild root and 62,198 pounds cultivated American root. The receipts in 1912 were about 137,000 pounds, most of which was from the United States. The receipts in 1913 were unusually heavy; the total turnover in the ginseng trade in Hongkong during the year was about \$1,400,000.

The market rates per pound on December 31, 1913, were \$12.50 gold for extra and selected, \$11 for good root, and \$9.55 for fair root, as compared with \$10.10, \$9 and \$7.87 per pound on December 31, 1912. The general ginseng situation in China is materially affected by the fact that the Japanese Government monopoly of wild Korean root, managed by a single firm, is in a position largely to dictate terms for that variety.

The rates for cultivated root during 1913 varied from \$2.20 to \$11 gold per pound, depending upon quality and condition. A large portion of the American imports were sold as of too poor a quality to be graded in the usual manner. The necessity of preparing root in accordance with Chinese ideas, rather than American ideas of what the Chinese ought to want, must not be forgotten. It is probable that growers of the United States lost fully \$200,000 during the past year because of the manner in which their root was prepared. The root should be grown to resemble the wild as nearly as possible; it should be packed to preserve any peculiar natural shape and especially should the little head be kept intact, and it should be kept rough, with all natural markings preserved. Smooth, round root brings poor prices. The wild root is the standard and that idea should be kept in mind by all producers.\*

#### Exports of Ginseng From the United States.

Year	Pounds	Value	Average value per pound
1908 -----	154,180	\$1,111,994	\$7 21
1909 -----	186,257	1,270,632	6 82
1910 -----	192,406	1,439,434	7 48
1911 -----	153,999	1,088,202	7 06
1912 -----	155,308	1,199,301	7 20

\*Consular Reports, March, 1914.

## Vegetables, Flowers and Plants and Nursery Products.

Crop	Number of farms	Acres		Value of products	
		1899	1909	1899	1909
Vegetables other than potatoes and sweet potatoes -----	*33,755	32,401	79,163	\$2,858,832	\$6,886,885
Farms reporting a product of \$500 or over -----	2,075		53,369		4,836,001
All other farms -----	31,680		25,794		2,050,884
Flowers and plants, total -----	442	672	1,013	580,646	1,388,513
Farms reporting a product of \$250 or over -----	347				1,373,577
All other farms -----	95				14,936
Nursery products, total -----	566	2,914	4,803	558,329	2,212,788
Farms reporting a product of \$250 or over -----	296				2,134,713
All other farms -----	270				78,075

In 1909 the total acreage of potatoes and other vegetables was 151,962 and their value \$12,121,958. Excluding potatoes and sweet potatoes the acreage of vegetables was 79,163 and their value \$6,887,000, both being more than twice as great as in 1899. The above table distinguishes between farms which make the raising of vegetables a business of some importance, and others on most of which vegetables are raised mainly for home consumption.

## FLOWERS, PLANTS, AND NURSERY PRODUCTS.

The choice of crops by the florist is largely influenced by changes in popular taste, the camellia, which was the most popular flower years ago, having been superseded in recent years by the rose, carnation, violet, chrysanthemum, and lily of the valley. There is also a growing demand for orchids.

The raising of flowers and plants and of nursery products is also of considerable importance in California, 5,816 acres being devoted to them in 1909, and the output being valued at \$3,601,301. Most of the product was raised on farms where these branches of agriculture were carried on as an important business.

In 1909, a total of 96,230,420 square feet, or over 2,200 acres, of land under glass was reported in the United States.

In California, 430 farms reported as florists' establishments, with 1,572,480 square feet under glass.

There is comparatively little land under glass in California, compared with the eastern states, as the climate does not require it.

## Nursery Products.

It has only been within the last thirty or forty years that the nursery industry has developed into a position of importance. Nursery stock was first grown as an adjunct to the general crops of the farm. It is difficult to determine when and by whom the first commercial nursery was established, but William Prince of Flushing, Long Island, is named as pioneer in the industry, who commenced this business about the middle of the last century.

\*Not including 9,393 farms that had vegetable gardens, but gave no information as to their products.

# CALIFORNIA FARM CROPS FOR FORTY-SIX YEARS. 1868-1913.

**Barley, Buckwheat, Corn, Oats, Rye, Wheat, Potatoes, Hay.\***

(Compiled from the Reports of the United States Department of Agriculture.)

**California Barley Crops, 1868-1913.**

Year	Acreage	Average yield per acre, bushels	Production, bushels	Average farm price, December 1	Farm value, December 1
1868	375,000	28.0	10,500,000	\$1 03	\$10,815,000
1869	348,016	35.3	12,285,000	65	7,985,250
1870	274,275	26.9	7,378,000	98	7,230,440
1871	364,350	20.0	7,287,000	1 08	7,869,960
1872	603,196	12.2	7,359,000	85	6,255,150
1873	385,433	26.5	10,213,991	85	8,681,892
1874	551,550	20.0	11,031,000	78	8,604,180
1875	502,777	18.0	9,050,000	91	8,235,500
1876	536,363	22.0	11,800,000	69	8,142,000
1877	487,500	16.0	7,800,000	90	7,020,000
1878	650,000	23.0	14,950,000	65	9,717,500
1879	630,500	23.0	14,501,500	56	8,120,840
1880	520,150	28.3	14,720,245	61	8,979,349
1881	537,000	18.9	10,146,000	77	7,812,420
1882	558,480	16.4	9,131,400	67	6,118,038
1883	625,498	18.2	10,135,854	63	6,385,588
1884	688,048	23.6	16,217,000	52	8,432,840
1885	701,809	18.1	12,703,000	79	10,035,167
1886	722,450	22.2	16,038,000	65	10,424,700
1887	794,695	20.5	16,291,000	52	8,471,320
1888	786,748	20.0	15,735,000	58	9,126,277
1889	815,995	21.5	17,548,386	45	7,896,774
1890	677,276	22.3	15,103,255	75	11,327,441
1891	812,731	23.7	19,261,725	61	11,749,652
1892	845,240	24.0	20,285,760	47	9,534,307
1893	760,716	22.5	17,116,110	42	7,188,766
1894	737,895	15.2	11,216,004	45	5,047,202
1895	937,127	20.3	19,023,678	40	7,609,471
1896	918,384	21.6	19,837,094	48	9,521,805
1897	881,649	23.0	20,277,927	54	10,950,081
1898	872,833	10.5	9,164,746	65	5,957,085
1899	855,376	26.0	22,239,776	50	11,119,888
1900	889,591	16.7	14,856,170	43	6,388,153
1901	1,089,785	26.0	28,334,410	41	11,617,108
1902	1,144,274	26.0	29,751,124	63	18,743,208
1903	1,201,488	25.7	30,878,242	61	18,835,728
1904	1,237,533	22.7	28,091,999	60	16,855,199
1905	1,237,533	21.5	26,606,960	59	15,698,106
1906	1,425,000	27.2	38,760,000	54	20,930,400
1907	1,040,000	28.9	30,056,000	78	23,444,000
1908	1,082,000	23.5	25,427,000	74	18,516,000
1909	1,180,000	26.5	31,270,000	74	23,140,000
1910	1,500,000	31.0	46,500,000	55	25,575,000
1911	1,450,000	28.0	40,600,000	85	34,510,000
1912	1,392,000	30.0	41,760,000	70	29,232,000
1913	1,275,000	26.0	33,150,000	68	22,542,000

\*For production of these crops by counties, see page 98.

Exports of domestic barley in 1913, 17,536,703 bushels.

## Duty on Imported Cereals, Potatoes, and Hay.

Barley.....	15c per bushel of 48 pounds	Oats.....	6c per bushel of 32 pounds
Wheat.....	free	Rye.....	free
Buckwheat.....	free	Potatoes.....	free
Corn.....	free	Hay.....	\$2.00 per ton
Wheat flour.....	free		

NOTE.—The imports of breadstuffs are very small. In 1913 the quantities were: Corn 903,062 bushels, oats 723,899 bushels, wheat 797,528 bushels, and wheat flour 107,558 barrels.



## California Corn Crops, 1868-1913.

Year	Acreage	Acreage yield per acre, bushels	Production, bushels	Average farm price, December 1	Farm value, December 1
1868	27,111	45.0	1,220,000	\$1 00	\$1,220,000
1869	31,521	41.4	1,305,000	90	1,174,500
1870	30,870	35.6	1,099,000	1 20	1,318,800
1871	24,578	36.0	934,000	1 16	1,083,440
1872	40,000	35.0	1,400,000	1 00	1,400,000
1873	37,561	41.0	1,540,000	73	1,124,200
1874	44,668	36.2	1,617,000	98	1,584,660
1875	41,322	36.3	1,500,000	1 07	1,605,000
1876	48,484	33.0	1,600,000	1 07	1,712,000
1877	51,667	30.0	1,550,000	95	1,472,500
1878	100,500	34.5	3,467,250	60	2,080,350
1879	100,500	28.0	2,814,000	79	2,223,060
1880	80,650	32.0	2,580,800	76	1,961,408
1881	96,700	27.2	2,633,000	78	2,053,740
1882	98,634	28.3	2,790,900	85	2,372,265
1883	100,607	24.5	2,464,800	85	2,095,080
1884	160,000	30.0	4,800,000	60	2,880,000
1885	155,200	24.7	3,840,000	68	2,611,200
1886	156,752	27.2	4,262,000	62	2,642,440
1887	156,752	30.0	4,703,000	61	2,868,890
1888	155,184	27.8	4,314,000	70	3,019,800
1889	158,288	28.2	4,464,000	57	2,544,322
1890	159,871	27.5	4,396,000	65	2,857,694
1891	161,470	34.5	5,571,000	71	3,955,208
1892	72,500	30.3	2,197,000	55	1,208,213
1893	71,775	37.1	2,275,268	50	1,137,634
1894	66,751	19.3	1,288,294	57	734,328
1895	65,416	34.5	2,256,852	53	1,196,132
1896	59,529	37.0	2,202,573	53	1,167,364
1897	60,720	31.5	1,912,680	56	1,071,101
1898	45,540	26.0	1,184,040	62	734,105
1899	56,925	27.0	1,536,975	60	922,185
1900	54,079	25.0	1,351,975	61	824,705
1901	59,703	31.0	1,850,793	68	1,258,539
1902	60,300	30.5	1,839,150	77	1,416,146
1903	57,888	30.7	1,777,162	74	1,315,100
1904	54,415	28.0	1,556,269	78	1,213,890
1905	56,592	32.0	1,810,944	76	1,376,317
1906	57,158	34.9	1,994,814	67	1,336,525
1907	54,000	34.0	1,836,000	85	1,561,000
1908	50,000	32.0	1,600,000	88	1,408,000
1909	50,000	34.8	1,740,000	91	1,583,000
1910	50,000	37.5	1,875,000	80	1,500,000
1911	51,000	36.0	1,836,000	90	1,652,000
1912	52,000	37.0	1,924,000	85	1,635,000
1913	55,000	33.0	1,815,000	88	1,597,000

Exports of domestic corn in 1913, 49,064,967 bushels; value, \$28,800,544.

## California Buckwheat Crops, 1868-1896.

Year	Acreage	Average yield per acre, bushels	Production, bushels	Average farm price, December 1	Farm value, December 1
1868	777	18.0	14,000	\$1 00	\$14,000
1869	882	17.0	15,000	80	12,000
1870	692	32.5	22,500	1 07	24,075
1871	819	26.0	21,300	1 30	27,690
1872	942	21.0	19,800	1 11	21,978
1873	851	23.5	20,000	1 20	24,000
1874	869	23.0	20,000	1 20	24,000
1875	1,400	25.0	35,000	1 50	52,500
1876	Not reported.				
1877	Not reported.				
1878	Not reported.				
1879	Not reported.				
1880	1,040	17.0	17,680	75	13,260
1881	340	17.9	6,100	1 00	6,100
1882	1,150	22.0	25,300	80	20,240
1883	1,161	22.2	25,806	90	23,225
1884	1,219	23.0	28,000	60	16,800
1885	1,243	20.1	25,000	68	16,905
1886	Not reported.				
1887	Not reported.				
1888	Not reported.				
1889	664	15.6	10,388	52	5,381
1890	677	14.5	9,816	73	7,166
1891	683	15.3	10,450	58	8,051
1892	697	16.5	11,500	53	6,141
1893	691	21.5	14,857	71	10,548
1894	691	18.0	12,438	45	5,597
1895	726	30.0	21,780	64	13,939
1896	690	18.7	12,903	39	5,032

NOTE.—The production of buckwheat is so small that it is seldom recorded, the area being only a few hundred acres. The crop is raised in any quantity in only twenty-four states. Very little is exported. The acreage in buckwheat in 1910 was only 849, producing 14,681 bushels.



## California Rye Crops, 1868-1913.

Year	Acreage	Average yield per acre, bushels	Production, bushels	Average farm price, December 1	Farm value, December 1
1868	1,428	14.0	20,000	\$1 40	\$28,000
1869	673	31.5	21,200	1 22	25,864
1870	655	38.0	24,900	1 19	29,631
1871	922	27.0	24,900	1 40	34,860
1872	3,000	12.0	36,000	1 02	36,720
1873	2,300	20.0	46,000	90	41,400
1874	2,555	18.0	46,000	1 03	47,380
1875	4,285	17.5	75,000	92	69,000
1876	5,131	15.2	78,000	95	74,100
1877					
1878	13,000	15.0	195,000	75	146,250
1879	13,000	17.7	230,100	1 17	269,217
1880	19,169	16.0	306,764	83	254,564
1881	18,800	11.1	209,000	1 00	209,000
1882	21,295	8.8	187,131	85	159,061
1883	29,813	7.0	209,587	95	199,108
1884	30,409	10.3	314,000	68	213,520
1885	30,105	10.3	310,000	76	235,662
1886	30,409	12.0	365,000	76	277,400
1887	30,409	9.5	289,000	80	231,200
1888	29,801	11.2	334,000	67	223,627
1889	27,413	8.9	243,871	56	136,568
1890	27,413	14.0	383,782	70	268,647
1891	27,961	16.5	461,357	90	415,221
1892	28,800	11.5	331,200	67	221,904
1893	28,800	17.5	504,000	60	302,400
1894	29,376	13.2	387,763	60	232,658
1895	36,720	11.6	425,952	58	247,052
1896	38,556	14.5	559,062	60	335,437
1897	40,484	12.2	493,905	65	321,038
1898	40,079	9.0	360,711	70	252,498
1899	36,472	15.0	547,080	78	426,722
1900	38,660	13.0	502,580	58	291,496
1901	66,087	12.8	845,914	57	482,171
1902	67,409	12.0	808,908	75	606,681
1903	68,083	12.3	837,421	77	644,814
1904	67,402	7.6	512,255	78	399,559
1905	67,402	13.0	876,226	77	674,694
1906	62,684	12.8	802,355	71	569,672
1907	65,800	19.0	1,251,000	85	1,063,000
1908	66,000	12.0	792,000	88	697,000
1909	61,000	13.8	842,000	1 04	876,000
1910	7,000	17.0	119,000	86	102,000
1911	8,000	17.0	136,000	85	116,000
1912	8,000	17.6	141,000	90	127,000
1913	8,000	15.0	120,000	75	90,000

The exports of domestic rye were considerably larger than the two previous years, in 1913 the quality being 1,822,962 bushels; value \$1,260,384, compared with 2,623 bushels in 1911, and 5,548 bushels in 1912.

## California Oat Crops, 1868-1913.

Year	Acreage	Average yield per acre, bushels	Production, bushels	Average farm price, December 1	Farm value, December 1
1868	63,333	30.0	1,900,000	\$0 70	\$1,330,000
1869	47,846	41.8	2,000,000	62	1,240,000
1870	44,535	35.5	1,581,000	59	932,790
1871	37,925	40.0	1,517,000	70	1,061,900
1872	90,000	25.0	2,250,000	74	1,665,000
1873	72,733	30.0	2,182,000	84	1,832,880
1874	65,810	35.8	2,356,000	69	1,625,640
1875	65,625	32.0	2,100,000	72	1,512,000
1876	70,000	35.0	2,450,000	74	1,813,000
1877	70,000	25.0	1,750,000	73	1,277,500
1878	145,000	30.0	4,350,000	69	3,001,500
1879	153,700	33.0	5,072,100	67	3,398,307
1880	49,900	29.0	1,447,100	65	940,615
1881	67,100	23.1	1,548,000	60	928,800
1882	64,416	24.0	1,548,000	58	897,840
1883	70,858	25.8	1,826,600	58	1,059,428
1884	79,600	27.0	2,149,000	38	816,620
1885	78,008	27.0	2,106,000	48	1,010,880
1886	80,348	28.8	2,317,000	44	1,019,480
1887	81,955	26.8	2,196,000	58	1,273,680
1888	73,760	25.3	1,866,000	60	1,119,600
1889	75,973	25.0	1,899,000	45	854,696
1890	70,655	27.5	1,943,000	56	1,088,087
1891	84,786	28.5	2,416,000	60	1,449,841
1892	67,829	29.3	1,987,000	40	794,956
1893	59,011	25.5	1,504,781	38	571,817
1894	57,831	35.6	2,058,784	44	905,865
1895	60,144	28.1	1,690,046	39	659,118
1896	58,941	31.0	1,827,171	44	803,955
1897	57,173	18.0	1,029,114	49	504,266
1898	58,888	33.0	1,943,304	50	971,652
1899	59,477	31.0	1,843,787	47	866,580
1900	60,072	24.6	1,477,771	46	679,775
1901	160,768	30.4	4,887,347	44	2,150,433
1902	168,806	30.5	5,148,583	51	2,625,777
1903	165,430	34.8	5,756,964	54	3,108,761
1904	167,084	34.1	5,697,564	57	3,247,611
1905	168,755	28.0	4,725,140	51	2,409,821
1906	163,692	31.5	5,156,298	52	2,681,275
1907	136,000	33.5	4,556,000	71	3,235,000
1908	200,000	33.5	6,700,000	67	4,489,000
1909	200,000	31.4	6,280,000	66	4,145,000
1910	200,000	37.0	7,400,000	50	3,700,000
1911	210,000	34.0	7,140,000	59	4,213,000
1912	200,000	39.0	7,800,000	55	4,290,000
1913	210,000	32.0	6,636,000	60	3,982,000

The exports of domestic oats in 1913 amounted to 33,759,177 bushels, valued at \$13,206,247, compared with 2,171,503 bushels; value \$1,135,635, in 1912.

## California Wheat Crops, 1868-1913.

Year	Acreage	Average yield per acre, bushels	Production, bushels	Average farm price, December 1	Farm value, December 1
1868	1,050,000	20.0	21,000,000	\$1 03	\$21,030,000
1869	1,098,901	18.2	20,000,000	93	18,600,000
1870	746,052	19.0	14,175,000	1 10	15,592,000
1871	1,523,363	11.0	16,757,000	1 41	23,627,370
1872	2,098,360	12.2	25,600,000	1 11	26,416,000
1873	1,592,889	13.5	21,504,000	1 32	28,385,280
1874	2,150,000	13.2	28,380,000	99	28,096,200
1875	2,163,636	11.0	23,800,000	1 18	28,084,000
1876	2,307,692	13.0	30,000,000	1 14	34,200,000
1877	2,315,789	9.5	22,000,000	1 30	28,600,000
1878	2,470,000	17.0	41,900,000	1 03	43,249,700
1879	2,500,000	14.0	35,000,000	1 23	43,050,000
1880	2,117,350	16.0	33,877,600	96	32,522,496
1881	2,367,200	12.0	31,406,000	1 03	32,348,180
1882	2,767,000	13.0	36,046,600	90	32,441,940
1883	2,794,000	13.0	36,322,000	1 00	36,322,000
1884	3,360,000	13.2	44,320,000	72	31,910,400
1885	2,822,400	9.4	26,592,000	67	17,816,640
1886	3,104,640	11.6	36,165,000	73	26,400,450
1887	2,766,235	11.0	30,429,000	74	22,517,460
1888	2,351,300	12.1	28,451,000	85	24,183,350
1889	3,291,820	13.3	43,781,000	70	30,646,644
1890	2,426,730	12.0	29,121,000	76	22,131,778
1891	2,815,007	13.0	36,595,000	95	34,765,336
1892	3,012,057	13.0	39,157,000	68	26,626,584
1893	2,620,490	13.3	34,852,517	53	18,471,834
1894	2,688,204	11.3	30,576,705	57	17,314,722
1895	3,084,446	13.0	40,097,798	60	24,058,679
1896	3,088,849	14.6	45,097,195	83	37,430,672
1897	3,239,402	10.0	32,394,020	83	26,887,037
1898	1,343,341	9.1	12,224,405	72	8,801,570
1899	2,393,185	14.1	33,743,909	62	20,921,223
1900	2,771,226	10.3	28,543,628	58	16,555,304
1901	2,672,547	13.0	34,743,111	60	20,845,847
1902	2,052,679	10.9	22,374,201	80	17,899,361
1903	1,868,410	11.2	20,926,192	87	18,205,787
1904	1,618,043	10.8	17,474,864	88	15,377,880
1905	1,886,238	9.3	17,542,013	82	14,384,451
1906	1,572,144	17.1	26,883,662	75	20,162,746
1907	1,368,000	15.0	20,520,000	98	20,110,000
1908	800,000	14.6	11,680,000	1 02	11,914,000
1909	825,000	14.0	11,550,000	1 11	12,820,000
1910	550,000	18.0	9,900,000	94	9,306,000
1911	480,000	18.0	8,640,000	88	7,603,000
1912	370,000	17.0	6,290,000	93	5,850,000
1913	300,000	14.0	4,200,000	95	3,990,000

NOTE.—All winter wheat; no spring wheat grown in California.

The exports of domestic wheat and flour were the largest for many years, being 91,602,974 bushels of wheat, valued at \$89,036,428, compared with 30,160,212 bushels in 1912, value \$28,477,584; and 11,394,805 barrels of flour, value \$53,171,537, which is about the average for the past three years.

## California Potato Crops, 1868-1913.

Year	Acreage	Average yield per acre, bushels	Production, bushels	Average farm price, December 1	Farm value, December 1
1868	23,800	90	2,142,000	\$0 56	\$1,199,520
1869	19,200	125	2,400,000	79	1,896,000
1870	12,317	148	1,823,000	1 35	2,461,050
1871	11,032	152	1,677,000	91	1,526,070
1872	32,203	59	1,900,000	1 13	2,147,000
1873	25,454	110	2,800,000	85	2,380,000
1874	22,400	120	2,688,000	1 11	2,983,680
1875	29,166	120	3,500,000	94	3,290,000
1876	32,000	125	4,000,000	83	3,320,000
1877	32,000	100	3,200,000	75	2,400,000
1878	38,400	114	4,377,600	98	4,290,048
1879	39,700	107	4,247,900	65	2,761,135
1880	39,300	140	5,502,000	79	4,346,580
1881	52,697	85	4,479,245	80	3,583,349
1882	53,751	82	4,434,453	60	2,660,672
1883	54,826	81	4,440,906	60	2,664,544
1884	58,664	95	5,573,000	60	3,343,800
1885	57,491	85	4,887,000	63	3,078,643
1886	60,940	78	4,753,000	66	3,136,980
1887	63,378	80	5,070,000	57	2,889,900
1888	60,843	73	4,442,000	61	2,709,339
1889	38,500	91	3,619,000	45	1,628,550
1890	39,655	95	3,767,225	68	2,561,713
1891	41,241	95	3,918,465	54	2,115,971
1892	38,354	75	2,876,550	59	1,697,164
1893	37,203	96	3,571,488	50	1,785,744
1894	26,786	52	1,392,872	49	682,507
1895	25,179	75	1,888,425	48	906,444
1896	22,158	80	1,772,640	53	939,499
1897	21,493	105	2,256,765	49	1,105,815
1898	20,418	95	1,939,710	55	1,066,840
1899	26,543	119	3,158,617	63	1,989,929
1900	26,808	104	2,788,032	53	1,477,657
1901	45,259	101	4,571,159	77	3,519,792
1902	47,975	118	5,661,050	58	3,283,409
1903	46,536	130	6,049,680	66	3,992,789
1904	47,001	129	6,063,129	67	4,062,296
1905	50,291	165	8,298,015	67	5,559,670
1906	50,291	125	6,286,375	74	4,651,918
1907	48,000	145	6,900,000	90	6,264,000
1908	49,000	107	5,243,000	77	4,037,000
1909	60,000	130	7,800,000	77	6,006,000
1910	70,000	130	9,100,000	85	7,735,000
1911	72,000	135	9,720,000	90	8,748,000
1912	78,000	130	10,140,000	65	6,591,000
1913	68,000	119	8,092,000	70	5,664,000

The imports of potatoes generally average less than half a million bushels, but in 1912 the quantity was 13,734,000 bushels; value \$7,168,627. The export of domestic potatoes is small, the quantity for 1912 being 1,237,276 bushels; value \$1,414,297. In 1913 the imports fell again to 327,230 bushels; value \$303,214



## California Hay Crops, 1868-1913.

Year	Acreage	Average yield per acre, tons	Production, tons	Average farm price, December 1	Farm value, December 1
1868	338,345	1.33	450,000	\$15 00	\$6,750,000
1869	303,225	1.55	470,000	12 70	5,969,000
1870	416,891	1.48	617,000	16 70	10,303,900
1871	415,503	1.29	536,000	21 85	11,711,600
1872	413,333	1.50	620,000	15 60	9,672,000
1873	520,438	1.37	713,000	16 50	11,764,500
1874	458,357	1.40	641,700	15 09	9,683,253
1875	492,857	1.40	690,000	16 59	11,447,100
1876	629,629	1.35	850,000	11 61	9,868,500
1877	622,222	.90	560,000	15 00	8,400,000
1878	620,000	2.05	1,271,000	12 61	16,027,310
1879	756,880	1.63	1,232,900	9 93	12,242,697
1880	698,643	1.80	1,257,556	12 72	15,996,138
1881	798,830	1.35	1,078,421	12 20	13,156,736
1882	806,818	1.39	1,121,558	13 00	14,580,254
1883	871,363	1.50	1,307,045	12 50	16,338,063
1884	930,000	1.50	1,395,000	10 31	14,382,450
1885	939,300	1.20	1,127,160	11 50	12,962,340
1886	967,479	1.34	1,296,234	8 15	10,564,307
1887	1,160,975	1.30	1,509,268	11 50	17,356,582
1888	1,184,195	1.30	1,539,454	12 03	18,519,632
1889	1,431,574	1.55	2,218,285	9 25	20,519,136
1890	1,412,676	1.40	1,977,746	10 50	20,766,333
1891	1,497,437	1.40	2,096,412	11 00	23,060,532
1892	1,617,232	1.50	2,425,848	8 76	21,250,428
1893	1,681,921	1.69	2,842,446	7 87	22,370,050
1894	1,665,102	1.93	3,213,647	9 50	30,529,647
1895	1,681,753	1.66	2,791,710	7 06	19,709,473
1896	1,732,206	1.65	2,858,140	6 35	18,149,189
1897	1,697,562	1.60	2,716,099	9 00	24,444,891
1898	1,459,903	1.60	2,335,845	14 25	33,285,791
1899	1,708,087	1.63	2,784,182	8 00	22,273,456
1900	793,491	1.51	1,708,171	8 15	22,071,594
1901	550,325	1.82	1,001,592	7 92	7,932,609
1902	555,828	1.81	1,006,049	9 41	9,466,921
1903	550,270	2.08	1,144,562	11 66	13,345,593
1904	583,266	2.03	1,184,071	10 41	12,326,179
1905	589,119	2.40	1,413,886	10 05	14,209,554
1906	612,684	1.85	1,133,465	11 25	12,751,481
1907	637,000	1.75	1,115,000	12 50	13,938,000
1908	605,000	1.35	817,000	13 25	10,825,000
1909	650,000	1.70	1,105,000	11 50	12,708,000
1910	2,400,000	1.83	4,392,000	9 60	*42,163,000
1911	2,500,000	1.75	4,375,000	10 90	*47,688,000
1912	2,500,000	1.53	3,825,000	13 70	*52,402,000
1913	2,400,000	1.50	3,600,000	13 50	48,600,000

\*Including forage.

The imports and exports of hay are not large. In 1913 155,763 tons were imported and 60,702 tons exported.



TABLE XXII.

## Value of All Crops.

(From Census Reports in 1909.)

Counties	Cereals	Other grains and seeds	Hay and forage	Vegetables	Fruits and nuts	All other crops	Total
Alameda	\$394,907 00	\$31,257 00	\$1,547,119 00	\$810,628 00	\$860,977 00	\$686,079 00	\$4,276,967 00
Alpine	25,833 00	8 00	49,147 00	3,291 00	1,444 00	3,483 00	83,206 00
Amador	55,405 00	90 00	229,982 00	41,583 00	59,599 00	65,651 00	492,270 00
Butte	556,107 00	767 00	806,735 00	55,314 00	797,893 00	147,699 00	2,364,515 00
Calaveras	7,881 00	755 00	217,191 00	58,093 00	53,368 00	71,880 00	409,168 00
Colusa	1,578,543 00	36,023 00	340,462 00	30,458 00	129,389 00	49,424 00	2,164,299 00
Contra Costa	604,035 00	104,487 00	1,617,610 00	1,125,668 00	499,436 00	80,818 00	4,032,054 00
Del Norte	8,877 00	164 00	85,763 00	10,605 00	2,878 00	3,665 00	111,952 00
El Dorado	15,189 00	120 00	196,638 00	41,950 00	143,924 00	73,693 00	471,514 00
Fresno	510,053 00	13,683 00	1,702,818 00	108,690 00	5,279,794 00	376,147 00	7,991,187 00
Glenn	909,796 00	700 00	327,008 00	13,644 00	35,661 00	64,101 00	1,350,910 00
Humboldt	117,802 00	19,249 00	893,913 00	175,817 00	141,493 00	90,151 00	1,438,425 00
Imperial	755,239 00	-----	893,913 00	175,817 00	141,493 00	90,151 00	1,438,425 00
Inyo	156,416 00	3,496 00	252,610 00	57,314 00	44,047 00	18,760 00	532,643 00
Kern	500,973 00	13,580 00	953,044 00	96,963 00	159,698 00	78,992 00	1,803,255 00
Kings	536,869 00	20,704 00	1,171,101 00	140,137 00	1,219,568 00	77,735 00	3,180,114 00
Lake	129,857 00	17,641 00	196,995 00	44,701 00	16,304 00	13,685 00	389,949 00
Lassen	214,275 00	20,267 00	582,371 00	51,047 00	6,731,532 00	2,278,626 00	14,720,884 00
Los Angeles	806,507 00	218,428 00	3,430,698 00	1,255,093 00	126,124 00	21,138 00	1,686,418 00
Madera	1,220,003 00	900 00	290,258 00	27,995 00	90,001 00	38,601 00	517,796 00
Marin	19,766 00	15 00	425,987 00	42,916 00	31,816 00	13,883 00	534,383 00
Mariposa	18,515 00	1,430 00	109,699 00	28,024 00	43,025 00	29,939 00	230,632 00
Mendocino	175,678 00	927 00	526,680 00	121,941 00	166,534 00	540,218 00	1,531,986 00
Merced	1,691,556 00	11,251 00	1,355,098 00	137,563 00	147,964 00	30,142 00	3,423,574 00
Modoc	329,318 00	59,506 00	621,177 00	98,574 00	49,894 00	17,569 00	1,176,038 00
Mono	5,023 00	552 00	85,083 00	13,396 00	3,038 00	665 00	107,757 00
Monterey	1,695,220 00	57,676 00	1,125,740 00	330,296 00	498,763 00	677,840 00	4,325,535 00
Napa	168,471 00	6,224 00	465,362 00	126,348 00	786,745 00	104,292 00	1,637,442 00
Nevada	3,101 00	58 00	159,879 00	54,554 00	89,771 00	78,963 00	386,326 00
Orange	562,563 00	683,763 00	976,896 00	540,864 00	2,497,734 00	944,517 00	6,176,337 00
Placer	104,677 00	-----	194,464 00	52,253 00	1,318,731 00	143,294 00	1,813,419 00
Plumas	74,736 00	-----	299,817 00	32,572 00	3,872 00	32,722 00	482,919 00
Riverside	895,051 00	10,180 00	1,624,675 00	133,199 00	2,393,371 00	77,100 00	5,133,576 00
Sacramento	232,584 00	405,143 00	786,239 00	509,231 00	2,265,690 00	521,123 00	4,720,010 00
San Benito	288,068 00	138,590 00	963,249 00	34,425 00	281,891 00	54,932 00	1,741,155 00
San Bernardino	93,464 00	1,097 00	932,249 00	107,283 00	5,357,098 00	327,042 00	6,818,233 00

San Diego	458,836 00	91,268 00	1,110,127 00	174,869 00	941,767 00	84,269 00	2,861,136 00
San Francisco	-----	3,310 00	1,460 00	190,965 00	920 00	127,271 00	323,926 00
San Joaquin	-----	538,977 00	1,763,286 00	2,149,300 00	1,307,448 00	89,462 00	9,082,240 00
San Luis Obispo	-----	517,452 00	681,886 00	141,685 00	155,094 00	116,427 00	2,481,812 00
San Mateo	-----	36,742 00	361,266 00	459,470 00	73,272 00	204,403 00	1,395,371 00
Santa Barbara	-----	869,908 00	771,922 00	244,205 00	538,465 00	558,671 00	3,568,250 00
Santa Clara	-----	265,665 00	1,587,494 00	450,065 00	4,234,874 00	260,150 00	6,968,438 00
Santa Cruz	-----	24,514 00	327,572 00	164,518 00	1,656,212 00	141,259 00	2,408,435 00
Shasta	-----	1,719 00	410,532 00	85,381 00	248,442 00	118,890 00	939,735 00
Sierra	-----	-----	180,874 00	12,369 00	7,618 00	7,524 00	234,151 00
Siskiyou	-----	6,972 00	851,817 00	130,817 00	41,170 00	70,306 00	1,426,394 00
Solano	-----	103,660 00	572,822 00	84,337 00	1,495,713 00	20,953 00	3,569,966 00
Sonoma	-----	809 00	1,170,906 00	185,749 00	2,034,805 00	1,008,116 00	4,451,378 00
Stanislaus	-----	17,411 00	1,424,229 00	181,282 00	207,508 00	53,050 00	3,198,060 00
Sutter	-----	150,486 00	419,331 00	57,368 00	470,985 00	63,149 00	1,749,422 00
Tehama	-----	756 00	376,843 00	46,108 00	428,108 00	127,278 00	1,228,250 00
Trinity	-----	604 00	167,713 00	58,211 00	11,874 00	18,549 00	269,345 00
Tulare	-----	17,311 00	1,362,609 00	192,030 00	2,053,596 00	285,763 00	5,353,994 00
Tuolumne	-----	183 00	167,810 00	39,885 00	31,044 00	44,121 00	297,496 00
Ventura	-----	2,711,809 00	931,688 00	61,878 00	1,795,606 00	902,824 00	6,751,759 00
Yolo	-----	112,847 00	984,115 00	126,359 00	677,099 00	341,320 00	3,274,450 00
Yuba	-----	2,075 00	214,158 00	38,083 00	73,358 00	237,734 00	700,136 00
Totals	-----	\$7,318,211 00	\$42,187,215 00	\$12,121,958 00	\$50,706,869 00	\$12,736,934 00	\$153,111,013 00
	-----	\$28,039,826 00					

## FARM CROPS BY COUNTIES.

## CEREALS.

Barley, Corn, Oats, Rye, Wheat, Potatoes, Hay and Forage, in 1910.

(From Reports of the Bureau of the Census.)

TABLE XXIII.  
Barley, Corn, and Oats.

Counties	Barley		Corn		Oats	
	Acres	Bushels	Acres	Bushels	Acres	Bushels
Alameda	12,650	473,575	503	13,097	1,725	53,745
Alpine	38	1,480			135	7,274
Amador	1,513	29,071	301	12,526	1,354	30,813
Butte	17,705	326,447	359	14,856	1,432	54,685
Calaveras	222	4,833	80	1,776	108	2,121
Colusa	89,985	1,949,223	706	16,619	771	12,556
Contra Costa	18,665	731,970	263	6,158	1,112	40,178
Del Norte	32	840	1	12	216	12,078
El Dorado	50	884	38	768	543	10,504
Fresno	32,132	694,234	1,422	37,726	1,554	20,027
Glenn	53,513	1,002,587	671	21,999	1,283	32,620
Humboldt	1,296	65,991	253	7,633	2,823	75,803
Imperial	36,986	908,916	690	14,419	30	372
Inyo	678	19,381	1,883	57,917	573	28,875
Kern	32,492	517,029	466	7,132	82	770
Kings	19,287	402,432	2,274	43,688	109	4,490
Lake	2,825	54,758	981	26,317	843	19,914
Lassen	3,244	63,471	4	93	977	25,647
Los Angeles	32,804	785,129	9,084	249,295	973	38,720
Madera	90,341	1,170,945	1	50	10,569	175,047
Marin	16	231	52	2,061	850	31,430
Mariposa	1,434	19,130	174	2,330	55	1,100
Mendocino	1,904	43,370	533	14,454	3,087	81,959
Merced	88,145	2,009,531	1,877	52,778	19,843	338,041
Modoc	8,650	227,473	6	209	728	22,138
Mono			4	160	42	3,000
Monterey	98,923	2,026,334	845	15,552	8,734	240,760
Napa	3,048	58,300	2,389	59,579	1,366	32,155
Nevada	30	249	5	208	119	1,559
Orange	27,384	671,526	3,054	91,643	995	30,858
Placer	1,318	17,128	27	1,055	3,030	40,397
Plumas	1,260	12,216			2,193	75,606
Riverside	56,946	958,526	372	12,421	3,767	85,540
Sacramento	4,599	75,575	795	34,089	4,174	66,949
San Benito	10,955	307,215	401	5,389	776	13,826
San Bernardino	3,260	85,480	920	14,839	436	16,598
San Diego	17,745	284,677	4,544	71,874	7,690	177,485
San Francisco						
San Joaquin	125,114	3,827,187	2,547	57,028	23,208	396,661
San Luis Obispo	26,370	667,718	1,509	24,015	1,139	35,884
San Mateo	917	26,001	11	164	16,125	462,566
Santa Barbara	26,294	683,605	1,240	25,979	9,494	233,171
Santa Clara	8,903	200,893	411	9,791	247	9,424
Santa Cruz	1,000	34,226	1,136	22,284	2,282	59,812
Shasta	1,298	21,551	163	4,655	723	8,915
Sierra	466	7,362	1	40	526	11,431
Siskiyou	4,282	60,118	89	3,165	3,148	93,076
Solano	41,647	1,263,357	91	935	1,306	25,711
Sonoma	361	8,795	1,681	44,331	468	20,156
Stanislaus	57,529	828,628	662	12,297	38,546	688,542
Sutter	27,457	491,720	761	22,373	3,568	56,823
Tehama	11,402	177,518	100	2,613	1,032	28,138
Trinity	39	1,210	51	1,833	150	2,667
Tulare	27,017	553,481	2,527	61,757	1,281	25,524
Tuolumne	579	5,055	7	156	425	7,447
Ventura	10,077	309,682	2,409	58,995	1,138	27,901
Yolo	49,530	1,236,884	201	5,123	515	12,365
Yuba	2,801	36,806	360	5,645	1,740	31,834
Totals	1,195,158	26,441,954	51,935	1,273,901	192,158	4,143,688

NOTE.—The acreage in buckwheat in 1910 was only 849, producing 14,681 bushels.

TABLE XXIV.

Rye, Wheat, Kaffir Corn, and Milo Maize.

Counties	Rye		Wheat		Kaffir corn and Milo maize	
	Acres	Bushels	Acres	Bushels	Acres	Bushels
Alameda			1,075	21,535		10
Alpine			618	19,464		
Amador			293	5,169		
Butte			20,894	245,743	409	9,529
Calaveras			51	439	5	48
Colusa	77	987	11,168	221,549	2,598	48,418
Contra Costa			2,443	53,332		
Del Norte	2	112				
El Dorado	117	609	193	3,201		
Fresno	100	1,000	7,829	97,391	1,689	37,506
Glenn			17,541	232,911	162	4,972
Humboldt	14	181	134	3,370		
Imperial			125	2,559	9,789	213,781
Inyo			1,715	50,858		
Kern	30	1,500	12,924	139,375	2,813	45,828
Kings	5	100	8,684	141,978	3,931	95,010
Lake	7	140	2,563	46,131		
Lassen	526	6,018	9,938	153,863		
Los Angeles	100	745	6,760	59,866	106	2,145
Madera	100	1,400	39,468	370,499	343	4,948
Marin			57	1,155		
Mariposa	20	240	124	1,298		
Mendocino	3	61	3,906	59,195		
Merced	2,108	19,917	10,399	115,938	2,206	45,770
Modoc	406	6,633	9,362	195,924		
Mono	4	40	167	2,739		
Monterey			22,924	298,080	2	40
Napa			4,134	50,671	2	35
Nevada			95	1,279		
Orange			793	10,797	189	3,557
Placer			5,721	62,167	8	161
Plumas	704	5,250	766	10,313		
Riverside			11,817	159,434	44	580
Sacramento			10,704	103,728	2	43
San Benito	15	125	4,451	57,535		
San Bernardino			100	200	1,216	15,391
San Diego	6	50	7,268	82,012	17	282
San Francisco						
San Joaquin	1,843	17,476	24,786	310,587	2,968	32,786
San Luis Obispo			33,608	428,636	1	24
San Mateo			68	1,473		
Santa Barbara	3	30	2,300	27,892		
Santa Clara			376	10,198		
Santa Cruz			217	3,629		
Shasta			3,783	45,022		
Sierra	238	2,546	383	6,389		
Siskiyou	306	3,653	17,872	224,512		
Solano			20,924	391,753		
Sonoma			56	1,445		
Stanislaus	245	1,560	22,068	258,121	4,448	80,343
Sutter	40	250	14,537	176,750	352	7,750
Tehama			6,090	84,009		
Trinity	7	35	377	5,274		
Tulare	1	25	66,567	761,459	10,987	288,382
Tuolumne			277	5,373		
Ventura			2,896	67,366		
Yolo			13,452	237,393	21	710
Yuba			10,376	74,227		
Totals	7,027	70,683	478,217	6,203,206	44,308	938,049



TABLE XXV.  
Hay and Forage.

Counties	Hay and forage		Counties	Hay and forage	
	Acres	Tons		Acres	Tons
Alameda -----	80,735	113,534	Placer -----	16,034	13,404
Alpine -----	3,846	5,815	Plumas -----	30,152	34,038
Amador -----	14,449	17,961	Riverside -----	88,430	141,794
Butte -----	55,962	91,832	Sacramento -----	56,936	70,548
Calaveras -----	15,281	15,686	San Benito -----	64,064	84,380
Colusa -----	29,581	45,779	San Bernardino -----	42,608	76,359
Contra Costa -----	88,937	129,080	San Diego -----	82,049	86,559
Del Norte -----	3,052	10,131	San Francisco -----	103	150
El Dorado -----	12,115	11,685	San Joaquin -----	104,916	174,448
Fresno -----	95,265	214,659	San Luis Obispo -----	55,000	70,225
Glenn -----	25,143	37,594	San Mateo -----	19,060	28,982
Humboldt -----	30,018	119,613	Santa Barbara -----	50,070	70,146
Imperial -----	57,064	101,763	Santa Clara -----	83,553	127,006
Inyo -----	16,209	43,605	Santa Cruz -----	18,037	25,244
Kern -----	58,955	112,995	Shasta -----	35,341	46,578
Kings -----	57,749	158,306	Sierra -----	20,622	22,234
Lake -----	12,653	19,089	Siskiyou -----	57,976	100,113
Lassen -----	62,758	92,634	Solano -----	39,693	57,028
Los Angeles -----	154,048	316,541	Sonoma -----	62,351	87,949
Madera -----	17,606	29,978	Stanislaus -----	69,432	178,643
Marin -----	17,460	37,972	Sutter -----	32,744	57,017
Mariposa -----	6,521	6,049	Tehama -----	24,343	44,039
Mendocino -----	27,015	38,085	Trinity -----	5,350	8,929
Merced -----	68,917	173,335	Tulare -----	91,595	188,810
Modoc -----	75,479	118,906	Tuolumne -----	8,624	9,584
Mono -----	6,947	12,118	Ventura -----	51,546	78,926
Monterey -----	83,647	109,848	Yolo -----	45,859	104,733
Napa -----	26,061	39,331	Yuba -----	17,010	18,188
Nevada -----	8,725	9,497			
Orange -----	47,651	87,655			
			Totals -----	2,533,347	4,327,130



TABLE XXVI.  
Potatoes and Sweet Potatoes.

Counties	Potatoes, acreage		Sweet potatoes, acreage	
	1900	1910	1900	1910
Alameda	1,854	1,655	1	2
Alpine	14	22		
Amador	108	125		1
Butte	152	171	2	21
Calaveras	65	147	2	
Colusa	98	439	10	6
Contra Costa	1,583	12,687	9	
Del Norte	97	69	1	
El Dorado	71	113		
Fresno	253	218	27	57
Glenn	36	24	4	1
Humboldt	1,173	1,108	1	
Imperial		60		9
Inyo	167	326	1	
Kern	672	339	22	31
Kings	46	194	9	19
Lake	141	182	7	
Lassen	286	259		
Los Angeles	2,799	4,140	218	342
Madera	12	75	1	2
Marin	724	435		
Mariposa	76	76		
Mendocino	586	616	3	
Merced	364	246	780	2,114
Modoc	245	346		
Mono	94	97		
Monterey	2,374	5,393	1	
Napa	149	530	2	
Nevada	123	106		1
Orange	1,318	1,770	75	484
Placer	28	72	1	
Plumas	114	100		
Riverside	688	309	20	57
Sacramento	5,036	1,406	117	
San Benito	147	205		
San Bernardino	406	444	25	55
San Diego	355	374	22	27
San Francisco	336	87		2
San Joaquin	9,895	21,313	88	19
San Luis Obispo	406	955	6	3
San Mateo	500	971	5	
Santa Barbara	826	1,524	7	28
Santa Clara	988	1,085		
Santa Cruz	1,007	1,080	1	1
Shasta	305	243	17	16
Sierra	55	46		
Siskiyou	478	655	2	
Solano	114	311		
Sonoma	3,260	2,279	2	
Stanislaus	30	207	31	1,647
Sutter	222	218	48	41
Tehama	150	112	6	30
Trinity	146	143		
Tulare	253	677	15	46
Tuolumne	107	114		2
Ventura	220	264	5	10
Yolo	206	402	12	31
Yuba	100	124	1	6
Totals	42,098	67,688	1,607	5,111

TABLE XXVII.  
Dry Edible Beans and Peas.

Counties	Dry beans		Dry peas	
	Acres	Bushels	Acres	Bushels
Alameda	86	2,933	215	5,794
Alpine		3		
Amador	3	31		
Butte	27	150		
Calaveras	8	238	2	16
Colusa	1,083	20,087	14	180
Contra Costa	2,298	65,748		
Del Norte		10	4	60
El Dorado	1	30		
Fresno	9	155	6	172
Glenn				
Humboldt	18	392	517	9,056
Imperial				
Inyo	70	1,055	1	10
Kern	26	648		
Kings	21	576	15	75
Lake				
Lassen				
Los Angeles	3,874	105,011	14	311
Madera	15	333		
Marin	1	8		
Mariposa	62	409		
Mendocino	5	44	17	345
Merced	523	5,839		
Modoc	88	1,567		4
Mono	5	133	11	63
Monterey	1,504	29,532	154	5,218
Napa	6	61		
Nevada	1	18		
Orange	21,186	402,951	55	605
Placer				
Plumas				
Riverside	50	192		
Sacramento	7,801	166,852	90	1,703
San Benito	59	677		
San Bernardino				
San Diego	3,492	45,661	12	17
San Francisco				
San Joaquin	13,954	352,157	362	10,050
San Luis Obispo	11,169	207,674	85	1,209
San Mateo	466	14,435	186	4,085
Santa Barbara	22,355	267,385	12	67
Santa Clara	706	8,810		2
Santa Cruz	577	12,645	2	15
Shasta	49	685	3	15
Sierra				
Siskiyou	10	272	1	10
Solano	2,553	65,755		
Sonoma	7	83		
Stanislaus	373	4,395	415	5,175
Sutter	2,766	76,201		
Tehama	14	302		
Trinity	4	275		
Tulare	21	267	10	60
Tuolumne	3	61		
Ventura	58,744	1,313,156	756	13,151
Yolo	1,835	51,204		
Yuba	59	1,112		
Totals	157,987	3,328,218	2,959	57,468

TABLE XXVIII.

## All Other Vegetables.

(Except Potatoes, Sweet Potatoes, Dry Peas, and Beans.)

Counties	Acres	Counties	Acres
Alameda .....	7,459	Placer .....	408
Alpine .....	14	Plumas .....	97
Amador .....	315	Riverside .....	1,225
Butte .....	513	Sacramento .....	6,367
Calaveras .....	278	San Benito .....	183
Colusa .....	160	San Bernardino .....	813
Contra Costa .....	3,650	San Diego .....	1,131
Del Norte .....	29	San Francisco .....	466
El Dorado .....	197	San Joaquin .....	6,728
Fresno .....	1,391	San Luis Obispo .....	950
Glenn .....	115	San Mateo .....	3,210
Humboldt .....	675	Santa Barbara .....	1,588
Imperial .....	3,672	Santa Clara .....	4,241
Inyo .....	240	Santa Cruz .....	648
Kern .....	589	Shasta .....	577
Kings .....	674	Sierra .....	35
Lake .....	353	Siskiyou .....	673
Lassen .....	184	Solano .....	650
Los Angeles .....	13,385	Sonoma .....	954
Madera .....	256	Stanislaus .....	1,621
Marin .....	117	Sutter .....	303
Mariposa .....	193	Tehama .....	292
Mendocino .....	594	Trinity .....	192
Merced .....	380	Tulare .....	2,550
Modoc .....	549	Tuolumne .....	232
Mono .....	36	Ventura .....	588
Monterey .....	658	Yolo .....	1,086
Napa .....	428	Yuba .....	235
Nevada .....	231		
Orange .....	3,785	Total .....	79,163

TABLE XXIX.

Sugar Beets in 1900 and 1910, by Counties.

Counties	1900		1910	
	Acres	Tons	Acres	Tons
Alameda	3,680	44,974	2,516	29,201
Alpine				
Amador				
Butte			711	6,977
Calaveras			1	1
Colusa	566	5,320	211	1,824
Contra Costa	524	3,688	40	250
Del Norte				
El Dorado				
Fresno			228	1,196
Glenn			1,264	9,769
Humboldt				
Imperial				4
Inyo				
Kern				
Kings			504	1,304
Lake				
Lassen			2	10
Los Angeles	697	4,856	14,191	162,059
Madera				
Marin				
Mariposa				
Mendocino				
Merced			2	24
Modoc			9	137
Mono				
Monterey	10,333	112,367	9,900	126,397
Napa				
Nevada			39	78
Orange	1,143	7,853	10,275	133,612
Placer				
Plumas				
Riverside			4	33
Sacramento	101	502	7	105
San Benito	1,080	6,587	283	3,826
San Bernardino	1,132	4,077	4,121	42,928
San Diego			21	87
San Francisco				
San Joaquin	423	2,537	132	1,429
San Luis Obispo	285	1,384	284	5,993
San Mateo				
Santa Barbara	2,426	11,388	11,320	90,849
Santa Clara	4,214	12,373	1,135	8,180
Santa Cruz	2,759	41,553	312	3,511
Shasta				
Sierra				
Siskiyou			128	245
Solano	400	4,000	4	16
Sonoma	580	5,600		
Stanislaus				
Sutter			27	250
Tehama				
Trinity				
Tulare			1,239	9,447
Tuolumne				
Ventura	10,899	87,476	14,333	149,715
Yolo			5,714	55,734
Yuba				
Totals	41,242	356,535	78,957	845,191

## PART IV.

# HORTICULTURE.

## ORCHARDS AND VINEYARDS.

**Orchard Fruits, Tropical Fruits, Olives and Olive Oil, Citrus Fruits,  
Raisins and Currants, Almeria Grapes, Almonds and Walnuts.  
Number of Trees and Vines by Counties.**

### CALIFORNIA FRUIT AND NUT CROPS 1886-1913.

#### California Orchards.

No statistics are extant recording the number of trees or the amount of fruit produced in the early days of fruit growing by the Missions at the period of their greatest prosperity. Inventories of the Mission properties were made at the time of their secularization in 1834. That of the Santa Ynez Mission recorded 987 fruit trees, valued at \$1.00 each. San Fernando returned 1,600 fruit trees, valued at \$1.50 each; San Gabriel 2,333 fruit trees upon which no valuation was placed, and San Diego returned 517 olive trees.

Outside of the Missions there were few attempts made at horticulture, and after they were broken up the early fruit industry began to decline. When General Fremont visited California in 1846, he wrote that "Little remains of the orchards that were kept in high cultivation at the Missions. Fertile valleys are overgrown with wild mustard; vineyards and olive orchards are decayed and neglected."

Some of the early settlers secured some of the Mission orchards, but the early plantings in the north were generally in the vicinity of the mines, and but little care was bestowed upon them, as fruit growing was not the science into which it has since developed.

#### Some of the Leading California Fruits.

In value of production among the orchard fruits, the peach ranks second. It has a wider range for possible growth than the apple. The nectarine is so similar to the peach as to be botanically classed as a variety of that fruit. It is even more difficult to grow than the apricot, and is produced almost entirely in California. The first large orchard of prunes was established in 1870 at San Jose.

There are two distinct branches of the apple industry in California: one is the growing of early varieties, like the Astrachan and Gravenstein, which are grown mostly in the Sacramento Valley and foothills; the other the production of winter apples. The greatest apple district of the State is the Pajaro Valley, including parts of Monterey and Santa Cruz counties, centering at Watsonville.

California has a monopoly of apricot growing, and in canned and dried forms this is one of the leading fruits exported.



The cherry is one of the lesser orchard fruits of California, but the peach is the greatest orchard fruit of the deciduous class produced in the State. Magnificent nectarines are grown, but in comparatively small quantities.

The production of pears declined for many years, owing to the ravages of the pear blight, but is now recovering from the setback the industry received. The varieties grown are comparatively few, and the Bartlett is the chief.

Prunes and plums are largely grown in certain counties, and the production of French prunes has developed into one of the largest fruit industries in the State.

The olive is another of the old Mission fruits which has come to the front again within the last few years. It thrives on a great variety of soils.

#### Tropical and Subtropical Fruits.

The subtropical fruits and nuts of the United States comprise almonds, bananas, citrons, cocoanuts, dates, figs, guavas, kaki (or persimmons), lemons, limes, English or Persian walnut (or Madeira nut), olives, oranges, pienapples, pomeloes, pomegranates, and pecans. The two leading states producing subtropical fruits are California and Florida.

#### FIGS.

Professor Wickson well describes the fig as perhaps the grandest fruit tree of California. California is the only state that produces figs in commercial quantities, and Fresno County takes the lead in the production of this fruit. The large and universal demand for figs is proved by the quantity of Smyrna figs produced in Asia Minor, which amounts to about 40,320,000 pounds annually.

The white Adriatic fig was extensively planted from 1884 to 1890, and in 1887 the Smyrna fig was introduced by George C. Roeding, of Fresno, and since this time the fig industry has kept increasing until it has become one of the most important fruit products of the State.

#### DATES.

During the last year or two dates have been grown in an experimental way, but the success of some of the tests has encouraged larger cultivation. While date trees can be grown wherever the orange is grown, they will not properly mature in any except the hottest and driest portions of the State. According to Dr. J. Eliot Coit, pomologist, California Experiment Stations, the requisite conditions may be found in many places throughout the Imperial, Coachella, and Colorado valleys, and the country around Palo Verde and Blythe, Riverside County. At other places in the State, such as the vicinity of Riverside, Redlands, Fresno, and Oroville, early dates might be grown in a small way for home consumption, or be sold in the fresh, uncured condition. While the new industry has a very promising future, it should be clearly borne in mind that date culture is a new industry, requiring experience and unusual skill on the part of the grower, and it must be carried out in regions having an extremely hot summer climate, and it must be remembered that to bring date palms into bearing costs very much more per acre than to grow any other orchard crop.

While of many varieties, dates may practically be classed as of three sorts—soft, dry, and semi-dry. The Deglet Noor is probably the best of the latter class. They are grown principally at Mecca, in the Coachella Valley, in Riverside County. There are about 1,200 palms shortly coming into bearing, and several thousand small ones, and a great number are now being planted. The quantity of edible dates sold last year was about 1,200 pounds. The production of dates in 1913 is estimated at 7,500 pounds. The Coachella Valley, it is claimed, will produce finer dates than the Imperial or Colorado valleys, owing to the humidity being less than in the other regions. Fruit of good quality for home use can undoubtedly be produced in a large part of the San Joaquin Valley, some parts of the Sacramento Valley, and a warm coastal region, such as that around San Diego. It is a question of introducing varieties that are at home in such climates, and to this work the Bureau of Plant Industry is devoting a great deal of energy. In 1913 18,145,341 pounds of dates were imported, valued at \$363,734, the duty being one cent a pound.

#### Orchard Fruits, Grapes, Tropical Fruits, Small Fruits, and Nuts—1909-1910.

The acreage in fruits has never been ascertained. In comparing one year with another the number of trees or vines of bearing age is on the whole a better index of the general changes or tendencies than the quantity of product, which may vary largely, owing to favorable or unfavorable climatic conditions.

The total quantity of orchard fruits produced in 1909 was 31,502,000 bushels, valued at \$18,359,000. Plums and prunes, peaches and nectarines, apples and apricots are the most important of the orchard fruits.

The total value of the tropical fruits produced in 1909 was \$16,752,000, the value of oranges representing more than three fourths of the total, and the value of lemons being next in importance.

The production of grapes in 1909 amounted to 1,979,687,000 pounds, valued at \$10,847,000, and the production of nuts was 28,378,000 pounds, valued at \$2,960,000. Most of the nuts were Persian or English walnuts and almonds.

#### Small Fruits—1899-1909.

Strawberries are by far the most important of the small fruits raised in California, with raspberries and loganberries, and blackberries and dewberries ranking second and third respectively.

The acreage of small fruits in 1909 was 9,687 and in 1899 it was 6,281, an increase of 54.2 per cent. The production in 1909 was 26,824,000 quarts, as compared with 14,582,000 quarts in 1899, and the value was \$1,789,000 in 1909, as compared with \$911,000 in 1899.

#### The Production of Fruit in Other States.\*

Definite conclusions as to the relative importance of different states can not always be drawn from the number of trees of bearing age, since the trees in some states are much more prolific than in others, nor does the production of any given year furnish an altogether satisfactory

\*For the states having the largest number of different fruit and nut trees, see Report for 1912, page 117.

index, since weather conditions may be favorable in one part of the country and unfavorable in another.

The leading states in the value of fruit produced are California and New York. The three states containing the largest number of orchard trees are:

State	Bearing trees	Non-bearing trees	Total
California -----	22,485,195	8,410,062	30,895,257
Missouri -----	23,128,107	5,748,159	28,876,266
New York -----	17,625,093	7,363,614	24,988,707

Although fruits are grown with few exceptions in every county in the State, certain counties take the lead in producing the principal fruits. The following is a brief summary of some of them:

### PRINCIPAL ORCHARD FRUITS BY COUNTIES.

#### Best Location for the Leading Fruit Crops.

The following summary is both interesting and valuable, as the figures show which districts are the best for raising the different varieties of fruit. In the earlier years many failures were experienced by growers, owing to the soil or climate not being suitable for the trees they had planted.

According to the number of trees in bearing, the following six counties rank in the order named in the production of various fruits:

#### Apples.

County	Number of bearing trees	County	Number of bearing trees
Santa Cruz -----	647,136	Santa Clara -----	102,841
Sonoma -----	386,740	Los Angeles -----	101,433
Monterey -----	290,404	Humboldt -----	73,010

#### Apricots.

Santa Clara -----	783,585	Ventura -----	219,836
Solano -----	310,262	Fresno -----	186,823
Alameda -----	270,461	Yolo -----	117,228

#### Cherries.

Santa Clara -----	173,002	Sonoma -----	43,927
Alameda -----	89,284	Placer -----	31,209
Solano -----	53,923	San Joaquin -----	21,590

#### Peaches and Nectarines.

Fresno -----	2,277,314	Placer -----	683,824
Kings -----	777,697	Santa Clara -----	437,677
Tulare -----	714,494	Solano -----	341,266

## Pears.\*

County	Number of bearing trees	County	Number of bearing trees
Solano -----	182,194	Santa Clara -----	142,550
Sacramento -----	161,094	Sonoma -----	109,965
Placer -----	142,999	Alameda -----	70,382

## Prunes and Plums.

Santa Clara -----	3,387,455	Placer -----	279,766
Sonoma -----	569,292	Tulare -----	264,337
Napa -----	299,613	Sacramento -----	206,553

## Total Number of Bearing Orchard Trees.

The following twelve counties have the largest number of orchard fruit trees in bearing, in the order named:

County	Number of bearing trees	County	Number of bearing trees
Santa Clara -----	5,043,766	Kings -----	1,048,506
Fresno -----	2,579,859	Santa Cruz -----	875,642
Sonoma -----	1,364,105	Alameda -----	627,824
Solano -----	1,357,911	Sacramento -----	506,961
Placer -----	1,190,074	Napa -----	497,391
Tulare -----	1,059,830	Butte -----	452,302

## TROPICAL FRUITS.

## Figs.

County	Number of bearing trees	County	Number of bearing trees
Fresno -----	120,124	Yolo -----	10,476
Stanislaus -----	37,676	Merced -----	9,837
Tulare -----	15,750	Butte -----	9,518

## Olives.

San Diego -----	109,871	Butte -----	73,453
Los Angeles -----	84,934	Fresno -----	72,788
Riverside -----	80,572	Orange -----	67,046

## Lemons.

Los Angeles -----	219,149	Riverside -----	115,020
San Diego -----	195,318	Ventura -----	95,018
San Bernardino -----	157,731	Orange -----	46,954

## Oranges.

San Bernardino -----	1,951,254	Tulare -----	801,151
Los Angeles -----	1,674,695	Orange -----	478,272
Riverside -----	1,021,957	Butte -----	147,412

\*Owing to the ravages of the pear blight, the number of bearing trees decreased from 2,512,890 in 1900 to 1,410,905 in 1910.



## Pomeloos.

County	Number of bearing trees	County	Number of bearing trees
San Bernardino -----	13,134	San Diego -----	5,764
Tulare -----	8,114	Riverside -----	4,477
Los Angeles -----	6,853	Yolo -----	1,325

## Total Number of Bearing Trees of Tropical Fruit.

San Bernardino -----	2,153,501	Ventura -----	253,754
Riverside -----	1,224,217	Butte -----	235,442
Los Angeles -----	1,194,402	Santa Barbara -----	99,023
Tulare -----	872,657	Sacramento -----	84,863
San Diego -----	425,260	Kern -----	82,888
Fresno -----	291,754	Placer -----	59,906

## GRAPE VINES.

County	Number of bearing vines	County	Number of bearing vines
Fresno -----	*†40,687,207	Santa Barbara -----	†5,987,127
Sonoma -----	†17,939,972	Santa Clara -----	†5,584,480
San Joaquin -----	†13,371,794	Los Angeles -----	*†4,923,877
Napa -----	†8,595,938	Kings -----	*†4,538,732
Sacramento -----	†7,627,510	Contra Costa -----	†2,972,130
Tulare -----	*†7,227,491	Yolo -----	*†2,568,019

\*Raisin grapes. †Wine grapes. All produce table grapes.

## NUTS.

## Almonds.

County	Number of bearing trees	County	Number of bearing trees
Contra Costa -----	209,056	Butte -----	84,069
Yolo -----	149,019	Los Angeles -----	76,949
Solano -----	98,276	Sacramento -----	66,372
San Joaquin -----	97,024	Sutter -----	61,572

## Walnuts.

Los Angeles -----	281,837	Santa Barbara -----	96,776
Orange -----	276,842	Santa Clara -----	19,070
Ventura -----	98,622	Sonoma -----	11,955

## Pecans.

San Diego -----	1,080	Los Angeles -----	313
Napa -----	996	Ventura -----	301
Kern -----	563	Santa Clara -----	136

## Total Nut Trees in Bearing.

Los Angeles -----	359,349	Solano -----	100,239
Orange -----	278,879	San Joaquin -----	99,499
Contra Costa -----	215,249	Santa Barbara -----	97,091
Yolo -----	150,822	Sacramento -----	67,156
Ventura -----	110,984	Sutter -----	62,289



## SMALL FRUITS.

## Strawberries.

County	Number of acres	County	Number of acres
Los Angeles -----	1,380	Placer -----	433
Santa Cruz -----	489	Monterey -----	263
Santa Clara -----	460	Fresno -----	148
Sacramento -----	450	Sonoma -----	103

## Blackberries.

Sonoma -----	930	Fresno -----	91
Los Angeles -----	280	Tulare -----	70
Santa Clara -----	228	San Bernardino -----	68
Santa Cruz -----	116	Placer -----	62

## Total Small Fruits.

Los Angeles -----	1,975	Monterey -----	407
Sonoma -----	1,471	Alameda -----	401
Santa Clara -----	1,011	Fresno -----	310
Santa Cruz -----	744	Orange -----	205
Placer -----	582	Stanislaus -----	161
Sacramento -----	554	Butte -----	148

## Acreage and Production of Small Fruits, 1899-1909.

	Number of farms, 1909	Acres		Quarts, 1909	Value, 1909
		1899	1909		
Strawberries -----	2,282	2,418	4,585	15,694,326	\$1,149,475
Blackberries and dewberries -----	3,190	1,960	2,576	4,898,524	282,383
Raspberries and loganberries -----	2,524	987	1,992	5,222,117	304,169
Currants -----	364	724	407	852,378	43,508
Gooseberries -----	343	133	74	145,119	9,086
Cranberries -----	12	-----	53	10,656	443
Other berries -----	1	59	*	1,000	150
Totals -----	-----	6,281	9,687	26,824,120	\$1,789,214

\*Less than 1 acre.

Of the small fruits strawberries lead, both in acreage and production, California being the largest producer in the West, the greatest production being in Los Angeles County. Currants are only grown in about eight states, California being one of them; gooseberries are not much grown anywhere in the United States, Indiana being the largest producer.

Cranberries only acquired commercial importance fifty or sixty years ago. They are principally grown in Massachusetts, New Jersey, and Wisconsin, and are not a success in California. There is a wild cranberry or huckleberry grown in the redwood regions of the State, but not like the hog cranberry of the East. One year 2,000 boxes were picked on the hills of west Sonoma County, and used for canning and pies; they are said to be juicy and delicious.

## Number of Trees and Vines in 1910.

Crop.	Bearing trees in 1910	Non-bearing trees in 1910	Total	Quantity, bushels, 1909	Value, 1909
<i>Orchard Fruits.</i>					
Peaches and nectarines	7,829,011	4,409,562	12,238,573	9,267,118	\$4,573,775
Plums and prunes	7,168,705	1,599,939	8,768,644	9,317,979	5,473,539
Apricots	2,992,453	581,524	3,573,977	4,066,823	2,768,921
Apples	2,482,762	1,054,107	3,536,869	6,335,073	2,901,662
Pears	1,410,905	398,093	1,808,998	1,928,097	1,660,963
Cherries	522,304	300,063	822,367	501,013	951,624
Quinces	76,979	65,471	142,450	32,638	26,266
Mulberries	2,076	1,303	3,330	52,766	2,147
<b>Totals</b>	<b>22,485,195</b>	<b>8,410,062</b>	<b>30,895,257</b>	<b>31,501,507</b>	<b>\$18,358,897</b>
<i>Tropical Fruits.</i>					
Oranges	6,615,805	2,093,410	8,709,215	<sup>1</sup> 14,436,180	\$12,951,505
Lemons	941,293	379,676	1,320,969	<sup>2</sup> 2,756,221	2,976,571
Pomeloes (grapefruit)	43,424	25,589	69,013	<sup>1</sup> 122,515	143,180
Mandarines	351	23	374	<sup>1</sup> 555	607
Tangerines	3,637	34	3,671	<sup>1</sup> 3,581	4,188
<b>Total citrus fruits</b>	<b>7,604,510</b>	<b>2,498,732</b>	<b>10,103,242</b>	<b><sup>1</sup>15,319,052</b>	<b>\$16,076,051</b>
Olives	836,347	121,659	958,006	<sup>2</sup> 16,132,412	\$401,277
Figs	269,001	214,527	483,528	<sup>2</sup> 22,990,353	260,153
Guaves	7,031	443	7,474	<sup>2</sup> 95,053	4,018
Loquats	3,711	1,011	4,722	<sup>1</sup> 4,516	5,830
Pomegranates	1,771	2,745	4,516	<sup>2</sup> 30,075	968
Japanese persimmons	3,274	8,801	12,075	<sup>2</sup> 6,696	3,344
Dates	325	19,552	19,877	<sup>2</sup> 3,332	418
Unclassified	35	200			
<b>Totals</b>	<b><sup>4</sup>8,726,005</b>	<b><sup>4</sup>2,867,670</b>	<b>11,593,675</b>		<b><sup>4</sup>\$16,752,101</b>

<sup>1</sup>Boxes. <sup>2</sup>Pounds. <sup>3</sup>Bushels. <sup>4</sup>Includes limes, bananas, and citron.

## Grapes.

	Bearing	Non-bearing	Total	Quantity, pounds	Value
Grapes	144,097,670	39,526,319	183,623,989	1,979,686,525	\$10,846,812

## Nuts.

	Bearing trees in 1910	Non-bearing trees in 1910	Total	Quantity, pounds, 1909	Value 1909
Almonds	1,166,730	365,961	1,532,691	6,692,513	\$700,304
Persian or English walnuts	853,237	546,804	1,400,041	21,432,266	2,247,193
Black walnuts	6,582	7,905	14,487	159,374	2,562
Pecans	4,226	2,793	7,019	44,955	4,632
Chestnuts	1,763	2,948	4,711	37,153	3,474
Franquette	408	617	1,025	4,550	910
Unclassified	1,356				
<b>Totals</b>	<b><sup>2</sup>2,034,302</b>	<b><sup>3</sup>931,933</b>	<b>2,966,235</b>	<b><sup>2</sup>28,378,115</b>	<b>\$2,959,845</b>

\*Including Oou-shue, Chili nuts, Brazil nuts, Japanese chestnuts, beechnuts, hazel nuts, French nuts, Japanese walnuts, pistachio, butternuts, mazette, hickory nuts, filberts, and other nuts.

## Summary.

	Bearing trees	Non-bearing trees	Total
Orchard fruits .....	22,485,195	8,410,062	30,895,257
Tropical fruits—Citrus .....	7,604,510	2,498,732	10,103,242
Other tropical fruits .....	1,121,495	368,938	1,490,433
Total tropical fruits .....	8,726,005	2,867,670	11,593,675
Nuts .....	2,034,302	931,933	2,966,235
Total trees .....	33,245,502	12,209,665	45,455,167
Grape vines .....	144,097,670	39,526,319	183,623,989

The following table shows the quantities of the more advanced products manufactured by farmers from orchard and tropical fruits and grapes:

Product	Number of farms	Unit	Quantity, 1899	Produced, 1909
Cider .....	481	gallons	75,443	118,456
Vinegar .....	973	gallons	199,678	244,683
Wine and grape juice .....	2,163	gallons	5,492,216	16,005,519
Olive oil .....	78	gallons	8,445	95,955
Raisins and dried grapes .....	4,551	pounds		169,210,679
Other dried fruit .....	8,373	pounds	117,935,727	189,495,705

NOTE.—These figures do not include wine, grape juice, and vinegar made in regular wineries, nor olive oil made in regular factories.

## Leading Counties in Fruits and Nuts.

(Value of one million and upward.)

County	Value	County	Value
Los Angeles .....	\$6,731,000	Sonoma .....	\$2,034,000
San Bernardino .....	5,357,000	Ventura .....	1,795,000
Fresno .....	5,279,000	Santa Cruz .....	1,656,000
Santa Clara .....	4,234,000	Solano .....	1,495,000
Riverside .....	2,393,000	Placer .....	1,318,000
Orange .....	2,497,000	San Joaquin .....	1,307,000
Sacramento .....	2,265,000	Kings .....	1,219,000
Tulare .....	2,053,000		

## FRESH DECIDUOUS FRUITS, 1903-1912.

Statement Showing Number of Cars of Each Variety Shipped, 1903-1912.

Year	Apricots	Cherries	Grapes	Peaches	Pears	Plums	Apples	Miscellaneous	Totals
1903 .....	241	211	1,804	1,857	1,720	1,145	671	22	7,671
1904 .....	97	209	1,451	559	2,186	1,053	43	28	5,626
1905 .....	279	79	1,602	1,946	1,013	1,391	1,913	16	8,239
1906 .....	16	150	2,052	584	1,513	1,220	748	22	6,305
1907 .....	71	133	3,460	699	1,039	1,039	1,067	18	7,526
1908 .....	232	208	3,819	1,980	2,702	1,763	2,201	15	12,920
1909 .....	210	250	5,880	2,599	2,638	1,526	2,158	19	15,280
1910 .....	290	250	4,948	2,518	2,361	1,552	2,136	17	14,072
1911 .....	215	216	6,374	2,027	2,325	1,366	-----	16	12,539
1912 .....	196	244	6,357	1,621	3,135	1,776	-----	15	13,344
1913 .....	158	231	6,363	2,359	2,496	1,706	-----	19	13,332

In no case do the above figures cover the entire shipment of apples, as they continue to be shipped long after the deciduous fruit season is closed.

**Total Value of All Crops, by Counties.**  
(Value of four million dollars and upward.)

County	Value	County	Value
Los Angeles -----	\$14,720,000	Tulare -----	\$5,353,000
San Joaquin -----	9,082,000	Riverside -----	5,133,000
Fresno -----	7,991,000	Sacramento -----	4,720,000
Santa Clara -----	6,968,000	Sonoma -----	4,451,000
San Bernardino -----	6,818,000	Monterey -----	4,325,000
Ventura -----	6,751,000	Alameda -----	4,276,000
Orange -----	6,176,000	Contra Costa -----	4,032,000

NOTE.—These figures are for the value of crops only, and do not include wine and other products.

### OLIVES AND OLIVE OIL.

The olive is a native of Syria, and lives to a great age. The culture of the olive for commercial purposes forms an industry that should be regarded as one of the safest in the State, and under favorable conditions one of the most profitable of all branches of horticulture. Commercial conditions under the pure food law have made it almost imperative that with few exceptions the manufacture of olive oil, as with dairy products, be conducted by central plants on a considerable scale, rather than by numerous small outfits, connected with the orchards themselves.

As a result, especially if the industry be coupled with that of pickling olives, the manufacturer, on account of the larger output and the possibility of handling at a greater profit his highest grade of olives in the form of pickles, can afford to pay the grower a price for his crop that will return a fair profit, a condition which can not generally be said to exist where operations are conducted on a small scale. In the face of competition of so cheap an oil as cottonseed, its chief competitor as an edible oil, and the high cost of producing strictly pure, high-grade olive oil, the manufacturer must use the most modern machinery, which is beyond the means of the ordinary grower. That there is a ready market in this country for olive oil is proved by the quantity and value of foreign oil and olives imported.

In the United States the production is confined largely to California. Trees from seed planted in 1769 at San Diego, California, are still producing fruit.

There were very few new orchards planted in olive trees during the years 1905-1909, consequently the production of olive oil during the last few years has changed but slightly. The few orchards that are coming into bearing are mostly varieties that are used for pickling purposes, and the production of pickling olives is increasing considerably from year to year. Since 1909 a large area has been planted. The production of olives during the last few years has increased by improved methods of irrigation and fertilization, and the industry is growing in importance, and new planting is on a considerable scale. The production is about equally divided between southern California and the territory north of the Tehachapi. In the last ten years the harvests in California have been very regular, alternating generally heavy and light, although the last few years have been very steady as to output, due to the increased care and attention to orchards.



Not more than 35 gallons of oil are produced from a ton of olives, although some manufacturers, who have heavy presses, claim to obtain 40 gallons of oil to the ton. It takes about  $5\frac{1}{2}$  pounds of olives to make one gallon of pickles. The output of pickled olives is increasing much more rapidly than the production of olive oil, as California manufacturers can not compete with foreign oil as to price.

The leading varieties now being planted in California are the Mission and Manzanillo, all other olives generally being treated as oil olives, as they are unfit for pickles.

Olive oil was first made in California in Santa Barbara in 1872. In 1900, six counties in the San Joaquin and Sacramento valleys produced nearly 75 per cent of the crop in the whole State.

It is estimated that at the present time there is a total of 18,000 acres in olives, producing in 1911 about 8,000 tons of oil olives, and 4,000 tons for pickling. Four years ago the average net income was only \$17 an acre, in 1912 the average had increased to \$36.88 an acre. In 1908 the olive industry represented capital invested amounting to \$4,500,000, increased in 1912 to \$7,500,000. Formerly the by-products were more or less wasted; now oil, described as "mechanical oil," is extracted from the pomace and used to a large extent by soap and other factories. The average yield per acre in California is about  $1\frac{1}{2}$  tons, and the average price received by the growers for the three years, 1909-1912, for oil olives on the tree was \$22 per ton. Forty per cent of the olives produced are pickling olives, and 60 per cent oil olives. The average price received by growers 1909 to 1912 for pickling olives on trees was \$62 per ton. The net average receipts by growers for pickling olives was \$53.50 per ton, and the net average receipts for both oil and pickling olives \$36.88 per acre. The amount paid to growers in 1911, for approximately 12,000 tons, was \$442,000; of this tonnage 4,000 were pickles, representing 1,200,000 gallons, and 8,000 tons of olive oil, representing 280,000 gallons of oil.

Compared with 1911, the output of olive oil in 1912 was very small, being about one third of that for the previous year, and the pickled olives about one half to one third, and in one or two counties even less. The price for oil olives during the last two years increased greatly, and in the southern part of the State has ranged from \$45 to \$50, and sometimes a few dollars higher per ton, while in pickling olives the price has ranged from \$75 to \$175 per ton, the higher prices being for the very best quality and the largest size. The price for oil olives on the trees in 1912 was from \$25 to \$35 per ton, pickling olives \$50 to \$60 on the tree and upward, depending on the quality of the fruit. Very fancy fruit commands prices of \$80, \$90 and \$100 on the trees.

In 1913 it is estimated that there were about 750,000 gallons of ripe olives, equal to 125,000 cases of 24 quart cans each. The quantity of olive oil manufactured was about 150,000 gallons. The quantity of olives imported was 2,946,076 gallons, compared with 5,076,857 gallons in 1912. The quantity of edible olive oil imported increased from 4,836,515 gallons in 1912 to 5,221,001 in 1913.

The largest factory for producing olive oil and pickled olives is in Los Angeles County. The leading counties in the production of olives are: San Diego, Los Angeles, Riverside, and Orange in the south, and Butte and Fresno in central California.



## THE CITRUS FRUIT INDUSTRY.

The orange was first cultivated in the United States in Florida and Louisiana, and subsequently in California. The varieties are very numerous, but by far the most popular and widely-known variety is the Washington Navel. It was first brought into this country from Bahia, Brazil, in 1870, by William Saunders, of the United States Department of Agriculture, and was named by him "Bahia."

Twelve trees only were imported, two of which were obtained by Mrs. L. C. Tibbetts of Riverside, in 1873, and as buds were taken from these trees and the cultivation of it spread through the district, it became also known as the Riverside Navel, to distinguish it from a similar, though inferior, variety which had been introduced in 1874 from Australia, and was at one time cultivated on a considerable scale in Orange County. There were many other types growing in southern California at that time, most of which were descended from trees planted around the Missions by the Spanish Fathers.

The variety was named by Californians the Washington Navel, in honor of the capital from which it was received, but its formal title remains as "Bahia."

Three fourths of the oranges in California are now of the Washington variety, the remainder comprising the Valencia Late as the most important variety, with fewer of the St. Michael, Mediterranean Sweet, Thompsons, Ruby, Blood, Jaffa, Seedlings, and Tangerines.

The two species of St. Michael, grown in the Azores, are the "San Miguel" and "Selecta" (a native of Cape Verde Islands). The former ripens from December to June, and the latter from June till September.

The cultivation of the Jaffa orange in Palestine has largely increased in recent years; the orange groves in the Jaffa district now cover upward of 13,000 acres, and the Alexandretta district about 7,000 acres.

The enormous consumption of oranges is shown by the exports from the leading countries that produce them.

Year	Spain. pounds	Italy. pounds	*Jaffa. boxes	Japan. pounds	Porto Rico. boxes	Cuba. pounds
1907	1,034,613,282	278,791,700	630,512	25,358,276	-----	1,509,536
1908	1,027,871,410	266,838,200	675,926	20,414,803	308,990	1,881,011
1909	1,031,865,629	244,488,600	744,463	22,245,897	204,239	2,376,635
1910	1,051,764,067	265,498,285	853,767	18,899,371	296,058	2,653,520
1911	869,725,553	282,945,860	869,859	14,158,559	313,461	3,609,817

\*The Jaffa box contains about 70 pounds of fruit; the Porto Rican box about 80 pounds.

In addition to the above, the exports from the British West Indies to the United States alone is on a very large scale, as the following figures show:

Year	Pounds
1907	5,988,107
1908	11,789,081
1909	758,998
1910	469,033
1911	4,108,651
1912	3,561,123

The total shipments from the countries mentioned above are equivalent to approximately 21,000,000 boxes of California capacity. California, therefore, provides about forty per cent of the total orange supply of the world and three fourths of the total production of the United States. Spain produces about the same quantity of oranges as California.\*

Japan is now growing navel oranges in considerable quantities. In 1911 there were 1,067,659 trees, and planting is rapidly extending. Three years ago these oranges were seldom seen in the market of northern Japan; now they are to be had in every part of Japan at 18 to 30 cents a dozen, according to quality. The fruit is good in quality, thin skinned, juicy, and sweet. They have been recently exported in considerable quantities to Australia, where, on account of their cheapness, they have successfully competed with the California navel oranges.

Every one can remember when all domestic oranges were called either California or Florida oranges. Now all this is changed, and there is not only a considerable number of well-known varieties, but a large number of different brands.

It was not until 1886, however, that the first regular orchard was planted for the purpose of profit, and since then the progress of the industry has been rapid. In 1890 California had 1,757 citrons, 11,495 guavas, 2,007 limes, and 29 acres with 145,000 pineapple plants in bearing, all in San Diego County. In 1900 the numbers were: 4,780 citrons, 7,056 guavas, 1,815 pineapples, and 2,690 Japanese persimmons. Pineapples and citrons are no longer grown on a commercial scale in this State.

The citrus fruit industry has reached its present development in southern California, which is made up largely of San Bernardino, San Gabriel, and San Fernando valleys, and in the coast region in Orange and Los Angeles counties. There are smaller but less favorable regions in Santa Barbara and Ventura counties, close to the mountains, and in San Diego County oranges have also been cultivated from an early period, and as far as Butte County in the north, and Tulare, Fresno, and Kern counties in central California.

The orange crop of northern California matures from four to six weeks earlier than it does in the southern part of the State, notwithstanding the fact that it is from 200 to 500 miles farther north. This unusual condition is due to the topography of the Pacific coast. The two large San Joaquin and Sacramento valleys in central and northern California lie between two great mountain ranges extending north and south. The Coast Range mountains shut off the modifying influences of the sea, causing relatively higher night temperatures during the summer months than prevail in the southern part of the State.

In southern California San Bernardino is the largest producer of oranges, with 1,951,254 bearing trees; Los Angeles has 1,674,695, Riverside 1,021,957, and Orange County 478,272. In northern and central California, Tulare leads with 801,151, Butte 147,412, Fresno 85,781, Kern 80,940, and Sacramento 46,256.

The shipments from northern and central California for the season of 1913-14, up to the first week in April, shows a considerable increase: Butte County 398 cars, Tulare County 4,636 cars of oranges, compared

\*See report of the Citrus Protective League to House of Representatives, January, 1913.

with about 1,800 in 1912-13, and 30 cars of lemons, to which may be added 950 cars of Valencias and 10 cars of lemons not yet shipped, and from Fresno County about 200 cars.

Pomeloes are also grown to a considerable extent, the two leading counties being San Bernardino with 13,134 bearing trees, and Tulare with 8,114.

#### California Fruit Growers' Exchange.

Some idea of the size and value of the crop, and of the immense benefit derived by growers by a well-organized association, is shown by the results obtained by the California Fruit Growers' Exchange, the largest and most successful of all the co-operative institutions formed by the fruit growers. The following tabular statement shows the total number of boxes shipped each year, the net amount received, the average f. o. b. California price per box, and the loss, if any, from failure to collect or in the transmission of funds:

Year	Boxes shipped	F. O. B. returns	Average per box	Losses
1904-05 -----	5,188,511	\$7,124,377 00	\$1 37	\$458 04
1905-06 -----	4,705,515	9,936,497 00	2 11	-----
1906-07 -----	6,149,708	12,268,752 00	2 00	-----
1907-08 -----	6,628,644	11,753,544 00	1 77	81 85
1908-09 -----	8,710,828	13,958,990 00	1 60	4,297 57
1909-10 -----	7,578,801	14,831,975 00	1 96	732 32
1910-11 -----	10,842,790	20,708,355 21	1 91	-----
1911-12 -----	9,232,357	17,235,822 98	1 87	-----
1912-13 -----	4,940,068	13,640,091 32	2 74	390 71
Totals -----	63,977,222	\$122,458,404 51	\$1 96	\$5,960 49

Over \$100,000,000 has been brought to California by the Exchange in the eight years, with a loss from failure to collect or in the transmission of funds of less than \$6,000.

The orange industry in California represents an investment of about \$150,000,000.

The average annual yield on 274 selected orange groves from 1906 to 1911 was 157.6 boxes per acre. The average cost of labor and material in growing the oranges in these orchards was \$136.06 per acre, of which \$52.82 was for labor.

A careful estimate recently made places the production of oranges in California at 129 to 191 boxes to the acre, but there is considerable difference in the crop in various orchards. A recent publication of the United States Department of Agriculture places the average for the last five years at 157.6 boxes to the acre, and the cost of oranges delivered in the markets of the United States exactly 18 cents a dozen.

#### Increase in the California Citrus Crop in Ten Years.

From the figures of the Bureau of the Census, it appears that the orange crop of California made a gain of 145.4 per cent during the decade between 1899 and 1909, increasing from 5,882,000 boxes in 1899 to 14,436,000 boxes in 1909. During the same period of time, the number of trees of bearing are increased from 5,649,000 to 6,616,000, or 17.1 per cent. In 1910 there were also 2,093,000 trees of non-bearing age. In 1909, the average product per tree was 2.2 boxes. With respect



to quantity of fruit, San Bernardino County rose from third rank in 1899 to first in 1909. In 1899 Los Angeles County ranked first and Riverside County second.

The value of the oranges produced in 1909 was \$12,952,000, an average of 90 cents per box.

The increase in the shipments of oranges from California in periods of five years, from 1886 to 1912, shows a most remarkable and steady growth.

Period	Per cent increase
1886-87—1891-92	100
1891-92—1896-97	36
1896-97—1901-02	194
1901-02—1906-07	52
1906-07—1911-12	34

The great damage that was inflicted on California orange growers by the heavy frost which occurred the last week in December, 1911, and the first week in January, 1912, is shown in a striking manner by the returns of the California Fruit Growers' Exchange, the shipments being only 4,940,068 carloads, compared with 9,232,357 the previous season. This large decrease was in some measure made up for by better prices, the average being \$2.74 per box, against \$1.87 for the previous year. The total receipts were only \$13,640,000, compared with \$17,235,000, or a loss of over \$3,595,000.

### LEMONS.

Although lemons have been grown in California for half a century, it is only during the last twenty years that they have risen to considerable commercial importance. The lemon is less hardy than the orange and comprises from 10 to 15 per cent of the citrus crop.

The principal varieties of lemons grown in California are the Eureka, a native of California, grown by C. R. Workman of Los Angeles from seed imported in 1872; the Lisbon, imported from Portugal, first grown at Riverside; Genoa, imported from Genoa by Don José Rubio of Los Angeles; Villa Franca, imported from Europe; Bonnie Brae, originated with H. M. Higgins of San Diego County, and are grown mostly in that county.

#### California Lemon Crop, 1899-1909.

The lemon crop increased from 874,000 boxes in 1899 to 2,716,000 boxes in 1909, a gain of 1,842,000 boxes, or 210.7 per cent, although for the same period the reported number of trees of bearing age decreased from 1,493,000 to 927,000, or 38 per cent. The number of trees of non-bearing age in 1910 was 377,000. The number of boxes per tree in 1909 was 2.9; in 1899, it was just under three fifths of one box. The value in 1909 was \$2,926,000, or \$1.08 per box.

The California lemon industry has been developed by small land-owners. There are a few groves which contain from 150 to 1,000 acres, but the average grove contains less than 10 acres. In San Diego County 100 growers own approximately 1,000 acres. In the San Dimas district 300 growers own 1,180 acres; in the Pomona district 75 growers own 344

acres; in the Santa Barbara district 70 growers own 407 acres. The newer planting of the last three years usually contain 5, 10 or 15 acres and seldom more than 20 acres. In a recent survey, including every important district, 11,185 acres were owned by 1,179 growers; 39 growers owned between 20 and 50 acres; 6 growers, 50 to 100 acres; 8 growers, 100 to 250 acres; 1 grower, 250 to 500 acres; and 2 growers owned more than 500 acres.

The average annual yield on 143 lemon orchards from 1906 to 1911 was 196.2 boxes per acre. The average value of land and water adapted to lemon culture in California is \$450 per acre, and the cost of bringing a grove into bearing at six years of age, varies from \$800 to \$1,500 per acre, a fair average being \$1,000. In 1909 there were approximately 22,000 acres of lemons in California; in 1912 there were 31,478 acres.

Practically all imported lemons come from Sicily, an Italian island, and the province of Calabria, where the production is very large, the exports being estimated in 1911 as 57,030,543 pounds, or the equivalent of about 23,763 California carloads.

Enormous quantities of lemons are used in making citrate of lime, which is made from the juice and pulp of the lemon; the quantity produced in 1910 was 21,000 pipes of 672 pounds each. It requires approximately 100,000 lemons to make a pipe of citrate, or the equivalent of a California carload of fruit, so the fruit so converted would amount to 504,000,000 pounds. The estimated production of lemon oil in Sicily in 1910 was 700 tons.

#### Pomelo or Grapefruit.

The pomelo or grapefruit was formerly almost exclusively grown in Florida, but its cultivation has increased in recent years, and considerable quantities are produced in Riverside, Tulare, San Diego, and other citrus counties. The leading varieties are the Nectar, Imperial, Marsh, Seedless, and Triumph.

#### Citron of Commerce.

The citron of commerce was grown by the Missions in the early days, but now is cultivated only to a very limited extent in Riverside County. At one time there was a grove of 21 acres in Los Angeles County, but it was neglected and five years ago was replaced by oranges, avocado, and other trees.

### THE FLORIDA CITRUS CROP.

Florida is at present the only competitor with California in the United States in the production of oranges and lemons, although in recent years citrus fruits are being produced on a small scale in Arizona, Louisiana, and Texas.

Florida Citrus Trees in Bearing, 1890, 1900, and 1910.

	1890	1900	1910
Orange -----	2,725,272	2,552,542	2,766,618
Lemon -----	85,052	22,691	11,740
Lime -----	17,089	41,741	45,369
Pomelo -----	3,135	117,336	656,213
Citron -----	2,480	-----	23,234



Florida first took the lead in the production of citrus fruits in this country, but "the great freeze" of December, 1894, and February, 1895, when the temperature at some places fell to 14 and 18 degrees, was a disaster from which they are only now fully recovering. From 6,000,000 boxes shipped before the frost, the number fell the following year to 75,000.

**Florida Orange Crop, 1899-1909.**

The production of oranges in Florida increased from 273,000 boxes in 1899 to 4,853,000 boxes in 1909, a sixteenfold gain. The number of trees of bearing age was 2,553,000 in 1900 and 2,766,618 in 1910, an increase of 7.8 per cent. The number of trees of non-bearing age in 1910 was 1,098,000. The value in 1909 was \$4,305,000, or \$1.11 per box.

**Florida Lemon Crop, 1899-1909.**

The lemon crop increased from 2,359 boxes in 1899 to 12,367 boxes in 1909, a gain of 10,008 boxes, a fourfold gain. The number of trees of bearing age reported decreased from 22,691 in 1900 to 11,740 in 1910, or almost one half. The number of trees of non-bearing age in 1910 was 7,329. The value of the lemon crop in 1909 was \$13,753.

**Orange and Lemon Crops of California and Florida, 1909-1910.**

(From the Bureau of the Census.)

Orange and lemon trees of bearing and non-bearing age in 1910, and number of boxes of oranges and lemons produced in 1909, together with the value thereof, 1910:

	California	Florida
<b>Oranges—</b>		
Number of trees of bearing age, 1910.....	6,615,929	2,766,618
Number of trees of non-bearing age, 1910.....	2,093,101	1,097,896
Number of boxes produced in 1909.....	14,436,424	4,852,967
Value, 1909 .....	\$12,952,291	\$4,304,987
<b>Lemons—</b>		
Number of trees of bearing age, 1910.....	927,130	11,740
Number of trees of non-bearing age, 1910.....	376,859	7,329
Number of boxes produced in 1909.....	2,715,974	12,367
Value, 1909 .....	\$2,925,759	\$13,753
<b>Pomeloos—</b>		
Number of trees of bearing age.....	43,427	656,213

## Florida Citrus Fruit Crop.

Season	Oranges, boxes	Lemons, boxes
1884-85	600,000	
1885-86	900,000	
1886-87	1,260,000	
1887-88	1,450,000	
1888-89	1,950,000	
1889-90	2,150,000	
1890-91	2,450,000	
1891-92	2,664,791	18,389
1892-93	3,357,507	29,756
1893-94	4,163,849	57,219
1894-95	2,808,474	*713
1895-96	147,000	*
1896-97	216,579	1,800
1897-98	357,960	1,006
1898-99	1,250,000	2,200
1899-1900	972,589	1,447
1900-01	1,350,700	1,900
1901-02	972,589	1,447
1902-03	1,465,306	5,185
1903-04	1,950,823	4,131
1904-05	2,363,058	14,433
1905-06	2,961,195	8,299
1906-07	2,899,390	10,065
1907-08	3,793,126	6,718
1908-09†	5,250,000	
1909-10†	6,100,000	
1910-11†	4,600,000	
1911-12	4,458,000	
1912-13	8,125,449	

The prices received by Florida growers during the last season are of interest as compared with the prices received in California.

Averages Received by the Florida Citrus Exchange, f. o. b. Packing-House, Season 1912-1913.

Fruits	Boxes, 1911-12	Average per box, 1911-12	Boxes, 1912-13	Average per box, 1912-13
Oranges	766,650	\$1 63	4,625,449	\$1 97
Grapefruit	231,196	1 83	400,000	2 01
Tangerines	31,787	1 92	3,100,000	1 92
Mixed and miscellaneous	313,345	1 63		
Grand totals	1,342,132	\$2 18	8,125,449	\$1 96

Lemons and limes are not reported separately, as the shipments are very small, but recently a considerable acreage has been set out in limes.

\*The year of "the great freeze," when the temperature fell to 14 degrees at Jacksonville and 18 degrees at Tampa on December 29, 1894, followed by one equally severe in February, 1895, which killed most of the citrus trees in the state.

†The figures for the last four years include lemons, the quantity being so small that separate records are not kept. Limes, grapefruit, and tangerines are also included. In the season 1909-10, there were about 7,100 boxes of lemons, 12,600 of limes, and 553,000 boxes of grapefruit. The total for the season 1911-12 includes 810,000 boxes of grapefruit, and 156,000 boxes of tangerines; also limes and lemons, the quantities of which are comparatively small.

## THE CALIFORNIA RAISIN INDUSTRY.\*

One of the largest and most important branches of fruit growing is the cultivation of the raisin grape, the acreage in which is now by far the largest in the world.

Raisins were first produced on a considerable scale in the southern part of the State, but Orange and Riverside counties no longer produce raisins; Los Angeles County very few; Yolo County, which at one time produced Sultanas and Thompson's Seedless in considerable quantities, now finds it more profitable to ship a large portion of the crop as table grapes, while the large vineyards in Riverside and San Bernardino counties are more devoted to wine grapes.

## Counties Where Raisins Are Produced.

Of the fifty-eight counties in California, less than a dozen produce raisins in commercial quantities. At the present time the proportion of an average crop raised by each county is estimated to be approximately as follows:

County	Pounds
Fresno .....	94,000,000
Tulare .....	25,000,000
Kings .....	20,000,000
Sutter .....	4,000,000
San Bernardino .....	3,600,000
San Diego .....	3,200,000
Madera .....	2,400,000
Yolo .....	2,000,000
Kern .....	1,100,000

Sutter County produces a considerable quantity of Thompson's Seedless and Yolo County mostly Sultanas.

Los Angeles at one time produced a considerable quantity, but the last few years the amount has been under 1,000,000 pounds.

A normal raisin crop amounts to about 160,000,000 to 170,000,000 pounds; that for 1913 was about 130,000,000, classified as follows:

Varieties	Estimated crop, 1913	Packed by the Associated Raisin Company
Muscats .....	98,588,798	88,527,110
Thompson's seedless .....	18,390,922	16,206,174
Sultanas .....	12,252,430	10,750,065
Malagas .....		1,180,006
Fehér Szagos .....	529,707	498,302
Black grapes .....	238,143	211,407
Totals .....	130,000,000	117,373,064

The average price received by growers will be about \$75 per ton, and the total sum so paid will amount to about \$4,840,275.

When raisins were first shipped East in any quantity it is impossible to say. In 1875, New York reported that up to November 1st, 6,000 22-pound boxes of California raisins had been received. About 1888, Fresno appears to have shipped a considerable quantity for the first time. In 1887, the market reports state that "Fresno raisins of excel-

\*For the early history of the raisin industry in California, see Report for 1912, pages 134-139.

lent quality are now on the market, especially from the Butler and Forsythe vineyards." The growers did their packing in those days.

#### Raisin Grape Varieties.

For more than half a century many varieties of grapes have been brought into California from all the grape-producing countries of the world. Coming from different countries, they have many names. Some of these have been preserved, some lost, and others have received local appellations.

The varieties of raisin grapes are few in number, the White Muscat of Alexandria and the Muscatel Gordo Blanca hold the first place, while Malaga and Feher Szagos are used to a small extent; the seedless varieties are the Sultana (which is grown extensively near Smyrna, in Asia Minor, and was first brought to California by Colonel Agostin Haraszthy in 1861), and Thompson's Seedless, so named by the Sutter County Horticultural Society after W. Thompson, Sr., of Yuba City, who procured the cuttings in 1878 from Elwanger & Barry of Rochester, New York. It was by them described as "a grape from Constantinople, named Lady de Coverly," and is now to be found in all parts of the State. Professor Bioletti, of the University of California, and other high authorities consider the variety identical with the Sultana, but an improved variety.

#### Consumption of Raisins.

Efforts have been made in recent years to increase the consumption of raisins in the United States, and there is no reason why they should not prove successful, as there is ample room for a greatly extended use of this wholesome fruit. The United Kingdom consumes annually about 73,000,000 pounds of raisins and 142,000,000 pounds of currants, or a total of about 215,000,000 pounds, equal to five pounds per capita. In the United States the consumption is less than one pound and a half per capita. In other words, if the American public appreciated raisins as they have been for centuries in Europe, the acreage in raisin grapes might be more than doubled without causing overproduction.

It was in 1892 that the California raisin crop first equalled that of Spain, and it has been increasing the difference ever since. Fresno County alone produces nearly double the quantity of raisins produced in Spain, which held the lead for centuries. But for this large production in California, there must have been a great advance in prices, which would have placed raisins beyond the reach of many.

#### The Raisin Crop of the World.

Year	Short tons of 2,000 pounds	In long tons of 2,240 pounds			Australia—pounds	
	California	Spain	Turkish Sultanas	Greek currants	Raisins	Currants
1904 -----	40,000	25,000	34,100	151,000	7,449,116	2,004,427
1905 -----	37,000	28,200	58,300	160,000	4,367,181	2,093,076
1906 -----	45,000	15,800	27,500	135,000	6,148,168	2,346,980
1907 -----	70,000	27,000	47,000	156,000	12,796,000	2,922,192
1908 -----	65,000	26,000	45,000	185,000	10,427,760	3,404,464
1909 -----	70,000	24,000	50,000	185,000	10,924,816	4,074,336
1910 -----	56,000	19,000	15,000	123,000	12,191,424	7,107,520
1911 -----	51,000	15,000	25,000	157,000	12,775,056	7,465,360
1912 -----	85,000	12,000	50,000	167,000	15,408,400	10,470,208
1913 (estimated) -----	65,000	18,500	30,000	160,000	-----	-----



**Raisins and Currants in Australia.**

The raisins and currants produced in Australia are mostly consumed at home. The quantity at present, though not large, is increasing rapidly. Victoria and South Australia are the two states with the largest production.

In 1912 Victoria produced 11,527,488 pounds of raisins and 5,240,368 pounds of currants, and South Australia 3,880,912 pounds of raisins and 5,229,840 pounds of currants.

As currants can be successfully produced in Australia, there appears to be no reason why they could not be equally well grown in California, the climate being equally suitable.

In New South Wales, Queensland, and Western Australia small quantities of raisins and currants are also produced, as well as in Cape Colony, South Africa.

**California Seeded Raisin Industry.**

In the early seventies, a raisin seeding machine was invented by George E. Pettit, which was taken up and first put into practical use by the late Colonel Forsythe of Fresno, one of the leading pioneer raisin growers.

Seeded raisins were first introduced to the public by him. When first placed upon the market, it was only with some difficulty that about twenty tons were disposed of, and no one then imagined the enormous success this system was destined to achieve.

Fresno County is the center of the seeded raisin industry, where it originated. The following figures show the wonderful increase in this popular form of raisin during the last eighteen years:

Year.	Tons	Year.	Tons
1896	700	1905	21,000
1897	3,500	1906	24,000
1898	7,000	1907	26,000
1899	12,000	1908	24,000
1900	14,000	1909	28,000
1901	14,000	1910	31,500
1902	16,000	1911	33,000
1903	18,000	1912	43,000
1904	18,000	1913	49,000

Loose raisins are packed in 50-pound boxes; Thompson's Seedless in 12-ounce cartons, 45 to the case; seeded raisins in one-pound cartons, 36 to the case; also in 12-ounce, 45 to the case and a few in bulk in 25-pound boxes. Raisin clusters are packed in 5, 10 and 20-pound boxes.

**Grape-seed Oil.**

Grape-seed oil is prepared in certain parts of France, Italy, and Wurttemberg. That obtained cold, from the first pressing, is edible; the oil obtained by pressing and heating and that extracted by means of solvents have a dark color and a bitter taste and, after being purified by concentrated sulphuric acid and cleared with bone black, are used for lighting purposes and in the manufacture of soap and, on account of the small cost, would be good substitutes for the expensive oils



used in the textile industry. Aside from the uses mentioned, and because some of its chemical properties are similar to those of castor oil, grape-seed oil has suggested itself as a substitute for castor oil in the preparation of compounds used in the manufacture of red colors (rojo de audinopolis).

On an average, the fresh refuse of the grape contains 25 per cent of seeds. According to the variety of the grapes and their degree of ripeness, the quantity of oil which can be rendered from the seeds varies from 6 to 20 per cent.

#### THE GREEK CURRANT.

The Greek or Zante currant has been produced on a very large scale for centuries. They are the seedless variety of a peculiar dwarf grape-vine producing a small black grape, or currant, of a peculiar flavor; it is the most important crop in Greece, as it forms nearly one half of the total exports. The vineyards cover 150,000 acres, and produce the enormous total of from 300,000,000 pounds to 370,000,000 pounds in a favorable season, or far more than double the size of an average California raisin crop.\*

The American consul at Patras reports that although the American market demands the best qualities of other fruits, yet in currants they only take the lowest grades. The best grades are limited in quantity and are usually all taken up within three months after the season opens. Perhaps this condition of the currant trade is the cause of complaints being made that the fruit is often poor and not properly cleaned.

#### IMPORTED ALMERIA GRAPES.

These table grapes come from the province of that name in Spain, and during the last six years their value has amounted to between \$1,500,000 and \$2,000,000 a year. They come into competition with late-season shipments of California Tokays, Cornichon and Emperor grapes.

Malaga is the center of the grape-exporting industry of southern Spain. Originally the Almeria or Malaga grape was cultivated only in and about a small town called Loja, about 50 miles north of Malaga. Cuttings were distributed throughout this entire district, but these table grapes, the only grapes that will retain their freshness, firmness, and flavor for months after being cut from the vine, are the product of the old cuttings taken from Loja and now cultivated in the Province of Almeria.

Owners of vineyards in the Malaga district have made repeated efforts to produce a grape possessing the keeping qualities of the Almeria fruit, without obtaining satisfactory results. Cuttings taken from Almeria produce a different grape when transplanted outside of that particular district. Cultivated in and about Malaga, the Almeria cuttings produce a tender, thin-skinned grape, more or less on the order of the Muscatel, a grape that may not be preserved for over two months. Cuttings of the Almeria grape have been imported into California, but the result so far has not been satisfactory.

\*For details regarding the Greek currants and the "Privileged Company" which controls and markets the crop, see Report for 1912, page 140.

## Almeria Grapes Imported.

(Duty, 25 cents per cubic foot of capacity of barrel or packages.)

Year	Cubic feet	Value
1907 -----	1,298,469	\$1,575,521
1908 -----	2,234,508	2,743,356
1909 -----	1,203,419	1,575,620
1910 -----	1,365,310	1,682,994
1911 -----	1,485,159	1,723,022
1912 -----	2,000,841	2,331,504
1913 -----	1,135,942	1,359,415

## FRUIT CANNING AND PRESERVING.

California made a pack of hermetically sealed fruits in tin cans in 1861. For many years after that, canned goods were a luxury, relatively expensive, and used only in emergencies, on board ship or at remote places where other food was not obtainable.

The real importance and development of the canning industry did not commence until about the year 1875. The value of its products, which in 1889 was \$6,621,931, more than doubled during each of the two following decades, amounting in 1909 to \$32,914,829.

The case, which is used as the unit of measure for canned fruits and vegetables in the table below, consists of 24 standard-size cans No. 2 (also called 2-pound cans) for berries, cherries and plums, and No. 3 (also called 3-pound cans) for all fruits and vegetables.

California ranks first among the states in the production of canned apricots, peaches and pears, and of dried peaches and prunes; the State had a complete monopoly of the production of dried apricots and of raisins in the United States in 1909, neither of these being produced in any other state.

The value of dried fruit constituted 55.3 per cent of the total value of products of the industry in 1909, as compared with 52.9 per cent in 1904 and 17.2 per cent in 1899. The increase in the value of the dried fruit products during the decade 1899-1909 was 608.8 per cent, the greatest advance being from 1899 to 1904, when the gain was 437.1 per cent. The most important of the dried fruit products, both in point of quantity and of value, were raisins and prunes. The fruit most largely canned in 1909 was peaches, the value of which constituted 9.2 per cent of the total for the canning and preserving industries.

## CANNED AND DRIED FRUITS, 1899-1909.

(Compiled from the Census Reports.)

## Canned Fruits.

Product	1899		1904		1909	
	Cases	Value	Cases	Value	Cases	Value
Apples -----	25,287	\$71,427	31,286	\$67,591	67,697	\$136,855
Apricots -----	531,568	1,582,927	532,038	1,619,757	560,186	1,819,558
Berries -----	87,564	218,733	67,467	168,640	108,672	200,094
Cherries -----	49,375	155,813	171,298	457,169	213,518	463,476
Peaches -----	903,676	3,103,775	744,715	2,640,524	1,166,627	3,013,203
Pears -----	444,343	1,610,900	524,197	1,577,823	436,272	1,316,022
Plums -----	358,298	596,484	196,379	349,307	138,477	230,384
All other -----			54,215	97,272	19,900	68,750
Totals -----		\$7,340,059		\$6,978,083		\$7,248,342

## Dried Fruits

Dried fruits	Pounds	Value	Pounds	Value	Pounds	Value
Apples -----	3,087,220	\$155,893	811,254	\$40,659	6,860,170	\$481,173
Apricots -----	5,310,217	442,544	19,559,573	1,410,838	29,205,569	2,277,177
Peaches -----	5,502,390	301,495	25,845,364	1,701,105	46,827,391	2,422,043
Prunes -----	24,102,329	907,041	114,580,431	3,169,878	118,917,876	4,394,922
Raisins -----	10,734,221	720,268	121,409,881	6,349,381	195,774,767	6,912,533
All other -----	601,506	42,279	18,102,416	1,128,740	26,140,777	1,724,468
<b>Totals -----</b>	<b>49,337,883</b>	<b>\$2,569,520</b>	<b>300,308,919</b>	<b>\$13,800,601</b>	<b>423,726,550</b>	<b>\$18,212,316</b>

Fresno city is one of the principal centers of the canning and preserving industry of the State, in 1909 reporting nearly one fourth of the total value of products for this industry in California and a much larger proportion of the total value of dried fruits.

## CANNED FRUIT PACKED, BY VARIETIES, 1911-1913.

Varieties	Cases, 1911	Cases, 1912	Cases, 1913
Apples -----	65,300	72,500	79,000
Apricots -----	858,325	863,000	650,000
Blackberries -----	77,825	826,000	70,000
Cherries -----	198,805	351,250	287,700
Grapes -----	70,915	66,600	30,000
Peaches and nectarines -----	2,091,148	2,200,000	1,995,300
Pears -----	618,920	1,062,000	700,000
Plums -----	165,840	241,000	145,000
Figs -----	1,500	1,500	-----
Loganberries -----	19,117	20,000	17,500
Raspberries -----	3,625	2,000	6,000
Strawberries -----	7,715	4,500	20,000
Quinces -----	18,000	20,000	-----
Currants -----	14,500	15,000	-----
Oranges -----	3,500	4,000	-----
Other fruits -----	15,000	-----	15,000
<b>Totals -----</b>	<b>4,095,035</b>	<b>5,005,950</b>	<b>4,015,500</b>

The leading varieties of fruits used for canning are as follows:

<i>Apricots</i> —	<i>Figs</i> —	<i>Plums</i> —	<i>Peaches</i> —
Moorpark.	Endish.	Reine Claude.	Clingstones:
Huns Kirk.	<i>Grapes</i> —	Greengage.	Phillip.
Blenheim.	Muscat.	Washington.	Tuscan.
Royal.	<i>Pears</i> —	Damson.	Golden Cling.
<i>Cherries</i> —	Bartlett.	Jefferson.	Freestones:
Royal Anne.	<i>Nectarines</i> —	Egg.	Lovell.
Centennial.	Stanwich.	Golden Drop.	Muir.
Rockport.			Crawford.
Black Tartarian.			Foster.

## Dried Fruit Packed, 1911-1913.

Varieties	Tons, 1911	Tons, 1912	Tons, 1913
Prunes -----	95,000	100,000	45,000
Raisins -----	60,000	92,500	65,000
Peaches -----	13,500	28,000	20,000
Apricots -----	11,000	19,000	9,000
Pears -----	2,000	5,000	2,000
Figs -----	5,000	4,500	3,500
Apples -----	4,000	3,500	2,500
Miscellaneous -----	3,800	1,000	2,000
<b>Totals -----</b>	<b>194,300</b>	<b>253,500</b>	<b>149,000</b>



The varieties of fruit cured by drying are as follows:

<i>Appricots—</i>	<i>Peaches—</i>	<i>Nectarines—</i>	<i>Plums—</i>
Royal.	Lovell.	Stanwich.	Washington.
Blenheim.	Muir.	<i>Pears—</i>	Jefferson.
<i>Figs—</i>	Crawford.	Bartlett.	Egg.
Adriatic.	Poster.		<i>Prunes—</i>
			Petites.

Dried fruit is packed in boxes of 25 and 50 pounds, and 12½ kilos for abroad.

### NUTS.

About three fourths of the nuts produced in the United States are grown in California, walnuts and almonds being the principal crops. Almonds are a native of western Asia and Morocco, and are produced in large quantities in Syria and Palestine.

The walnut is a native of the mountains of Greece and Armenia and the northwest Himalayas, in India, and is largely cultivated in most temperate countries. Walnuts in the United States are produced almost exclusively in California, Orange, and Los Angeles counties taking the lead.

California produces practically the whole of the almond crop in the United States.

Peanuts thrive well in southern California, chiefly on the lower lands of the coast region, while in central and northern California, peanuts are mostly grown in the river bottoms of the Sacramento and San Joaquin valleys. The peanut was originally a native of South America. Large quantities are exported to London, Hamburg, and Marseilles for the sake of the oil produced from the seeds, which yield from 42 to 50 per cent oil, which is said to be an excellent substitute for olive oil.

During the civil war almost every army in the field occupied at some time or other that portion of Virginia in which peanuts were grown. The knowledge of the culture and value of the crop acquired by soldiers was utilized by them on returning home, with the result that between 1865 and 1870 the production increased from 200 to 300 per cent annually.

The pecans grow well in the lower lands of the interior valleys, but are raised in only limited quantities.

### Walnuts.

The English walnut is the greatest nut grown in the State, judged by the size and value of the crop. It is almost entirely grown in the four southern counties of Santa Barbara, Los Angeles, Orange, and Ventura.

The production of walnuts has doubled in the last ten years, until the domestic supply produces half the quantity consumed in the United States. In 1911 about 50 per cent of the walnuts of grade No. 1 were sold at 14 cents a pound f. o. b. California, less 7½ per cent paid to brokers as cash discount and commission. The remaining half of the 1911 crop was sold at from 11 to 13½ cents f. o. b., less the same commission. The production in 1912 was approximately 19,500,000 pounds, and the entire crop was marketed at 14 cents f. o. b., less the above rate of commission. In 1913 the crop was about 22,378,354 pounds, of which amount 1,224,302 pounds were so badly damaged by the hot wave which

visited southern California in September that they were marked as off-grade, at a considerably lower price than the standard grade of walnuts.

The price for the last twelve years is as follows:

Year	Price, cents	Year	Price, cents
1902 -----	10	1908 -----	12½
1903 -----	12½	1909 -----	15
1904 -----	11	1910 -----	14
1905 -----	13	1911 -----	14
1906 -----	11	1912 -----	14
1907 -----	15	1913 -----	16

Only two districts in Europe—Sorrento, in Italy, and Grenoble, in France—produce walnuts comparable in size and quality with those grown in California.

The bulk of imported nuts are of the Marbot and Cornes varieties, which correspond in size and quality to the second grade of the Pacific coast production. The consumption of walnuts in the United States has increased from about 23,000,000 pounds in 1903 to 53,000,000 pounds in 1912.

#### Almonds.

The production of almonds in California in 1912 was 6,000,000 pounds, or nearly double the quantity of the previous year, and in 1913 some 2,200,000 pounds. The net prices paid to growers, after all expenses of warehousing and selling had been paid, by the Almond Growers' Exchange, which controls about 60 per cent of the crop, is as follows:

Grade	Price, cents. 1911	Price, cents. 1912	Price, cents. 1913
Nonpareil -----	16½	13	17½
I X L -----	15½	12½	17
Ne Plus Ultra -----	14½	11½	16
Drake Seedling -----	12	9¾	13
Hardshell -----	8	7	8½



## CALIFORNIA FRUIT AND NUT CROPS.

1887—1913.

Imports and Exports of Apples, Apricots, Figs, Oranges, Lemons, Olives, Peaches, Nectarines, Pears, Prunes, Plums, Raisins, Dried Grapes, and Greek Currants.

## CANNED FRUITS, NUTS, ALMONDS, AND WALNUTS.

## APPLES (DRIED).

(None imported.)

Year	California crop, pounds	Exported	
		Pounds	Value
1887	700,000	8,130,396	\$413,363
1888	550,000	11,803,161	812,682
1889	500,000	22,102,579	1,201,070
1890	1,000,000	20,861,462	1,038,682
1891	1,800,000	6,973,168	409,605
1892	2,750,000	26,042,003	1,288,102
1893	3,800,000	7,966,819	482,085
1894	5,850,000	2,846,645	168,054
1895	4,560,000	7,085,946	461,214
1896	2,350,000	26,691,963	1,340,507
1897	5,250,000	30,775,401	1,340,159
1898	3,520,000	31,031,254	1,897,725
1899	5,900,000	19,305,739	1,245,733
1900	6,360,000	34,964,010	2,247,851
1901	6,450,000	28,309,023	1,510,581
1902	9,750,000	15,664,468	1,190,593
1903	3,600,000	39,646,297	2,378,635
1904	3,000,000	48,301,665	2,791,421
1905	6,500,000	39,272,890	2,208,414
1906	5,500,000	27,852,831	2,044,820
1907	3,600,000	45,697,948	3,166,946
1908	6,800,000	24,237,873	1,946,810
1909	5,800,000	33,474,634	2,339,936
1910	6,200,000	25,076,618	2,056,692
1911	9,000,000	21,804,086	1,944,209
1912	6,500,000	53,664,639	4,545,971
1913	4,000,000	41,574,562	2,898,211

## Dried Apples Exported in 1913.

Country	Pounds	Value
Germany	17,970,592	\$1,207,705
Netherlands	12,846,054	890,673
Other countries	10,757,916	799,833
Totals	41,574,562	\$2,898,211

## APRICOTS (DRIED).

(None imported.)

Year	California crop, pounds	Exported	
		Pounds	Value
1886	3,150,000		
1887	3,600,000		
1888	3,250,000		
1889	2,500,000		
1890	8,500,000		
1891	13,500,000		
1892	12,500,000		
1893	9,500,000		
1894	28,750,000		
1895	10,650,000		
1896	6,740,000		
1897	30,125,000		
1898	8,240,000		
1899	11,600,000		
1900	28,080,000		
1901	15,750,000		
1902	37,525,000	1,928,367	\$178,143
1903	21,000,000	9,190,081	713,887
1904	17,000,000	7,205,686	608,511
1905	38,500,000	6,854,154	606,777
1906	6,500,000	13,760,281	1,325,422
1907	3,000,000	2,760,432	336,812
1908	36,000,000	1,224,602	229,467
1909	32,000,000	16,597,871	1,512,417
1910	33,500,000	12,028,834	1,218,423
1911	14,000,000	19,329,358	2,085,437
1912	35,500,000	13,413,430	1,885,855
1913	18,000,000	35,016,730	3,513,473

## Dried Apricots Exported in 1913.

Country	Quantity	Value
United Kingdom	13,174,672	\$1,322,496
Germany	7,806,944	800,568
France	4,214,153	415,597
Netherlands	3,625,314	404,559
Other countries	6,195,647	570,253
Totals	35,016,730	\$3,513,473

## FIGS.

(Duty, 2 cents per pound.)

Year	California crop, pounds	Imported	
		Pounds	Value
1886	100,000	7,223,070	\$505,876
1887	200,000	8,724,583	487,602
1888	175,000	10,058,053	496,755
1889	225,000	10,649,049	482,759
1890	360,000	10,284,998	456,567
1891	365,000	9,201,565	697,562
1892	500,000	8,338,759	511,142
1893	890,000	10,503,928	548,995
1894	1,540,000	7,985,959	392,040
1895	2,750,000	11,855,890	587,420
1896	2,160,000	11,900,710	639,512
1897	3,250,000	8,940,762	535,380
1898	4,780,000	9,628,426	509,002
1899	5,800,000	7,284,058	356,762
1900	4,000,000	8,812,487	513,895
1901	6,500,000	9,933,871	458,513
1902	7,250,000	11,087,131	487,733
1903	6,000,000	16,482,142	775,917
1904	5,700,000	13,178,061	660,360
1905	7,250,000	13,364,107	617,027
1906	7,750,000	17,562,358	722,967
1907	6,000,000	24,346,173	1,136,924
1908	6,000,000	18,836,574	867,523
1909	7,500,000	15,235,513	691,981
1910	6,250,000	17,362,197	775,319
1911	8,000,000	23,459,728	1,059,340
1912	10,000,000	18,765,408	934,763
1913	11,100,000	17,003,848	944,317

Nearly all the figs are imported from Smyrna, in Turkey in Asia, about two million pounds from Greece and smaller quantities from Italy and Spain.

Exports of domestic figs are not shown separately in the customs returns, but are included in "All other green, ripe, or dried fruits."

## OLIVES.

(Duty, 15 cents per gallon.)

Year	Imported	
	Gallons	Value
1878		\$74,971
1879		48,549
1880		79,032
1881		112,456
1882		84,473
1883		108,329
1884-99		
1900		
1901-06		
1907	2,298,480	1,277,973
1908	3,121,788	1,358,897
1909	2,969,329	1,349,023
1910	4,555,975	1,659,801
1911	3,044,947	1,567,546
1912	5,076,857	2,303,277
1913	2,946,076	1,896,982

NOTE.—Olives in California, although cultivated on a considerable scale, have generally been considered one of the minor crops, and no regular records of the crop have been kept until the last few years. A large acreage has been planted in the last two or three years.

Most of the olives imported into this country come from Italy, France ranking second.

Exports of domestic olives and olive oil are not shown separately in the customs returns, but included in "All other fruits or oils."

### OLIVE OIL.

#### Imports.

(Duty, in cask, 20 cents per gallon; in bottles, 30 cents per gallon. Olive oil unfit for food, free.)

Year	For manufacturing or mechanical purposes		For table use	
	Gallons	Value	Gallons	Value
1880	118,369	\$83,543	264,762	\$442,935
1881	160,051	102,403	224,362	378,280
1882	243,190	151,067	264,838	478,747
1883	279,374	165,395	257,375	459,759
1884	610,429	672,552		
1885	*	*	493,928	†547,017
1886	*	*	634,354	†651,590
1887	*	*	744,766	†662,197
1888	*	*	654,162	†617,172
1889	*	*	893,338	†696,065
1890	*	*	893,984	†819,110
1891	*	*	605,509	†733,489
1892	*	*	706,486	†876,613
1893	*	*	686,852	†891,424
1894	*	*	757,478	†909,897
1895	*	*	775,046	†952,405
1896	*	*	942,598	†1,107,049
1897	*	*	928,567	†1,134,077
1898	*	*	736,877	†923,804
1899	*	*	930,042	†1,090,250
1900	*	*	967,702	†1,170,871
1901	*	*	983,059	†1,266,293
1902	*	*	1,339,097	†1,579,409
1903	*	*	1,494,132	†1,736,648
1904	*	*	1,713,590	†1,875,825
1905	*	*	1,923,174	†2,108,893
1906	2,538,366	1,105,876	2,447,131	2,566,994
1907	1,471,766	682,656	3,449,517	3,523,725
1908	1,565,253	703,829	3,799,112	3,876,901
1909	369,979	183,983	4,129,454	5,069,655
1910	842,926	477,679	3,702,210	4,869,114
1911	578,477	378,819	4,405,827	6,014,191
1912	636,013	389,539	4,836,515	6,170,882
1913	619,356	407,074	5,221,001	6,739,172

NOTE.—No record has been kept of the annual output of California olive oil, until recently, although the amount has been considerable for some years.

\*Included in "Olive oil for table use."

†1885-1905 includes olive oil for manufacturing purposes.

## CALIFORNIA ORANGE AND LEMON CROP.

(Carloads.)

Season	Southern California		Total carloads	Northern California*		Grand total, carloads
	Lemons	Oranges		Oranges	Lemons	
1886-87	12	2,200	2,212			
1887-88	20	2,500	2,520			
1888-89	26	2,782	2,808			
1889-90	34	3,476	3,510			
1890-91	40	4,016	4,056			
1891-92	52	4,400	4,452			
1892-93	65	5,871	5,936			
1893-94	145	5,726	5,871			
1894-95	335	4,687	5,022			
1895-96	565	7,010	7,575			
1896-97	1,378	5,972	7,350			
1897-98	1,166	13,987	15,153			
1898-99	903	9,448	10,351			
1899-1900	1,447	16,362	17,809			
1900-01	2,924	21,173	24,097			
1901-02	2,816	17,571	20,387			
1902-03	2,649	19,776	22,425	†1,304		23,729
1903-04	2,782	25,117	27,899	†1,567		29,466
1904-05	4,274	25,608	29,882	†1,734		31,616
1905-06	3,789	22,175	25,964	†1,564		27,528
1906-07	3,507	23,986	27,493	†2,333		29,826
1907-08	4,959	24,538	29,497	†3,150		32,647
1908-09	6,196	31,875	38,071	†2,501		40,572
1909-10	4,782	25,331	30,113	2,921	109	33,143
1910-11	6,764	36,821	43,585	2,687	127	46,399
1911-12	5,961	30,327	36,288	4,220	172	40,680
1912-13	2,192	13,574	15,766	2,453	112	18,331

\*Lemons and oranges not reported prior to 1902-03 and not shown separately until 1909. The number of boxes per car of oranges and lemons has varied considerably, as the size of cars in recent years has increased. In 1904-05, and prior to that date, oranges averaged about 374 boxes and lemons 313 boxes to the car. At the present time the numbers are about 396 for oranges and 336 for lemons.

†Including lemons.



## Imports and Exports of Oranges.

(Duty, in packages exceeding 5 cubic feet, or in bulk,  $\frac{1}{2}$  of 1 cent per pound.)

Year	Exports		Imports	
	Boxes	Value	Pounds	Value
1885				\$2,088,204
1886				1,871,839
1887				2,408,140
1888				2,268,872
1889				1,961,889
1890				1,916,652
1891				2,339,987
1892				1,210,338
1893				1,695,469
1894				1,127,005
1895				1,997,266
1896				2,694,131
1897				2,324,907
1898		\$339,396		886,722
1899		282,313		1,097,596
1900		271,468	68,618,938	1,087,041
1901		436,560	50,332,914	716,457
1902		420,835	52,742,476	784,640
1903		465,397	56,872,070	818,780
1904		739,593	35,896,260	525,468
1905		929,151	28,880,575	374,088
1906		1,110,993	31,134,341	456,726
1907		1,255,104	21,267,346	354,495
1908	654,251	1,577,661	18,397,429	275,060
1909	866,753	2,131,724	8,435,873	137,390
1910	932,118	2,213,905	4,676,118	82,457
1911	1,179,273	2,983,322	7,672,186	116,658
1912	1,197,363	3,022,859	7,628,662	108,880
1913	1,063,233	2,976,520	12,252,960	233,760

NOTE.—In years for which no figures are given, oranges were included in "Other fresh or dried fruits." Oranges are mostly imported from Mexico, West Indies, and Italy. The bulk of California oranges exported go to Canada.

The export of lemons in 1913 amounted to 81,949 boxes, value \$399,409.

## Imports of Lemons and Limes.

(Duty, in packages exceeding 5 cubic feet, or in bulk,  $\frac{1}{2}$  of 1 cent per pound.)

Year	Pounds	Value	Year	Pounds	Value
1885		\$2,510,426	1900	160,198,056	\$3,666,881
1886		2,608,819	1901	148,514,614	3,516,856
1887		3,835,147	1902	164,075,309	3,320,359
1888		3,395,983	1903	152,004,213	3,079,221
1889		3,189,534	1904	171,923,221	3,659,598
1890		3,374,032	1905	139,084,321	2,905,082
1891		4,351,970	1906	138,717,252	2,933,990
1892		4,548,263	1907	157,859,906	4,253,296
1893		4,994,328	1908	178,490,003	4,388,530
1894		4,285,278	1909	135,183,550	2,623,399
1895		3,917,326	1910	160,214,785	3,136,933
1896		5,040,344	1911	134,968,924	2,985,561
1897		4,043,822	1912	145,639,396	3,368,863
1898		2,848,130	1913	151,416,412	4,300,266
1899		4,398,004			

NOTE.—Of the imported lemons in 1912, 145,275,122 pounds came from Italy, and the balance of 364,274 from other countries. The exports of domestic lemons were not shown separately in the customs returns until 1913, but were included under "All other" fruit.

## PEACHES AND NECTARINES (DRIED).

(None imported.)

Year	California crop, pounds			Exported	
	Peaches	Nectarines	Total	Pounds	Value
1890	12,250,000	525,000	12,775,000		
1891	12,250,000	625,000	13,875,000		
1892	13,500,000	720,000	14,220,000		
1893	16,800,000	780,000	17,580,000		
1894	30,540,000	1,250,000	31,790,000		
1895	24,500,000	1,325,000	25,825,000		
1896	16,460,000	625,000	17,085,000		
1897	27,150,000	285,000	27,435,000		
1898	10,960,000	190,000	11,150,000		
1899	34,800,000	840,000	35,640,000		
1900	34,340,000	870,000	35,210,000		
1901	29,510,000	650,000	30,160,000		
1902	50,420,000	910,000	51,330,000		
1903	36,000,000	635,000	36,635,000		
1904	23,000,000	420,000	23,420,000		
1905	35,000,000	370,000	35,370,000		
1906	22,500,000	340,000	22,840,000	1,181,649	\$110,407
1907	24,000,000	275,000	24,275,000	1,757,650	186,043
1908	48,000,000	525,000	48,525,000	1,148,598	144,318
1909	40,000,000	750,000	40,750,000	2,403,430	151,334
1910	50,000,000	500,000	50,500,000	2,617,069	151,520
1911	22,000,000	800,000	22,800,000	7,125,014	499,530
1912	53,000,000	500,000	53,500,000	4,425,803	422,766
1913	40,000,000	400,000	40,400,000	6,529,633	444,879

NOTE.—Included in "All other green, ripe, or dried fruits" in the years where no figures are given.

## PEARS.

(None imported.)

Year	California crop, dried pears, pounds	Exported, green or ripe, value
1890	600,000	
1891	11,000,000	
1892	2,250,000	
1893	2,640,000	
1894	6,530,000	
1895	5,400,000	
1896	3,650,000	
1897	6,350,000	
1898	6,620,000	
1899	5,760,000	
1900	14,550,000	
1901	6,510,000	
1902	5,250,000	
1903	4,650,000	
1904	3,500,000	
1905	3,500,000	
1906	7,000,000	\$631,972
1907	1,000,000	675,944
1908	5,000,000	288,918
1909	2,500,000	546,198
1910	2,000,000	302,958
1911	4,000,000	578,067
1912	3,500,000	784,627
1913	2,000,000	796,913

NOTE.—Included under "All other green, ripe, or dried fruit" in the years where no figures are given. Dried pears are not shown separately. Pears are mostly exported to the United Kingdom and Canada.

**DRIED PRUNES.**  
(Duty, 1 cent per pound.)

Year	California crop, pounds	Exports	
		Pounds	Value
1886	4,340,000	*	*
1887	7,500,000		
1888	8,050,000		
1889	17,150,000		
1890	16,200,000		
1891	13,875,000		
1892	22,500,000		
1893	52,180,000		
1894	44,750,000		
1895	64,500,000		
1896	55,200,000		
1897	97,780,000		
1898	90,420,000	15,940,791	\$1,021,888
1899	112,900,000	5,615,565	380,847
1900	174,000,000	25,922,371	1,646,332
1901	81,600,000	10,021,564	589,113
1902	195,000,000	23,358,849	1,404,422
1903	165,000,000	66,385,215	3,512,507
1904	135,000,000	73,146,214	3,410,497
1905	70,000,000	54,993,849	2,455,056
1906	180,000,000	24,869,744	1,410,636
1907	105,000,000	44,400,104	2,400,960
1908	57,000,000	28,148,450	1,642,114
1909	150,000,000	22,602,288	1,078,210
1910	75,000,000	89,014,880	4,016,554
1911	140,000,000	51,030,711	3,271,971
1912	200,000,000	74,328,074	4,969,053
1913	90,000,000	117,950,875	6,665,870

\*Previous to 1898, the export of prunes was included under "Other fresh or dried fruits." The largest quantity of prunes exported go to Germany and Canada; the imports of prunes are included with plums.

**PLUMS.**  
(Duty, 1 cent per pound.)

Year	California plum crop, pounds	Imports of plums and prunes	
		Pounds	Value
1886	400,000	64,995,545	\$2,026,595
1887	450,000	92,032,625	2,999,648
1888	365,000	70,626,027	2,197,150
1889	330,000	46,154,825	1,423,304
1890	1,000,000	58,093,410	1,789,176
1891	1,250,000	34,281,322	2,054,486
1892	2,000,000	10,869,797	437,271
1893	1,500,000	26,414,112	1,162,318
1894	2,760,000	9,908,122	416,342
1895	4,500,000	14,352,057	527,625
1896	2,100,000	483,658	68,862
1897	3,250,000	710,028	73,303
1898	2,460,000	303,992	39,660
1899	3,360,000	600,360	63,574
1900	3,900,000	443,457	47,700
1901	3,450,000	745,974	62,880
1902	2,560,000	522,478	44,077
1903	2,870,000	633,819	63,218
1904	2,300,000	494,105	46,976
1905	1,860,000	671,604	63,617
1906	2,000,000	497,494	53,348
1907	1,500,000	323,377	45,386
1908	1,000,000	335,089	49,322
1909	1,200,000	296,123	41,696
1910	750,000	*	*
1911	1,200,000	*	*
1912	750,000	*	*
1913	1,200,000	*	*

\*Included in "All other fruits" after 1909, the quantity being so small.

## CALIFORNIA RAISIN CROP, AND EXPORTS AND IMPORTS.

(Duty on raisins and dried grapes, 2 cents per pound.)

Year	California crop, pounds	Exports		Imports	
		Pounds	Value	Pounds	Value
1884	3,500,000			53,702,220	\$3,290,150
1885	9,400,000			38,319,787	2,661,699
1886	14,460,000			40,387,946	2,885,123
1887	16,000,000			40,673,288	2,881,981
1888	18,860,000			40,476,763	2,070,120
1889	19,740,000			35,091,139	1,736,786
1890	38,000,000			36,914,330	1,997,103
1891	52,000,000			39,572,655	2,018,879
1892	57,000,000			20,687,640	964,309
1893	85,000,000			27,543,563	1,266,342
1894	103,000,000			13,751,050	554,081
1895	91,000,000			15,921,278	651,420
1896	68,000,000			10,826,094	460,200
1897	93,000,000			12,650,598	567,039
1898	80,000,000	3,109,639	\$167,062	6,593,833	381,889
1899	71,000,000	4,659,807	242,620	4,933,201	282,400
1900	90,000,000	2,415,456	139,689	10,309,498	531,124
1901	74,000,000	3,512,164	218,715	3,860,836	297,631
1902	106,000,000	2,323,274	149,216	6,683,545	399,973
1903	120,000,000	4,280,028	284,530	6,715,675	476,844
1904	75,000,000	4,020,418	281,402	6,867,617	355,542
1905	87,000,000	7,054,824	372,087	4,041,689	273,031
1906	95,000,000	4,528,502	305,768	12,414,855	524,590
1907	140,000,000	9,128,827	599,395	3,967,151	364,403
1908	130,000,000	5,684,541	427,583	9,132,353	554,633
1909	140,000,000	7,880,161	455,657	5,794,320	327,644
1910	115,000,000	8,526,114	417,403	5,042,683	296,047
1911	120,000,000	18,659,992	1,069,300	2,479,220	237,422
1912	185,000,000	19,949,046	1,351,986	3,255,861	295,466
1913	130,000,000	28,121,507	1,512,642	2,579,705	241,630

NOTE.—Imported raisins come almost entirely from Spain, and sultanas, which are included in the above figures, from Smyrna in Turkey in Asia. These latter have also greatly decreased in recent years from upward of 7,000,000 pounds in 1906 to less than 500,000 pounds the last two years. Canada is our best customer for raisins, taking 11,004,000 pounds. Other countries taking over one million pounds are: New Zealand 2,647,000 pounds, Germany 1,336,000 pounds and the United Kingdom 1,130,000 pounds.

## DRIED GRAPES.

(Imports and exports included in raisins.)

Year	California crop, pounds	Year	California crop, pounds
1886	1,600,000	1900	480,000
1887	1,800,000	1901	350,000
1888	2,340,000	1902	375,000
1889	2,500,000	1903	410,000
1890	10,500,000	1904	340,000
1891	5,500,000	1905	385,000
1892	4,000,000	1906	400,000
1893	4,880,000	1907	375,000
1894	4,520,000	1908	360,000
1895	4,250,000	1909	450,000
1896	2,700,000	1910	650,000
1897	3,450,000	1911	500,000
1898	640,000	1912	800,000
1899	450,000	1913	767,850



## IMPORTS OF GREEK CURRANTS.

(Duty, 1½ cents per pound.)

Year	Pounds	Value
1891*	33,128,140	\$1,246,074
1892*	36,665,828	1,269,119
1893*	33,166,546	1,185,537
1894*	52,664,843	774,802
1895*	16,450,706	258,659
1896*	33,040,846	551,072
1897	29,265,761	596,084
1898	25,186,210	837,987
1899	30,849,253	798,357
1900	36,251,779	916,908
1901	16,049,198	916,994
1902	36,238,976	1,238,756
1903	33,878,209	743,644
1904	38,347,649	997,430
1905	31,742,919	764,289
1906	37,078,311	1,119,146
1907	38,392,779	1,746,941
1908	38,652,656	1,592,018
1909	32,482,111	1,185,106
1910	33,326,030	1,190,020
1911	33,439,565	1,486,263
1912	33,151,396	1,561,350
1913	47,003,345	1,602,987

\*From 1891 to 1894, currants were duty free, and in 1895, 1896 and 1897, currants not from Zante were admitted free. Currants practically all come from Greece.

## CALIFORNIA CANNED FRUIT, AND EXPORTS.

(None imported.)

Year	California pack, cases	Exports, value
1886	675,000	\$580,422
1887	772,500	506,794
1888	1,360,400	834,668
1889	1,420,600	915,341
1890	1,495,300	698,321
1891	1,571,200	703,880
1892	1,602,370	1,558,820
1893	1,001,640	1,137,660
1894	1,528,815	660,723
1895	1,639,807	871,465
1896	1,602,446	1,376,281
1897	1,942,982	1,686,723
1898	2,085,166	1,624,741
1899	3,003,100	2,330,715
1900	2,775,800	3,127,278
1901	2,677,000	3,006,109
1902	2,252,000	1,195,635
1903	2,783,500	1,739,571
1904	2,840,600	2,637,002
1905	3,252,500	2,541,025
1906	3,125,000	2,348,064
1907	2,983,000	1,581,047
1908	4,734,000	1,549,826
1909	3,047,000	2,899,374
1910	3,600,000	2,656,019
1911	4,095,035	2,686,445
1912	5,005,950	4,012,463
1913	4,015,500	5,599,373

Exported domestic canned fruit in 1912, to the United Kingdom, \$2,690,834; to all other countries, \$1,321,629.



## IMPORTS OF MISCELLANEOUS FRUITS.

## Duty on Imported Preserved Fruits.

Preserved in sugar or their own juices, 1 cent a pound; if containing over 10 per cent of alcohol, 20 per cent ad valorem and in addition \$2.50 per proof gallon of alcohol in excess of 10 per cent. Jellies, 20 per cent ad valorem; pineapples preserved in their own juice, 20 per cent ad valorem.

Year	Prepared or preserved fruits, value	All other fresh or dried fruits, value	Total fruits, value
1890	954,331	3,168,367	\$18,310,007
1891	1,289,137	2,552,245	23,018,937
1892	1,234,828	2,508,940	18,176,471
1893	864,166	3,372,666	20,944,918
1894	526,561	2,980,584	16,566,782
1895	570,568	1,725,342	15,227,079
1896	598,928	2,128,056	16,957,307
1897	605,053	1,810,807	14,926,771
1898	922,357	1,294,855	12,329,012
1899	1,020,644	1,579,652	15,586,664
1900	1,243,479	1,989,546	16,284,758
1901	1,366,801	2,059,130	16,317,848
1902	1,454,788	2,053,588	17,436,184
1903	1,521,443	2,353,864	18,860,238
1904	1,796,209	2,749,670	18,964,688
1905	1,599,488	2,924,187	19,779,113
1906	2,437,766	2,484,345	21,542,322
1907	1,272,445	1,363,167	26,124,277
1908	1,550,246	2,250,815	27,710,799
1909	1,062,775	1,912,949	22,446,430
1910	956,368	920,362	24,177,160
1911	893,633	971,572	27,017,632
1912	936,008	1,693,516	29,549,281
1913	795,399	1,115,330	28,657,084

Bananas to the value of about \$14,000,000, and dates valued at \$363,734, are also imported, but not being produced in California, are omitted from these lists.

## EXPORTS OF DOMESTIC FRUITS.

Year	Preserved other than canned	Other fresh or dried fruits	Total fruits
1890	59,401	1,003,846	\$4,031,686
1891	93,996	699,798	2,384,176
1892	214,738	1,095,845	6,565,461
1893	224,381	881,804	3,823,897
1894	211,215	1,016,397	2,299,006
1895	47,420	1,522,100	4,856,517
1896	70,353	1,868,353	5,585,783
1897	43,276	2,172,199	7,613,500
1898	82,504	2,033,845	8,851,878
1899	66,899	1,997,649	7,757,235
1900	63,448	2,545,451	11,486,172
1901	71,597	2,716,269	10,607,908
1902	94,323	2,153,050	8,415,103
1903	66,757	4,215,034	17,558,119
1904	115,490	4,317,910	20,348,299
1905	71,868	2,253,638	15,297,391
1906	89,872	1,727,943	14,857,272
1907	104,663	2,246,384	17,206,267
1908	137,929	2,360,360	13,965,840
1909	77,746	2,104,624	16,079,227
1910	176,474	2,119,210	18,504,591
1911	205,643	2,792,281	23,893,663
1912	136,870	3,812,304	30,354,700
1913	181,749	2,893,395	36,345,517

## ALMONDS.

(Duty, 3 cents per pound; shelled, 4 cents per pound.)

Year	California crop. pounds	Imported	
		Pounds	Value
1890	250,000	5,715,858	\$813,278
1891	500,000	6,812,061	931,007
1892	1,066,000	7,629,392	1,028,671
1893	720,000	6,679,147	938,054
1894	2,125,000	7,436,784	769,453
1895	1,850,000	7,903,375	810,439
1896	3,210,000	7,789,681	763,594
1897	4,750,000	9,644,338	880,263
1898	900,000	5,746,362	659,659
1899	4,640,000	9,957,427	1,222,587
1900	5,480,000	6,317,633	949,083
1901	3,000,000	5,140,232	946,138
1902	6,540,000	9,868,982	1,240,886
1903	6,400,000	8,142,164	1,337,717
1904	1,600,000	9,838,852	1,246,474
1905	4,250,000	11,745,081	1,520,063
1906	1,800,000	15,009,326	1,825,475
1907	1,850,000	14,283,613	2,331,816
1908	6,000,000	17,144,968	2,410,648
1909	3,500,000	11,029,421	1,852,523
1910	6,800,000	18,556,356	3,153,645
1911	3,400,000	15,552,712	2,896,573
1912	6,000,000	17,231,458	3,253,495
1913	2,200,000	*15,670,558	3,344,658

Practically all almonds are imported from Spain, Italy and France.

\*Of the above quantity imported, 13,078,771 pounds were shelled and 3,591,787 pounds unshelled.

## WALNUTS.

(Duty on imported walnuts, unshelled, 2 cents per pound; shelled, 4 cents.)

Year	California crop. pounds	Imported	
		Pounds	Value
1890	2,000,000		
1891	2,124,000		
1892	2,950,000		
1893	2,866,000		
1894	5,805,000		
1895	4,620,000		
1896	8,230,000		
1897	7,970,000		
1898	11,300,000		
1899	11,160,000		
1900	10,860,000		
1901	13,800,000		
1902	17,140,000		
1903	11,000,000	12,362,567	\$1,106,033
1904	15,180,000	23,670,761	1,729,378
1905	11,500,000	21,684,104	1,469,463
1906	12,250,000	24,917,028	2,193,653
1907	14,000,000	32,597,592	2,969,649
1908	18,000,000	28,887,110	2,765,486
1909	17,000,000	26,157,703	2,409,644
1910	15,000,000	33,641,466	3,538,264
1911	22,000,000	33,619,434	4,471,227
1912	19,500,000	37,213,674	4,069,515
1913	22,378,354	*26,662,441	3,499,981

Years for which no figures are given are included in "Other nuts."

\*Of the above number imported 16,291,313 pounds were unshelled, and 10,371,128 shelled.

## IMPORTED NUTS.

(Duty on imported peanuts, unshelled,  $\frac{3}{4}$  of 1 per cent per pound; shelled,  $\frac{3}{4}$  of 1 per cent per pound; all others (except almonds, peanuts and walnuts) 1 cent per pound.)

Year	Peanuts and other ground nuts		Miscellaneous nuts, value	Total all nuts, group
	Pounds	Value		
1890				
1891			\$800,376	\$2,437,767
1892			1,115,978	2,997,456
1893			822,255	2,792,846
1894			951,941	2,744,741
1895			631,759	2,187,989
1896			730,411	2,012,844
1897			868,799	2,075,132
1898			848,511	2,200,161
1899			1,002,344	2,237,938
1900			879,166	2,727,542
1901			1,326,804	2,978,834
1902			1,518,484	3,268,855
1903			1,971,072	4,044,341
1904			1,514,406	4,866,398
1905			1,523,462	5,471,166
1906			2,082,344	6,158,343
1907			2,055,557	7,373,425
1908			2,100,274	9,742,883
1909			1,790,375	9,643,943
1910			1,717,374	8,664,253
1911	29,276,235	\$1,234,088	1,218,052	13,246,742
1912	18,834,441	765,033	1,254,943	14,498,413
1913	15,558,098	575,282	858,837	15,827,988
	18,756,422	769,666	977,161	13,965,569

In 1913 the unshelled peanuts imported amounted to 12,281,580 pounds, and the shelled to 6,474,842 pounds.

## EXPORTS OF DOMESTIC NUTS.

Year	Peanuts		Other nuts, value	Total nuts, value
	Pounds	Value		
1890				
1891				\$27,861
1892				50,617
1893				60,684
1894				94,902
1895				125,233
1896				115,274
1897				93,283
1898				125,805
1899				161,432
1900				140,250
1901				156,490
1902				218,743
1903				304,241
1904				299,558
1905				330,366
1906*				309,195
1907	7,180,163	\$275,927	\$140,959	416,886
1908	6,386,012	278,236	103,929	382,165
1909	5,503,685	283,819	89,205	373,024
1910	5,501,107	242,569	246,284	488,853
1911	4,484,613	224,779	156,284	381,063
1912	5,447,185	276,651	328,151	604,802
1913	5,920,711	305,465	303,473	608,938
	7,301,381	366,016	367,569	733,585

\*Prior to 1906 peanuts were not shown separately in the customs returns.

TABLE XXX.

## ORCHARD FRUITS BY COUNTIES.\*

Number of Bearing Trees in 1910, and Production.

Counties	Apples		Apricots		Cherries	
	Number of trees	Bushels	Number of trees	Bushels	Number of trees	Bushels
Alameda	26,045	38,346	270,461	399,035	89,284	89,662
Alpine	1,140	642	7		63	2
Amador	8,592	11,990	1,197	949	1,143	1,588
Butte	34,425	42,671	9,900	11,126	4,317	4,403
Calaveras	13,341	21,583	672	465	459	329
Colusa	3,067	4,507	4,420	3,323	223	228
Contra Costa	13,429	18,494	38,812	19,906	7,258	5,139
Del Norte	3,234	3,110			48	38
El Dorado	31,929	26,529	503	786	3,259	3,051
Fresno	32,097	34,505	186,823	206,536	2,729	104
Glenn	4,617	4,909	6,830	2,310	78	48
Humboldt	73,010	1,552,585	235	267	3,733	5,040
Imperial	86	3	1,922	673		
Inyo	19,611	35,430	342	416	539	331
Kern	7,725	10,006	33,573	48,955	163	64
Kings	4,196	8,507	124,007	234,147	11	205
Lake	22,254	18,537	1,463	536	590	764
Lassen	12,679	10,349	70	17	439	61
Los Angeles	101,433	118,528	122,769	181,079	795	168
Madera	20,576	11,227	9,408	6,188	40	20
Marin	15,995	6,907	1,689	633	165	111
Mariposa	16,601	29,141	233	415	120	216
Mendocino	63,263	112,856	187	305	1,181	1,576
Merced	8,941	7,267	7,381	4,263	343	64
Modoc	28,969	60,202	652	788	963	1,033
Mono	1,088	850	6	1	197	190
Monterey	290,404	501,847	27,996	36,067	1,729	723
Napa	41,301	47,216	16,953	16,273	16,955	20,895
Nevada	20,223	25,800	193	133	1,727	1,810
Orange	11,992	12,218	129,352	328,931	23	9
Placer	42,704	26,848	4,092	1,023	31,209	67,429
Plumas	3,534	1,391	18		65	10
Riverside	10,577	9,977	83,069	145,159	982	765
Sacramento	10,948	18,235	10,480	9,951	17,173	33,729
San Benito	26,593	31,385	61,694	106,806	3,421	1,761
San Bernardino	55,150	79,077	111,125	171,763	3,057	2,928
San Diego	37,662	45,687	20,858	33,001	1,792	1,729
San Francisco	40	230				
San Joaquin	5,053	7,019	53,007	27,474	21,590	13,669
San Luis Obispo	35,006	56,047	20,123	25,929	702	463
San Mateo	18,634	31,317	3,694	1,259	671	228
Santa Barbara	2,744	38,511	15,512	29,237	659	238
Santa Clara	102,841	118,603	783,585	958,163	173,002	90,198
Santa Cruz	647,136	2,090,968	63,021	95,042	17,608	25,368
Shasta	35,440	47,556	839	2,141	2,785	2,311
Sierra	3,398	4,895			67	114
Siskiyou	31,055	19,521	366	363	1,850	1,478
Solano	4,862	6,857	310,262	180,011	53,923	52,512
Sonoma	386,740	818,725	9,087	10,374	43,927	58,710
Stanislaus	3,680	1,693	20,451	14,122	1,182	380
Sutter	5,433	7,806	5,986	3,443	1,249	967
Tehama	15,633	16,256	30,446	26,128	624	321
Trinity	4,272	4,951	41	33	247	205
Tulare	25,261	28,241	48,834	56,042	316	290
Tuolumne	13,544	16,558	162	120	144	118
Ventura	15,179	19,170	219,836	562,978	392	1,047
Yolo	2,512	3,654	117,228	101,396	4,534	5,908
Yuba	5,468	7,133	1,481	342	559	265
Totals	2,482,762	6,335,073	2,992,453	4,066,823	522,304	501,013

\*For the number of bearing trees in orchard fruits in 1890 and 1900, see Report for 1912, pages 162-164.



TABLE XXX—Continued.

## ORCHARD FRUITS BY COUNTIES.\*

Number of Bearing Trees in 1910, and Production.

Counties	Peaches and nectarines		Pears	
	Number of trees	Bushels	Number of trees	Bushels
Alameda	12,555	14,561	70,382	99,994
Alpine	28	40	79	36
Amador	16,349	20,606	5,112	4,430
Butte	255,047	356,683	22,159	25,318
Calaveras	5,954	6,794	2,178	5,358
Colusa	4,075	3,372	2,432	1,906
Contra Costa	39,461	38,525	68,088	75,803
Del Norte	42	32	129	154
El Dorado	61,800	58,738	49,672	36,848
Fresno	2,277,314	2,727,978	13,356	7,548
Glenn	6,420	3,175	1,655	1,500
Humboldt	9,471	10,552	3,804	8,196
Imperial	432	228	347	11
Inyo	4,602	5,037	2,668	2,676
Kern	35,149	30,278	1,057	1,065
Kings	777,697	803,637	4,379	8,007
Lake	9,288	8,336	39,075	39,871
Lassen	1,455	1,753	632	479
Los Angeles	160,197	234,581	16,149	21,161
Madera	40,989	20,996	1,185	1,164
Marin	6,313	3,092	4,151	8,979
Mariposa	1,618	1,803	701	1,528
Mendocino	6,928	10,031	15,829	23,666
Merced	134,991	90,954	5,704	2,624
Modoc	2,113	1,866	1,888	3,334
Mono	91	61	123	122
Monterey	7,381	8,693	5,194	8,061
Napa	71,080	65,843	50,210	81,812
Nevada	17,873	22,488	36,800	26,279
Orange	12,461	13,104	2,100	2,973
Placer	683,824	1,084,566	142,999	115,950
Plumas	184	35	261	112
Riverside	72,933	77,138	18,447	13,424
Sacramento	99,635	129,981	161,094	308,352
San Benito	12,301	25,132	12,409	22,903
San Bernardino	197,763	246,049	2,302	3,421
San Diego	29,800	29,530	6,023	7,585
San Francisco	120	125		
San Joaquin	185,073	229,175	13,664	13,096
San Luis Obispo	10,614	10,325	5,097	8,869
San Mateo	572	643	1,688	1,923
Santa Barbara	9,560	11,337	2,612	5,148
Santa Clara	437,677	574,514	142,550	206,214
Santa Cruz	11,868	10,873	23,100	33,456
Shasta	98,950	110,712	33,952	64,803
Sierra	157	83	148	414
Siskiyou	4,371	3,779	2,300	2,164
Solano	341,266	474,444	182,194	319,303
Sonoma	237,220	165,396	109,965	128,421
Stanislaus	154,553	89,385	4,158	1,804
Sutter	149,057	287,894	17,911	32,754
Tehama	260,204	276,049	141,584	26,992
Trinity	886	873	738	1,468
Tulare	714,494	622,373	6,483	4,948
Tuolumne	3,065	2,063	1,056	2,004
Ventura	8,943	15,630	2,597	3,776
Yolo	116,003	219,660	38,115	71,897
Yuba	8,744	5,517	10,220	25,993
Totals	7,829,011	9,267,118	1,410,905	1,928,097

\*For the number of bearing trees in orchard fruits in 1890 and 1900, see Report for 1912, pages 162-164.



TABLE XXX—Continued.

## ORCHARD FRUITS BY COUNTIES.\*

Number of Bearing Trees in 1910, and Production.

Counties	Plums and prunes		Total	
	Number of trees	Bushels	Number of trees	Bushels
Alameda .....	157,981	157,270	627,824	799,976
Alpine .....	214	42	1,531	762
Amador .....	10,685	11,880	43,332	51,757
Butte .....	104,474	252,141	452,302	693,210
Calaveras .....	8,265	9,901	31,276	44,963
Colusa .....	57,468	111,658	71,796	125,122
Contra Costa .....	58,177	54,831	225,939	213,351
Del Norte .....	96	222	3,549	3,556
El Dorado .....	32,764	23,327	180,017	149,543
Fresno .....	66,926	139,252	2,579,859	3,116,325
Glenn .....	24,860	8,559	44,565	20,613
Humboldt .....	26,950	12,161	117,368	1,589,053
Imperial .....	347	3	3,170	926
Inyo .....	2,349	1,845	30,164	45,760
Kern .....	58,075	74,053	136,088	164,626
Kings .....	132,192	258,851	1,048,506	1,315,117
Lake .....	47,244	54,807	120,037	122,945
Lassen .....	2,223	1,069	17,511	13,731
Los Angeles .....	43,592	34,295	446,698	590,929
Madera .....	7,570	435	80,156	40,077
Marin .....	3,775	2,625	32,263	22,420
Mariposa .....	762	1,168	19,461	34,283
Mendocino .....	37,197	63,356	125,282	212,320
Merced .....	5,401	3,437	163,013	108,843
Modoc .....	3,182	4,660	37,776	71,883
Mono .....	86	10	1,595	1,234
Monterey .....	6,189	4,122	339,105	559,680
Napa .....	299,613	407,023	497,391	639,976
Nevada .....	6,955	7,055	84,259	84,046
Orange .....	4,569	5,295	160,667	362,981
Placer .....	279,766	323,731	1,190,074	1,673,123
Plumas .....	510	161	4,574	1,709
Riverside .....	34,357	54,873	220,723	301,493
Sacramento .....	206,553	269,547	506,961	772,257
San Benito .....	91,066	223,443	207,537	411,477
San Bernardino .....	8,779	6,473	379,533	509,989
San Diego .....	16,022	8,204	112,993	126,427
San Francisco .....	945	575	1,105	930
San Joaquin .....	83,641	102,991	364,290	395,038
San Luis Obispo .....	21,383	15,236	93,217	117,126
San Mateo .....	18,279	14,686	43,655	50,130
Santa Barbara .....	2,730	4,822	34,200	89,858
Santa Clara .....	3,387,455	3,854,070	5,043,766	5,807,595
Santa Cruz .....	112,269	109,959	875,642	2,366,344
Shasta .....	87,959	159,696	262,136	387,566
Sierra .....	232	262	4,002	5,768
Siskiyou .....	5,683	4,405	45,708	31,735
Solano .....	465,341	714,730	1,357,911	1,747,916
Sonoma .....	569,232	596,953	1,364,105	1,784,301
Stanislaus .....	6,095	3,492	190,515	111,304
Sutter .....	65,723	136,082	244,587	469,829
Tehama .....	92,459	133,024	441,070	478,915
Trinity .....	1,083	1,329	7,313	8,906
Tulare .....	264,337	639,586	1,059,830	1,351,573
Tuolumne .....	1,404	1,302	19,554	22,254
Ventura .....	12,541	15,755	259,682	618,490
Yolo .....	119,193	214,792	397,748	617,448
Yuba .....	3,487	2,447	30,264	41,998
Totals .....	7,168,705	9,317,979	22,485,195	31,501,507

\*For the number of bearing trees in orchard fruits in 1890 and 1900, see Report for 1912, pages 162-164.

TABLE XXXI.

## TROPICAL FRUITS BY COUNTIES.\*

Number of Bearing Trees in 1910, and Production.

Counties	Figs		Olives		Lemons	
	Number of trees	Pounds	Number of trees	Pounds	Number of trees	Boxes
Alameda	482	9,990	10,963	45,285	660	2,144
Alpine			4	50		
Amador	347	24,315	274	2,600	8	12
Butte	9,518	337,725	73,453	2,242,445	2,223	1,222
Calaveras	1,839	142,990	4,065	10,465	19	37
Colusa	1,391	60,577	336	5,716	199	148
Contra Costa	293	16,235	9,744	340,410	148	92
Del Norte	1					
El Dorado	587	74,060	37	4,020		
Fresno	120,124	15,898,146	72,788	655,302	12,389	10,083
Glenn	879	63,235	445	14,290	593	432
Humboldt	82	2,430				
Imperial	606	10,450	41		36	4
Inyo	14	400				
Kern	1,475	92,990	393	2,950	54	37
Kings	391	26,720	5	400		
Lake	1,062	41,896	3,198	7,390	8	
Lassen						
Los Angeles	5,736	397,376	84,934	1,549,419	219,149	704,301
Madera	4,321	82,290	18,010	38,035	15	16
Marin	201	1,065	48	150	26	25
Mariposa	461	135,455	2,711	2,452	35	50
Mendocino	358	25,125	7	100		
Merced	9,837	793,495	6,981	90,916	209	217
Modoc						
Mono						
Monterey	217	9,146	657	2,622	7	
Napa	1,234	20,889	20,176	36,885	258	86
Nevada	1,468	67,225	419	4,273	6	
Orange	1,066	25,123	67,046	828,204	46,954	74,227
Placer	4,463	105,802	26,396	417,415	714	683
Plumas	6		6			
Riverside	2,054	73,796	80,572	1,281,970	115,020	304,683
Sacramento	1,145	54,450	34,077	969,962	2,500	1,636
San Benito	128	4,615	4		5	4
San Bernardino	1,144	33,790	30,190	486,478	157,731	630,108
San Diego	2,459	94,323	109,871	2,559,792	195,318	473,543
San Francisco			1			
San Joaquin	4,037	232,063	19,998	506,268	75	58
San Luis Obispo	819	43,317	1,597	28,877	955	1,475
San Mateo	36	525	7,187	141,006	1	1
Santa Barbara	853	40,255	44,258	1,275,022	46,181	134,168
Santa Clara	985	31,500	13,945	639,227	996	1,201
Santa Cruz	333	12,845	1,243	2,500	349	233
Shasta	2,306	53,270	9,616	7,541	7	1
Sierra						
Siskiyou	3	10			2	
Solano	4,598	497,159	1,221	34,874	126	163
Sonoma	3,850	98,105	10,863	54,490	396	235
Stanislaus	37,676	397,675	5,458	129,384	576	262
Sutter	4,675	447,470	3,018	170,581	602	641
Tehama	3,176	115,472	17,373	394,449	356	354
Trinity	20	255			2	
Tulare	15,750	1,037,350	5,605	89,921	41,069	65,466
Tuolumne	237	17,435	10		6	
Ventura	618	29,653	25,961	686,171	95,018	347,804
Yolo	10,476	1,128,670	4,482	307,395	183	222
Yuba	3,159	81,200	6,660	64,710	109	147
Totals	269,001	22,990,353	836,347	16,132,412	941,293	2,756,221

\*For the number of bearing trees of tropical fruits in 1890 and 1900, see Report for 1912, pages 165-167.

NOTE.—The production being in pounds and citrus fruits in boxes, the total production for each county can not be given.

TABLE XXXI—Continued.

## TROPICAL FRUITS BY COUNTIES.

Number of Bearing Trees in 1910, and Production.

Counties	Oranges		Pomelos		Total trees
	Number of trees	Boxes	Number of trees	Boxes	
Alameda	3,782	6,074	4	2	15,900
Alpine					4
Amador	151	283			780
Butte	147,412	128,108	122	171	235,442
Calaveras	388	544	3	2	6,315
Colusa	1,537	2,970	70	147	3,537
Contra Costa	402	453			10,597
Del Norte					1
El Dorado	53	195			677
Fresno	85,781	92,640	346	431	291,754
Glenn	4,860	1,704	5	13	6,783
Humboldt	1				83
Imperial	1,410	3,012	18	1	2,411
Inyo					14
Kern	80,940	32,232	16	7	82,888
Kings	24	31			425
Lake	72	13			4,340
Lassen					
Los Angeles	1,674,695	4,124,161	6,853	11,810	1,994,402
Madera	184	114	2		22,532
Marin	79	147	5	9	387
Mariposa	1,169	1,691	1	1	4,378
Mendocino	4	3			370
Merced	1,572	1,097	11	2	18,613
Modoc					
Mono					
Monterey	29	25			913
Napa	1,192	535	9	21	23,251
Nevada	364	320	2		2,311
Orange	478,272	1,247,905	677	2,612	597,383
Placer	26,921	14,103	289	411	59,906
Plumas					12
Riverside	1,021,957	2,006,902	4,477	16,408	1,224,217
Sacramento	46,256	61,517	864	1,278	84,863
San Benito	42	10			179
San Bernardino	1,951,254	5,425,759	13,134	60,149	2,153,501
San Diego	107,457	167,201	5,764	12,950	425,260
San Francisco					1
San Joaquin	1,950	1,854	2		26,070
San Luis Obispo	794	1,225	75	49	4,253
San Mateo	25	9			7,249
Santa Barbara	4,246	12,272	716	931	99,023
Santa Clara	1,905	1,354	57	9	18,023
Santa Cruz	330	151	7	6	2,279
Shasta	55	39			11,986
Sierra					
Siskiyou					6
Solano	2,950	2,737	15		8,911
Sonoma	5,047	4,209	8	4	20,226
Stanislaus	10,492	8,087	18	1	54,291
Sutter	2,427	3,335	18	14	10,741
Tehama	10,744	7,975	5	4	31,654
Trinity					22
Tulare	801,151	758,465	8,114	13,551	872,657
Tuolumne	114	122			367
Ventura	131,681	310,239	392	909	253,754
Yolo	2,371	2,949	1,325	612	18,858
Yuba	1,263	1,409			11,205
Totals	6,615,805	14,436,180	43,424	122,515	8,726,005

NOTE—The production being in pounds, and citrus fruits in boxes, the total production for each county cannot be given.

## TABLE XXXII.

## GRAPES AND NUTS BY COUNTIES.\*

Number of Vines and Bearing Trees in 1910, and Production.

Counties	Grapes		Almonds		Pecans	
	Number of vines bearing	Production, pounds	Number of trees	Pounds	Number of trees	Pounds
Alameda	2,390,959	20,671,600	21,190	155,871	5	80
Alpine	9,000	56,000	12	75		
Amador	314,604	2,743,320	628	3,931	1	50
Butte	258,742	1,499,000	84,069	799,351	158	5,450
Calaveras	212,300	1,457,030	14,624	27,080	6	
Colusa	482,417	5,010,240	16,078	90,479	10	340
Contra Costa	2,972,130	32,217,131	209,056	830,112	25	200
Del Norte					3	
El Dorado	581,342	4,891,740	438	3,850		
Fresno	40,687,207	611,253,961	7,390	56,472	56	225
Glenn	20,416	145,300	25,739	61,055	15	350
Humboldt	4,095	76,405	304	580		
Imperial	298,813	1,210,475	29			
Inyo	39,478	292,730	28	1,080	9	150
Kern	419,582	1,715,540	3,101	23,505	563	1,290
Kings	4,538,732	91,434,166	1,721	37,040	2	40
Lake	296,752	1,750,522	8,281	47,316	6	350
Lassen	31	800	8			
Los Angeles	4,923,877	44,846,307	76,949	57,770	313	6,400
Madera	1,530,630	21,105,970	2,778	7,975	5	
Marin	115,198	1,982,560	151	1,112		
Mariposa	28,647	285,740	159	1,918		
Mendocino	924,191	6,471,050	229	4,260		
Merced	1,281,342	12,085,751	17,132	114,499	31	200
Modoc	795	7,100				
Mono	2,000	20,000				
Monterey	79,935	754,340	2,196	24,050	3	100
Napa	8,595,338	66,876,897	18,731	90,783	996	
Nevada	94,338	757,865	1,325	11,980	10	40
Orange	282,682	2,684,855	1,248	70	26	1,350
Placer	1,340,132	11,231,830	11,539	64,431	2	
Plumas						
Riverside	1,570,794	12,133,389	21,789	168,570	98	3,520
Sacramento	7,627,510	399,386,705	66,372	335,257	3	100
San Benito	177,976	1,620,030	6,958	73,922	6	100
San Bernardino	5,987,127	38,608,263	634	15,479		
San Diego	1,228,858	15,204,430	9,279	40,521	1,080	19,205
San Francisco	3,000	10,000				
San Joaquin	13,371,794	175,879,915	97,024	547,300	6	250
San Luis Obispo	265,481	1,937,110	9,281	46,990	1	
San Mateo	124,990	695,440	94	425		
Santa Barbara	208,595	590,485	239	3,150	70	130
Santa Clara	5,584,480	41,129,250	25,862	198,186	136	1,000
Santa Cruz	1,365,414	7,315,935	240	1,855	5	
Shasta	117,481	643,463	8,056	43,210	7	100
Sierra						
Siskiyou	2,473	44,507	83	2,611	2	
Solano	1,213,265	16,276,990	98,276	650,933	134	2,175
Sonoma	17,939,972	137,556,285	2,893	11,279	43	220
Stanislaus	1,932,302	18,595,445	33,726	118,198	25	760
Sutter	1,249,923	25,162,300	61,572	343,084	11	
Tehama	1,307,218	16,416,690	32,919	219,396	10	
Trinity	2,842	57,950	30	5	1	
Tulare	7,227,491	95,037,424	1,977	59,822	26	505
Tuolumne	95,811	580,502	54	200	1	
Ventura	36,398	505,892	12,057	166,180	301	
Yolo	2,568,019	26,109,390	149,019	1,109,760	9	245
Yuba	162,751	2,652,510	3,163	19,535	6	30
Totals	144,097,670	1,979,686,525	1,166,730	6,692,513	4,226	44,955

\*For the number of grape vines and bearing trees in nuts in 1890 and 1900, see Report of 1912, pages 167-169.



TABLE XXXII—Continued.

## NUTS BY COUNTIES.\*

Number of Bearing Trees in 1910, and Production.

Counties	Walnuts		Total nuts	
	Number of trees	Pounds	Number of trees	Pounds
Alameda	3,726	46,183	25,250	210,142
Alpine			12	75
Amador	185	3,266	830	7,602
Butte	1,063	22,906	85,445	832,019
Calaveras	832	22,117	15,619	51,932
Colusa	1,306	13,463	17,409	105,782
Contra Costa	6,148	110,088	215,249	941,400
Del Norte	3		6	
El Dorado	880	10,855	1,512	27,130
Fresno	634	7,991	8,203	70,097
Glenn	220	3,617	26,336	67,707
Humboldt	498	8,220	827	8,975
Imperial	24	400	53	400
Inyo	35	940	72	2,170
Kern	127	1,565	3,819	26,615
Kings	24	1,215	1,747	38,295
Lake	564	5,232	8,920	55,198
Lassen	8	250	16	250
Los Angeles	281,837	6,138,033	359,349	6,204,703
Madera	14	560	2,797	8,535
Marin	61	385	212	1,497
Mariposa	91	2,019	262	4,270
Mendocino	360	9,990	762	33,040
Merced	633	11,538	17,845	127,357
Modoc	3	80	27	535
Mono				
Monterey	306	3,287	2,505	27,437
Napa	7,767	44,164	27,622	135,747
Nevada	1,105	13,811	2,768	32,048
Orange	276,842	7,478,955	278,879	7,492,175
Placer	535	3,276	12,122	69,065
Plumas	4		4	
Riverside	3,040	67,491	24,940	239,581
Sacramento	755	21,682	67,156	357,539
San Benito	1,369	29,800	8,333	103,822
San Bernardino	2,228	43,777	2,900	60,742
San Diego	9,159	194,829	19,651	259,730
San Francisco				
San Joaquin	2,455	6,548	99,499	554,098
San Luis Obispo	7,871	223,493	17,264	277,783
San Mateo	223	2,010	331	2,435
Santa Barbara	96,776	2,678,039	97,091	2,681,694
Santa Clara	19,070	227,955	48,398	469,926
Santa Cruz	4,015	25,880	4,757	40,640
Shasta	1,168	14,380	9,339	64,760
Sierra	24	1,260	24	1,260
Siskiyou	30	275	185	5,046
Solano	1,806	27,636	100,239	681,194
Sonoma	11,955	144,040	16,631	168,151
Stanislaus	864	10,995	34,701	134,103
Sutter	671	7,130	62,289	350,214
Tehama	1,569	13,500	34,555	237,596
Trinity	58	1,510	91	1,560
Tulare	1,942	28,612	3,945	88,939
Tuolumne	175	6,465	240	6,840
Ventura	98,622	3,665,935	110,984	3,832,116
Yolo	1,270	19,953	150,822	1,151,868
Yuba	287	4,665	3,458	24,280
Totals	853,237	21,432,266	2,034,302	28,378,115

\*For the number of grape vines and bearing trees in nuts in 1890 and 1900, see Report of 1912, pages 167-169.



TABLE XXXIII.

## SMALL FRUITS BY COUNTIES.

Number of Acres in 1910, and Production.

Counties	Strawberries		Blackberries and dewberries		Total	
	Acres	Quarts	Acres	Quarts	Acres	Quarts
Alameda	18	41,770	12	20,225	401	890,867
Alpine						1,510
Amador	6	9,259	13	18,655	29	46,124
Butte	48	54,513	57	76,793	148	207,794
Calaveras	5	11,210	14	13,366	34	37,948
Colusa	1	2,120	5	7,039	7	12,564
Contra Costa	1	2,880	3	2,774	6	13,654
Del Norte	1	1,050		300	1	1,760
El Dorado	5	8,215	11	12,480	23	31,427
Fresno	148	750,708	91	247,186	310	1,196,613
Glenn	2	2,945	4	8,980	8	15,005
Humboldt	58	152,758	4	5,757	87	219,489
Imperial			1	1,426	1	1,726
Inyo	5	5,591	8	9,835	21	18,621
Kern	2	2,112	26	24,900	34	32,087
Kings	15	53,810	13	33,260	31	94,940
Lake	6	12,227	15	15,261	25	33,910
Lassen	3	3,380	2	2,354	20	14,889
Los Angeles	1,380	5,135,203	280	1,019,735	1,975	7,837,987
Madera	2	1,750	3	1,380	7	4,270
Marin	1	1,750		380	3	5,130
Mariposa	1	1,217	2	4,470	7	8,705
Mendocino	22	35,296	14	11,900	57	69,492
Merced	5	8,377	21	25,230	34	47,293
Modoc	9	10,113	9	11,515	37	44,168
Mono		1,220		48	1	5,011
Monterey	263	2,449,084	56	268,180	407	3,663,576
Napa	22	45,316	26	18,903	59	72,503
Nevada	4	7,047	15	29,245	55	78,369
Orange	76	192,365	43	71,907	205	401,218
Placer	433	1,062,214	62	198,039	582	1,581,263
Plumas	6	6,828	1	584	13	11,881
Riverside	27	59,305	28	49,554	64	123,772
Sacramento	450	1,676,826	52	143,729	554	1,974,178
San Benito	35	34,367	1	4,310	54	68,426
San Bernardino	34	52,917	68	112,255	130	190,564
San Diego	43	275,744	22	45,635	87	369,546
San Francisco						
San Joaquin	33	93,367	31	51,650	92	226,154
San Luis Obispo	45	61,895	30	42,845	137	131,117
San Mateo	*56	210,850	10	15,030	69	232,655
Santa Barbara	24	125,766	32	99,084	63	233,123
Santa Clara	460	989,600	228	304,022	1,011	1,785,865
Santa Cruz	489	1,384,784	116	163,757	744	1,707,208
Shasta	44	51,975	32	35,067	95	112,667
Sierra	2	2,623	1	964	6	5,997
Siskiyou	7	15,011	10	11,057	31	41,053
Solano	5	11,060	5	5,560	12	19,110
Sonoma	103	195,330	930	1,413,936	1,471	2,106,103
Stanislaus	95	184,399	53	84,073	161	290,431
Sutter	1	1,550	7	8,008	16	24,186
Tehama	36	57,921	7	11,163	49	83,593
Trinity	5	4,668	5	4,307	15	14,039
Tulare	19	44,078	70	87,262	119	181,574
Tuolumne	5	10,652	8	9,729	19	29,153
Ventura	14	72,350	7	18,566	31	138,600
Yolo	1	210	6	6,162	10	10,774
Yuba	4	4,750	6	8,692	19	22,408
Totals	4,585	15,694,326	2,576	4,898,524	9,687	26,824,120

NOTE.—The totals include other fruits, for which see page 111.

PART V.

CALIFORNIA WINE INDUSTRY.

Sweet Wines in Other States, California Vineyards, Sparkling Wines, Grape Juice, Price of Wine Grapes, Imports and Exports of Wine and Brandy, California Brandies, Vintages 1891-1913.

The California wine industry, with its extensive vineyards of wine grapes and enormous investments of capital, has attained such proportions as to demand special notice. In sweet wines the production has more than doubled within the last ten years, and the output is much greater than that of all other states combined.\*

The State Board of Viticultural Commissioners estimates that more than half the acreage of vineyards in the State is planted to wine grapes, the area being about 170,000 acres. It also estimates the amount paid to growers by the wineries in 1913 at \$6,000,000.

Production of Sweet Wines in the United States in 1913.

State	Gallons
New Jersey, port.....	8,045
New York, port, 175,279; sweet catawba, 462,510.....	637,789
North Carolina, Scuppernong.....	92,031
Virginia, Scuppernong .....	581,672
Total .....	1,319,537
California total .....	17,927,812

In the production of wine previous to 1891, it is not possible to arrive at the totals for each year as given in the census reports, owing to different classification. The wines made in wineries are included in separate returns under the head of "manufactures," and the value of the product, instead of the quantity, is stated. The figures are as follows:

Wine Made in Wineries.

Year	Establishments	Capital	Cost of material	Value of product
1860 .....	11	\$173,000	\$53,030	\$160,300
1870 .....	139	658,420	203,631	602,553
1880 .....	45	639,600	292,075	622,087
1890 .....	128	3,729,413	840,222	1,738,863
1900 .....	187	4,658,625	2,526,768	3,937,871
1910 .....	181			8,936,848

\*For the early history of wine production in California, see Report of 1912, pages 170-172.

For 1960, the following additional figures are given in the census reports:

Pounds of grapes used.....	320,398,267
Cost.....	\$2,160,655
Still wine, gallons.....	19,019,378
Value.....	\$3,817,582
Effervescing wine, gallons.....	8,880
Value.....	\$27,220

NOTE.—Only 169,955 gallons of effervescing wine were made in the United States in 1900.

#### Great Wine Grape Vineyards.

Some of the California vineyards are now the largest and best cultivated in the world. In the southern part of the State there is the large vineyard of the Italian Vineyard Company, in San Bernardino County, comprising 3,547 acres of all the best varieties, including Alicante Bouchet, Zinfandels, Burger, Folle Blanche, and a dozen others. In central California there is the Wahtoke vineyard, near Reedley, in Fresno County, of 3,631 acres, with 2,500 acres already planted and in bearing and containing some twenty of the leading varieties; and in northern California there is the Vina vineyard, in Tehama County, with 1,500 acres, mostly in Zinfandel and Burger. These are the most important vineyards in the State.

#### Largest Wine Producing Countries.

The largest wine producers and consumers in the world are France and Italy, in Europe, and Argentina, in South America. The total area under wine grapes in Italy is over 11,000,000 acres; in France about 4,000,000 acres, and in Germany about 280,000 acres. The Argentina vintage in 1912, according to the Minister of Agriculture, was 107,800,000 gallons, produced from 1,345,000,000 pounds of grapes. The bulk of this enormous output, as in France and Italy, is consumed at home.

#### Area of Vineyards and Production of Wine in Specified Countries, 1911-1912.

(From a report of the International Institute of Agriculture.)

Country	Area		Production (wine)	
	1912. acres	1911. acres	1912. gallons	1911. gallons
Italy .....	11,008,305	11,063,161	1,162,348,000	1,126,793,360
France .....	4,148,663	4,156,501	1,567,559,288	1,185,740,254
Spain .....	3,123,356	3,187,533	369,838,000	389,572,846

#### Consumption of Wine and Other Liquors.

The production of wine, both in quantity and quality, varies considerably from year to year in all countries, grapes depending more than almost any other crop upon weather conditions. France is the largest producer in the world, followed closely by Italy. In all wine countries the domestic consumption is large, in France amounting to 33 gallons per capita, in Italy 25.1 gallons, and Spain ranks next with rather more than 18 gallons. In English-speaking countries the consumption is very small. The production of wine in the leading foreign countries in Europe is enormous; both France and Italy produce upward of a billion gallons in some years. Much of this is of a very inferior character, and is consumed at home.



There is no reliable data available regarding the production of the various kinds of dry wine, but since 1890 the exact figures for sweet wines and brandy have been recorded, and are here given, so that a comparison can be made. The quantity of sweet wine has increased during the last twenty years from 1,083,000 gallons in 1891 to 23,467,000 in 1912 (Aug.-Dec. 1911), which is by far the heaviest in the history of the industry. Owing to the dry season the quantity was only 17,927,812 for 1913.

Port and sherry are the two leading wines, the former leading as a rule, but in some years the output of sherry comes to the front, as in 1903 and 1912, when it was upwards of 8,000,000 gallons. In the three years 1910-1912 the output of port was upwards of 9,000,000 gallons. Muscatel and Angelica are the next favorites, followed by Malaga and Tokay.

The imports of foreign wines have remained steady during the last few years, the value being about \$10,000,000 annually.

It is acknowledged that the best wines of California and of South America are equal to those produced in Europe. California grows the principal wine grapes of France, Italy, Spain, Portugal and Germany, and the variety of types of wines produced is unequaled by any country in the world. Conditions suitable for the growth of any variety, including the American varieties of the eastern states, are found here.

Surplus table and shipping grapes are used for the manufacture of wine, but the qualities desirable in a shipping grape differ from those of a good wine grape and the product is inferior. They are more suitable for making brandy, which is their principal use. Surplus raisin grapes are used for the same purposes, but the quality is somewhat better. Large quantities of sweet wine and brandy are made from the Muscat of Alexandria and form a special type of their own.

The great bulk of all the dry and sweet wines and of brandy is made from a special wine grape which is unsuited for other purposes.

#### Wine Districts of California.

It is usual to classify the wine-producing areas of California into "Dry wine districts" and "Sweet wine districts." Those included in the former are situated principally in the valleys and hills of the counties of the Coast Range, from Mendocino to San Diego. The great central valleys of Sacramento and San Joaquin, from Shasta to Kern, constitute the latter. While this classification corresponds fairly accurately with the practice of the wine-makers and with the nature of their actual products, it is not quite logical, as both sweet and dry wines can be made in nearly all, if not all, the grape-growing districts of California, and if justified by the demand of the market, all the wine grapes of California could be used for the manufacture of good dry wine.

A more rational classification would be into fine wine and bulk wine districts. This would be a very difficult classification to make, however, as the areas would not correspond to any geographical districts.

Fine wines are made on the warm, well-drained slopes of the Coast Range, of hills in similar situations in the foothills of the Sierra and in favored locations in valley and plain, where the physical conditions of the soil resemble those of the hill slopes. The quality of the wines may be equal in all these locations, though the character will differ widely, according to the climate and to the variety of grapes grown.

In the cooler and later parts of the northern and central grape growing regions of the coast counties, the lightest dry wines, resembling the Rhine, Moselle, Champagne and Medoc types are made. In the warmer parts of these same regions and in favored locations in the Sierra foothills and southern California, wines resembling Chablis, Burgundy, Hermitage, Sauternes and the fine wines of Italy are made. By a careful choice of varieties and methods, fine wines of dry Sherry or Madeira type can be made throughout the hotter regions.

Bulk, or cheap wines, can be made anywhere that the soil, water and climate favor the production of large crops. This includes the rich valleys both of the coast and of the interior. The bulk wines of the coast tend to be too high in natural acidity and low in alcohol; those of the interior with abundant alcohol are usually deficient in acidity. These opposite defects are mutually complementary and by judicious blending, either of the grapes before or of the wines after fermentation, good standard wines can be produced very cheaply.

#### Wine Grapes Used in California.

Practically all the principal wine grapes of Europe have been introduced into California and tested. About four fifths of the wine, both dry and sweet, however, is made from about a dozen varieties, and between forty and fifty will include over 95 per cent of the wine grapes.

The Zinfandel is the typical red wine grape of California and is grown in larger quantities than any other. From it the bulk of dry and sweet red wines is made. The proportion of Zinfandel, however, tends to diminish in newer plantings. Other red wine varieties largely planted are Carignane, Petite Sirah, Mataro, Petit Bouschet, Alicante Bouschet, Grenache, Blue Elbling and Charbono. The commonest white wine grapes are Burger, Colombar, Palomino, Green Hungarian, Feher Szagos and Muscat of Alexandria. Of table and raisin grapes, used largely for wine making, the principal are, besides the Muscat, Flame Tokay, Malaga, Sultanina (Thompson's Seedless) and Verdal.

The fine wines are made principally of Petite Sirah, Colombar and Semillon, though a large number of other fine varieties are used in varying amounts.

The yield of average vineyards varies from one or two tons per acre to eight or ten tons. This difference depends principally on the soil and climate and on the methods of the grape grower. Some varieties have the reputation of being heavy bearers and some of being light. The differences, however, are more those of proper adaptation to conditions and the use of proper viticultural methods. A variety, such as the Semillon, with a reputation as a light bearer, may produce seven or eight tons to the acre, if planted in a suitable location and properly pruned and cultivated. A variety such as the Burger owes its reputation for heavy bearing to the fact that it will bear in almost any location and however unskillfully it is treated. Practically all varieties producing fine wines require great care in selection of cuttings, suitable soil and climate and skilled treatment by the cultivator. Varieties recommended for various purposes in various regions are given below:



## Wine Grapes Recommended for California.

## FOR COOLER REGIONS.

*Fine wines of Rhine type:* Franken Riesling, Johannisberger, Traminer.

*Fine wines of Sauterne type:* Semillon, Colombar, Sauvignon blanc.

*Fine wines of Chablis type:* Marsanne, Chardonay, Peverella.

*Bulk white wines:* Palomino, Green Hungarian.

*Fine wines of Medoc type:* Cabernet Sauvignon, Beclan, Blue Portuguese, Verdot, Merlot.

*Fine wines of Hermitage type:* Petite Sirah, Mondeuse, Tannat.

*Bulk red wines:* Zinfandel, Carignane.

## FOR WARMER REGIONS.

*Fine white wines:* Franken Riesling, Johannisberger, Vernaccia Sarda, Marsanne.

*Bulk white wines:* Burger, Folle blanche, West's White Prolific.

*Fine red wines:* Valdepeñas, St. Macaire, Lagrain, Gros Mansenc, Barbera, Refosco.

*Bulk red wines:* Zinfandel, Alicante Bouschet.

## FOR SWEET WINES.

*Fine white:* Furmint, Beba, Boal.

*Bulk white:* Palomino, Perruno, Mourisco, Branco.

*Fine red:* Trousseau, Tinta Madeira.

*Bulk red:* Grenache, Mission, Monica, California Black Malvoisie, Tinta Amerella, Alicante Bouschet.

*Muscat:* Muscat of Alexandria, Frontignan.

Some varieties, such as the Riesling, give fine wines, though of different character, wherever they are planted. Others produce a fine wine in one locality and a poor wine in another. The Cabernet Sauvignon produces a fine wine in the cooler regions and a harsh, disagreeable wine in the hot regions. The Valdepeñas produces a better wine in the hot interior than in the coast regions.

Most of the varieties recommended for bulk wines are capable of yielding fine wines under favorable conditions, when blended with a sufficient quantity of finer varieties.

According to the quantity of sugar retained by the arrest of fermentation, wines are divided into sweet and dry; according to color, into red and white; and according to the quantity of carbonic acid gas generated in fermentation and retained under pressure, into still and effervescing wines, such as champagne. The quantity of sugar contained in grapes used for wine making is influenced by many conditions, such as the variety of the grape, soil, climate, and the vicissitudes of the season, and will vary from 13 to 30 per cent. In fermentation, sugar is converted into alcohol, and for the sweet wines the grapes with the largest percentage of sugar are selected. Before enough of the sugar is fermented out to convert the juice into a dry wine, grape brandy is added to give the requisite alcoholic strength and to arrest fermentation. Red wines are made from grapes with colored skins which are fermented with the juice, and from which the alcohol formed by the fermentation of the sugar absorbs the coloring matter. White wines are usually made from distinct types of light-colored grapes, fermented without the skins.\*

\*Professor Frederic T. Bioletti, of the University of California.

The production of sweet wine during 1911 constituted a record, the quantity of the different varieties up to the close of the year being as follows:

Varieties (made August-December, 1911).	1911
Angelica .....	2,609,518
Malaga .....	327,172
Muscatel .....	2,247,219
Madeira .....	119,781
Port .....	9,522,237
Sherry .....	8,559,868
Sweet Catawba .....	
Tokay .....	81,645
Fractional gallons .....	4
Totals .....	23,467,444

The production of wine and brandy is given for the fiscal year ending June 30th, but as almost all the wine is made in the fall of the year, the vintage is really that of the previous year. For example, the 1912 vintage appears under the year ending June 30, 1913.

The estimated production of sweet wines and brandy made last season from August, 1913, to January 31, 1914, is almost the same as the previous year.

Varieties (August-December, 1913).	Gallons
Angelica .....	1,195,641
Muscatel .....	1,512,727
Malaga .....	288,170
Madeira .....	40,914
Port .....	9,158,474
Sherry .....	4,900,360
Tokay .....	39,816
Total .....	17,136,104

The total amount of brandy produced was 6,584,908 gallons, and the quantity used for fortification 2,820,314 gallons, and the quantity of dry wines is estimated at 25,000,000 gallons.

#### Sparkling Wines.

The manufacture of sparkling wines is now engaging the attention of the wine makers in California and promises to be successful. The production of naturally fermented champagne in the bottle during the last three years has steadily increased, the total being estimated as follows:

Year	Bottles
1911 .....	580,000
1912 .....	800,000
1913 .....	1,000,000

The bottling is done in the months of June and July of the following year. The increase in the output is largely due to the heavy bottling of the Italian Swiss Colony during the past ten years. Last year they

filled 400,000 bottles of Golden State Champagne, which is the brand they will offer during the Exposition year, and this year it is expected that 600,000 bottles will be filled at Asti.

#### Grape Juice.

The manufacture of grape juice in this State does not appear to be increasing. The best authorities place the quantity at about 75,000 gallons, and the highest at not exceeding 100,000 gallons, and it is claimed that so far, there is no profit in its manufacture.

Many judges consider that some of the eastern varieties of grapes, such as the Concord, are better suited for the making of grape juice.

#### Prices of Wine Grapes.

The prices paid for grapes vary considerably, according to the varieties and districts. The average price for standard wine grapes, such as Zinfandel, in the bay counties were in 1911 \$14 per ton, and in 1912 \$15 per ton, but for special varieties, such as Petite Sirah, Serene, Mondeuse, Cabernet, etc., as high as \$20 was paid.

In Fresno County, in 1911 the price paid for average sweet wine grapes (not including Muscats) was \$10 per ton, and in 1912 from \$5 to \$6 per ton.

In other parts of the San Joaquin Valley and the Sacramento Valley \$9 per ton was paid for average wine grapes in 1911, and as high as \$11 for special varieties. In 1912 standard grapes were \$6 per ton, and for special varieties, or under contract, as high as \$10 per ton. During the year 1913 the average price was \$10 per ton, and \$27.50 per ton in dry wine districts in the coast counties.

#### California Brandy.

The following summary shows that almost all the brandy made in the United States is produced by California. In 1913 California produced 7,472,561 gallons, and all other states only 780,313 gallons.

#### Total Fruit Brandy Produced in the United States, 1891-1913.

For the fiscal year ended June 30th—	Production of fruit brandy, including apple, peach, and grape, gallons
1891	1,804,712
1892	3,667,465
1893	2,358,548
1894	2,948,159
1895	1,960,176
1896	3,403,852
1897	1,813,427
1898	2,906,198
1899	3,097,769
1900	3,760,487
1901	4,047,602
1902	4,220,400
1903	6,430,673
1904	5,193,262
1905	5,448,584
1906	4,444,072
1907	6,138,304
1908	6,899,823
1909	6,440,857
1910	7,656,433
1911	7,953,131
1912	9,321,823
1913	8,252,874

Under the provisions of "An act to reduce revenue and equalize duties on imports, and for other purposes," approved October 1, 1890, provision was made for the fortification with grape brandy, free of tax, of pure sweet wine, and of wine intended for exportation. Since that year exact returns have been kept by the Internal Revenue Department of the quantity of the various kinds of wines produced and the amount of brandy used for fortification.

#### Brandy From Other Fruits.

Brandy is also produced from other fruits, and until 1908 was shown separately from grape brandy in the internal revenue returns; since then all brandy is included under the head of "fruit brandy." The quantity, however, is not large; in 1908, the last year the varieties are shown separately, fruit brandy, other than grape brandy, was only 94,558 gallons, while grape amounted to 5,367,489 gallons.

#### Variety and Quantity of Fruit Brandy.

Varieties	Gallons
Prune -----	60,594
Peach -----	21,210
Pear -----	9,339
Apricot -----	2,178
Apple -----	897
Orange -----	280
Fig -----	30
Berry -----	30
Total -----	94,558

The production of brandy during the last twenty years has also greatly increased; in 1891 the quantity amounted to 1,474,876 gallons, and in 1913 to 7,472,561 gallons; considerably more than one half of this is used for fortifying the sweet wines, the amount used for this purpose in 1913 amounting to 4,671,415 gallons.



## SUMMARY OF CALIFORNIA VINTAGES, 1866-1913.\*

(For the fiscal year ending June 30th.)

Year	Sweet wine, gallons	Dry wine, gallons	Total wine, gallons	Brandy used for fortifications
1851-65				
1866			2,250,000	
1867			2,500,000	
1868			4,000,000	
1869			3,000,000	
1870			3,800,000	
1871			4,500,000	
1872			3,000,000	
1873			2,500,000	
1874			4,000,000	
1875			4,000,000	
1876			4,000,000	
1877			4,000,000	
1878			5,000,000	
1879			7,000,000	
1880			10,200,000	
1881			8,000,000	
1882			9,000,000	
1883			8,500,000	
1884			10,000,000	
1885			11,000,000	
1886			18,000,000	
1887			15,000,000	
1888			17,000,000	
1889			15,500,000	
1890			14,626,000	
1891	1,083,274	18,900,000	19,983,274	193,557
1892	2,746,655	12,200,000	14,946,655	695,844
1893	2,652,480	22,000,000	24,652,480	617,593
1894	4,724,595	9,200,000	13,924,595	1,112,794
1895	4,242,600	13,700,000	17,942,600	1,018,483
1896	6,084,009	10,900,000	16,984,009	1,484,887
1897	4,968,339	11,400,000	16,368,339	1,174,466
1898	7,024,372	24,400,000	31,424,372	1,688,949
1899	7,779,031	11,200,000	18,979,031	1,860,721
1900	8,433,383	15,000,000	23,433,383	2,063,033
1901	9,177,560	13,000,000	22,177,560	2,220,659
1902	9,301,353	33,600,000	42,901,353	2,292,721
1903	16,059,747	18,500,000	34,559,747	4,011,865
1904	13,571,845	16,000,000	29,571,845	3,329,804
1905	13,161,198	18,000,000	31,161,198	3,260,421
1906	11,502,309	29,000,000	40,502,309	2,998,998
1907	15,657,572	26,800,000	42,457,572	3,962,352
1908	16,491,169	27,700,000	44,191,169	4,233,977
1909	14,368,025	33,900,000	48,268,025	3,678,376
1910	18,086,868	27,400,000	45,486,868	4,702,863
1911	18,850,167	26,000,000	44,850,167	4,951,640
1912	17,927,812	25,000,000	42,927,812	6,153,131
1913	23,467,444	22,000,000	45,467,444	4,671,415

\*The above figures for sweet wine and brandy are exact; the amount of dry wine can only be estimated, as no complete records are kept. Wines being made in the fall, the vintages belong to the previous year, thus the vintage for the year ending June 30, 1913, was mostly made from August to December, 1912.



**Total Production of Sweet Wines by Vintages—1908-1913.\***  
(Gallons.)

Varieties	1908	1909	1910
Angelica -----	1,513,534	919,540	1,361,290
Lenoir -----	452		
Malaga -----	216,390	73,518	81,175
Moselle -----	3,488		
Muscatel -----	2,449,211	2,242,412	1,767,387
Madeira -----	13,316	51,716	2,785
Port -----	6,015,052	5,859,630	9,051,017
Sherry -----	6,267,323	5,189,598	5,690,080
Tokay -----	12,400	31,607	133,132
Fractional gallons -----	3	4	2
<b>Totals -----</b>	<b>16,491,169</b>	<b>14,368,025</b>	<b>18,086,868</b>

Varieties	1911	1912	1913
Angelica -----	1,241,431	2,609,518	1,640,738
Malaga -----	223,739	327,172	184,308
Muscatel -----	1,087,411	2,247,219	2,070,827
Madeira -----	363,455	119,781	48,714
Port -----	9,780,864	9,522,237	8,334,993
Sherry -----	5,955,886	8,559,868	5,619,502
Sweet Catawba -----	9,497		
Tokay -----	187,882	81,645	28,725
Fractional gallons -----	2	4	5
<b>Totals -----</b>	<b>18,850,167</b>	<b>23,467,444</b>	<b>17,927,812</b>

\*For vintages, from 1891-1907, see Report for 1912, pages 181-182.

**SUMMARY OF WINES PRODUCED, BY VARIETIES, 1891-1913.**

(Gallons.)

Year	Angelica	Frontignan	Lenoir	Madeira	Malaga
1891 -----	182,208				3,248
1892 -----	379,964				62,000
1893 -----	339,590				
1894 -----	386,860				42,929
1895 -----	364,297	6,133	949		2,795
1896 -----	466,156	6,327	6,081		2,906
1897 -----	330,032	9,020		2,269	
1898 -----	748,686				11,614
1899 -----	438,419	3,048			14,267
1900 -----	870,195				975
1901 -----	548,095			901	
1902 -----	465,104				
1903 -----	887,238				
1904 -----	1,029,404				81,136
1905 -----	1,187,683				18,847
1906 -----	566,604				8,098
1907 -----	1,009,600				11,899
1908 -----	1,513,534		452	13,316	216,390
1909 -----	919,540			51,716	73,518
1910 -----	1,361,290			2,785	81,175
1911 -----	1,241,431			363,455	223,739
1912 -----	2,609,518			119,781	327,172
1913 -----	1,640,738			48,714	184,308

**SUMMARY OF SWEET WINE PRODUCED, BY VARIETIES, 1891-1913.**  
(Gallons.)

Year	Muscatel	Port	Sherry	Sweet Catawba	Tokay
1891	106,922	663,668	124,837		2,391
1892	145,735	1,723,744	423,383	555	5,686
1893	353,299	1,535,227	424,138	226	
1894	400,064	2,808,832	1,084,714		1,193
1895	188,437	2,309,702	1,370,284		
1896	863,227	2,613,734	2,118,942		6,634
1897	960,897	1,670,495	1,994,649		974
1898	721,556	3,158,545	2,372,197		11,772
1899	819,105	3,441,592	3,053,163		9,433
1900	868,388	3,949,631	2,697,682		46,508
1901	1,611,116	4,407,250	2,597,377		12,819
1902	1,909,485	2,854,477	4,069,538		2,749
1903	1,741,952	5,171,103	8,233,871		25,580
1904	721,033	7,630,881	4,109,075		316
1905	1,398,532	5,530,310	5,011,744		14,080
1906	933,647	5,322,203	4,648,305		23,448
1907	1,484,447	7,708,226	5,443,397		
1908	2,449,211	6,015,052	6,267,323		12,400
1909	2,242,412	5,859,630	5,189,598		31,607
1910	1,767,387	9,051,017	5,690,080		133,132
1911	1,087,411	9,780,864	5,955,886		187,882
1912	2,247,219	9,522,237	8,559,868		81,645
1913	2,070,827	8,334,993	5,619,502		28,725

NOTE.—The wine is made in the fall of the previous year, which is the real date of the vintage, but the returns are made for the fiscal year ending June 30th.

In 1892 5,588 gallons of Sauterne were reported, and in 1908 3,488 gallons of Moselle, but this is probably an error, as neither can be classed as sweet wines.

**CALIFORNIA BRANDY.**

(For fiscal year ending June 30th.)

Year	Produced	Number of fruit distilleries		
		Used for fortification of sweet wines	Registered	Operated
1885	312,197			
1886	329,679			
1887	673,610			
1888	864,704			
1889	913,481			
1890	1,072,306			
1891	1,474,876	193,557	288	284
1892	2,197,613	695,844	298	295
1893	1,642,284	617,593	292	286
1894	2,256,607	1,112,794	272	267
1895	1,677,082	1,018,483	270	268
1896	2,066,404	1,484,887	235	229
1897	1,439,285	1,174,466	239	237
1898	2,382,241	1,688,949	267	267
1899	2,775,164	1,860,721	238	232
1900	3,060,078	2,063,033	208	194
1901	3,194,544	2,220,659	222	212
1902	3,464,391	2,292,721	213	209
1903	5,614,215	4,011,865	230	223
1904	4,451,928	3,329,804	225	216
1905	4,602,133	3,260,421	224	218
1906	3,864,080	2,998,998	224	201
1907	5,367,489	3,962,352	209	193
1908	*6,388,076	4,233,977	216	202
1909	*5,971,171	3,678,376	206	201
1910	*7,170,212	4,702,863	203	195
1911	*7,316,488	4,951,640	211	202
1912	*8,721,693	6,153,131	192	181
1913	*7,472,561	4,671,415	184	179

\*Including fruit brandy other than grape.

## IMPORTS AND EXPORTS OF WINE AND BRANDY.

## Wines Imported.

Year	*Champagne and other sparkling		*Still wines in casks		*Still wines in bottles		Total value of wines
	Doz. qts.	Value	Gallons	Value	Doz. qts.	Value	
1851	117,229	\$655,108	5,852,510	\$1,470,811	143,487	\$233,360	\$2,359,279
1852	111,579	620,176	6,039,863	1,333,213	138,934	249,841	2,203,230
1853	145,211	880,712	6,742,678	1,778,390	191,464	416,529	3,075,631
1854	184,900	1,004,028	6,436,812	1,873,738	270,651	493,036	3,370,802
1855	157,717	909,922	4,669,729	1,641,078	310,967	566,330	3,117,330
1856	179,064	970,706	3,622,282	1,559,081	297,831	634,653	3,164,440
1857	210,474	1,148,469	5,336,391	2,448,913	331,436	676,823	4,274,205
1858	156,593	860,942	3,940,542	1,862,548	255,024	522,898	3,246,388
1859	246,186	1,385,760	5,022,765	1,687,404	260,698	534,984	3,608,148
1860			7,620,010	2,650,644	1,882,428	2,125,149	4,775,793
1861			4,416,583	1,790,805	1,190,829	1,347,370	3,138,175
1862			1,904,637	697,235	522,339	559,469	1,256,704
1863			3,862,706	1,172,055	736,429	967,884	2,139,939
1864 <sup>1</sup>							3,391,576
1865	107,786	768,513	2,477,249	986,675			1,755,188
1866	192,784	1,551,206	11,405,573	3,908,940			5,460,146
1867	155,033	1,269,327	7,919,912	3,150,281			4,419,608
1868	162,822	1,358,236	5,292,761	2,207,669			3,565,905
1869			6,693,682	2,478,126	323,228	2,289,393	4,767,519
1870			9,087,159	3,214,996	520,622	2,586,361	5,801,357
1871			9,553,156	3,228,177	484,570	2,545,146	5,773,323
1872			9,484,157	3,290,439	430,691	2,754,035	6,044,474
1873			9,836,442	3,584,766	455,260	2,866,982	6,451,748
1874			7,839,837	3,156,979	419,422	2,887,109	6,044,088
1875			6,731,593	2,842,622	401,849	2,708,652	5,551,274
1876			4,436,016	2,084,385	364,946	2,669,725	4,754,110
1877			4,192,630	1,889,871	309,995	2,236,889	4,126,760
1878			3,686,157	1,838,891	295,172	2,123,254	3,962,145
1879			4,080,938	2,054,700	298,715	2,284,833	4,339,533
1880			4,087,332	2,356,705	407,328	3,289,766	5,646,471
1881			4,370,947	2,743,669	457,257	3,928,087	6,671,756
1882			4,878,919	3,160,672	511,444	4,398,586	7,559,258
1883			6,187,520	3,939,278	643,176	6,040,348	9,979,626
1884	201,414	2,362,137	2,774,771	1,979,953	251,489	1,318,743	5,660,883
1885	228,580	2,834,816	3,419,532	2,241,682	239,381	1,199,205	6,275,703
1886	238,604	3,110,292	3,787,420	2,519,624	258,153	1,310,125	6,940,041
1887	255,656	3,382,907	3,383,593	2,345,565	253,132	1,327,613	7,056,085
1888	274,914	3,646,475	3,393,322	2,287,062	284,174	1,402,661	7,336,198
1889	315,870	4,254,413	3,078,554	2,126,548	260,026	1,325,811	7,706,772
1890	354,350	4,752,572	3,485,792	2,450,174	329,604	1,657,210	8,859,956
1891	400,084	5,615,872	3,860,503	2,641,816	348,666	1,749,372	10,007,060
1892	319,592	4,571,816	3,477,989	2,464,484	365,140	1,908,203	8,944,503
1893	374,124	5,579,054	3,525,625	2,505,024	413,860	2,121,275	10,205,353
1894	237,360	3,498,522	2,599,693	1,817,813	296,097	1,423,143	6,739,478
1895	257,757	3,807,961	2,769,153	1,945,347	296,779	1,430,229	7,183,537
1896	246,393	3,628,319	2,834,898	1,950,770	314,190	1,527,916	7,107,005
1897	228,628	3,348,004	2,997,952	2,039,250	309,281	1,475,211	6,862,465
1898	223,827	3,264,323	1,930,870	1,392,710	268,921	1,312,147	5,969,180
1899	262,371	3,668,791	2,253,226	1,573,573	274,873	1,347,842	6,590,206
1900	310,149	4,114,908	2,538,828	1,744,736	315,920	1,560,851	7,421,495
1901	311,078	4,589,494	2,785,850	1,942,322	373,832	1,687,420	8,219,236
1902	335,256	4,930,768	3,300,026	2,143,433	397,818	1,846,937	8,921,138
1903	407,944	5,861,639	3,753,211	2,292,297	440,869	2,095,360	10,249,296
1904	336,245	4,969,635	4,007,691	2,387,018	471,153	2,035,217	9,391,870
1905	371,811	5,723,764	3,973,919	2,352,485	488,773	2,165,672	10,241,921
1906	415,394	6,127,062	4,482,499	2,567,712	546,658	2,299,194	10,993,968
1907	419,403	6,228,281	5,213,458	2,966,154	636,938	2,614,346	11,808,781
1908	366,669	5,221,070	5,443,782	3,008,996	628,428	2,516,461	10,746,527
1909	436,628	6,863,785	5,747,056	2,838,232	650,861	2,574,596	12,276,613
1910	391,003	6,302,377	7,100,661	3,527,896	822,243	3,177,020	13,007,293
1911	218,495	3,566,824	4,812,787	2,638,039	596,521	2,326,750	8,531,613
1912	281,134	4,688,090	3,864,071	2,488,744	577,244	2,414,621	9,591,451
1913	280,828	4,636,191	4,417,130	2,718,045	677,111	2,724,471	10,678,707

<sup>1</sup>1860-63 and 1869-83 included in "Still wines bottled"; 1864 included in "Total wines." <sup>2</sup>1864 included in "Total wines"; 1865-68 including "Still wines bottled."

<sup>3</sup>1860-63 and 1869-83 including "Sparkling wines"; 1864 included in "Total wines"; 1865-68 included in "Still wines unbottled."



## Brandy Imported.

(Duty, brandy and other spirits, \$2.60 per proof gallon.)

Year	Proof gallons	Value
1851	3,163,783	\$2,128,679
1852	2,751,947	1,792,968
1853	3,854,956	3,251,408
1854	2,152,441	2,255,397
1855	1,024,497	1,479,362
1856	1,715,717	2,859,342
1857	1,513,328	2,527,262
1858	1,180,484	2,232,452
1859	2,528,356	3,262,058
1860	2,616,555	3,938,041
1861	1,175,480	1,860,994
1862	373,227	549,345
1863	501,007	743,727
1864	693,043	915,946
1865	188,621	253,619
1866	817,743	981,010
1867	657,688	959,563
1868	379,369	590,986
1869-83 (included in "spirits and cordials")		
1884	506,681	1,263,803
1885	503,945	1,227,556
1886	432,611	1,117,237
1887	421,141	1,091,456
1888	416,899	1,119,327
1889	400,089	1,076,265
1890	461,257	1,217,913
1891	443,278	1,139,315
1892	333,234	889,883
1893	326,303	918,165
1894	201,433	568,458
1895	313,327	813,882
1896	250,704	690,761
1897	337,595	911,721
1898	137,902	395,758
1899	219,968	626,875
1900	244,100	696,540
1901	290,301	843,318
1902	316,222	911,419
1903	348,878	1,000,997
1904	390,988	1,104,410
1905	403,386	1,139,129
1906	470,433	1,286,270
1907	629,333	1,687,473
1908	592,382	1,523,842
1909	764,244	1,961,170
1910	716,259	1,899,021
1911	409,242	1,018,382
1912	509,286	1,316,031
1913	610,358	1,647,277

## Duty on Imported Wines, Etc.

Wine containing more than 24 per cent of alcohol is classed as spirits and charged accordingly. Champagne and sparkling wines \$9.60 per dozen quarts, \$4.80 per dozen pints. Half pints \$2.40 per dozen. Bottles containing more than one quart to pay at the rate of \$3.00 per gallon on the excess. Still wines in casks, if containing 14 per cent or less of alcohol, 45 cents per gallon; above 14 per cent, 60 cents per gallon. In bottles, per case of one dozen quarts, or two dozen pint bottles, \$1.85 per case. Bottles containing more than the above, 6 cents per pint on the excess. Duty on brandy and other spirits, \$2.60 per proof gallon.

## Domestic Wines and Brandy.

(Exported.)

Year	Casks		Bottled		Total value of wines	Brandy proof gallons	Value
	Gallons	Value	Dozen bottles	Value			
1864	97,104	\$84,022			\$84,022		
1865	51,572	69,247			69,247		
1866	20,338	27,990			27,990		
1867	31,288	43,078			43,078		
1868	27,070	33,564			33,564		
1869	*	24,181			24,181		
1870	32,812	42,120			42,120		
1871	19,217	26,444			26,444		
1872	31,263	37,713			37,713		
1873	46,715	48,202			48,202		
1874	48,141	45,534			45,534		
1875	45,039	50,308			50,308		
1876	31,915	35,483			33,483		
1877	57,408	40,632			40,632		
1878	46,614	38,775			38,775		
1879	46,224	49,775			49,775		
1880	154,887	123,317			123,317		
1881	68,181	69,915			69,915		
1882	65,140	67,909			67,909		
1883	80,973	77,280			77,280		
1884	83,951	65,309	5,463	\$28,923	94,232		
1885	79,733	62,574	6,487	32,725	95,299		
1886	119,085	93,297	6,051	24,813	118,110		
1887	282,607	191,672	4,426	23,499	215,171		
1888	302,233	201,525	7,185	31,698	233,233		
1889	372,350	296,488	7,311	33,000	269,488		
1890	393,323	298,580	7,281	32,350	270,930		
1891	543,292	319,085	11,409	52,392	371,477	136,529	\$111,657
1892	655,795	371,344	14,834	67,686	439,030	216,696	178,294
1893	708,558	369,893	11,128	51,654	421,547	123,518	90,731
1894	802,192	380,588	13,813	63,860	444,448	361,653	291,022
1895	1,125,297	545,708	13,919	56,202	601,910	100,719	94,924
1896	1,339,090	581,827	17,147	69,460	651,287	89,259	87,294
1897	1,389,375	629,270	16,794	69,444	698,714	11,815	12,640
1898	1,623,103	682,028	9,672	46,721	728,749	24,886	39,455
Doz. qts.							
1899	1,498,078	624,315	10,973	52,015	676,330	20,944	29,289
1900	1,408,859	575,665	9,854	49,927	625,592	80,259	83,698
1901	1,117,858	461,560	9,901	43,013	504,573	15,323	28,176
1902	929,900	407,345	10,952	42,980	450,325	24,077	30,174
1903	678,150	290,552	5,232	24,624	315,176	18,117	19,213
1904	896,643	403,557	6,066	33,136	436,693	70,193	44,119
1905	839,386	355,215	5,800	28,242	383,457	21,171	18,217
1906	789,526	326,335	5,596	25,215	351,550	5,145	8,553
1907	560,147	251,353	4,404	20,128	271,481	14,172	22,496
1908	438,676	195,160	6,273	30,830	225,990	2,750	4,900
1909	415,891	181,516	3,839	19,902	201,418	14,718	12,262
1910	501,348	193,597	5,962	31,314	224,911		
1911†	1,394,994				518,536		
1912†	957,120				366,260		
1913	1,075,151				418,668		

\*Prior to 1864, stated as "Wines"; in 1869, the quantity is not stated. Brandy was included under "Alcohol" prior to 1891, and included in "All other spirits" after 1910.

†Not stated in detail after 1910. The quantity includes wines both in casks and bottles.



## PART VI.

# IRRIGATION.

**Description of Irrigation Enterprises; Source of Water Supply; Cost of Irrigation; Irrigated Crops, and Orchards; Dry Farming; Irrigation Districts; Colorado River and Salton Sea; Tulare and Other Lakes; Summary of Agricultural and Irrigated Areas; Irrigation from Underground Waters; California Rivers and Creeks; Acreage of Irrigated Farms by Counties.**

### Farms and Irrigation.

In most sections of California there is usually sufficient rainfall for the maturing of some crops, although there are other sections where no crops can be grown without irrigation. The normal annual precipitation ranges from about 2 inches in the Imperial Valley, in the southeastern part of the State, to about 60 inches along the coast in the northwestern part.

Irrigation is practiced to some extent throughout the State, but the largest part of the irrigated land lies in the southern part of the Sacramento and the San Joaquin valleys and in the northern part of the State.

In 24 of the 58 counties in the State more than half the farms are irrigated. Imperial County has the largest percentage of farms irrigated, 94.6, and Inyo County the next largest, 93.2 per cent. In both 1900 and 1910 the county for which the largest area of irrigated land was reported was Fresno, with an irrigated acreage of 402,318, compared with 283,737 in 1900. In Tulare County 265,404 acres were irrigated in 1910, and in five other counties the area irrigated exceeded 100,000 acres. The summary on page 170 shows that in 1910 existing enterprises were ready to supply water to 3,619,378 acres, or 955,274 acres more than were irrigated in 1909. The acreage included in projects exceeds the acreage irrigated in 1909 by 2,826,256 acres, which is more than twice the acreage brought under irrigation in the last decade. This acreage represents the area which will be available for the extension of irrigation in the next few years, upon the completion of projects now under way and without new undertakings.

### Description of Enterprises.

Name	Acreage irrigated	Per cent distribution
United States Reclamation Service.....	400	*
United States Indian Service.....	3,490	0.1
Irrigation districts.....	173,793	6.5
Cooperative enterprises.....	779,020	29.2
Commercial enterprises.....	746,265	28.0
Individual and partnership enterprises.....	961,136	36.1
Totals.....	2,664,104	100.0

\*Less than one tenth of one per cent.

Irrigation districts, cooperative enterprises and individual and partnership enterprises, which together supply about 72 per cent of the acreage irrigated, are all controlled by the water users. Commercial enterprises, the only other class in the State that irrigates any extensive acreage, supplies 28 per cent.

The United States Reclamation Service operates under the Federal law of June 17, 1902, providing for the construction of irrigation works with the receipts from the sale of public lands.

The United States Indian Service operates under various acts of Congress, providing for the construction by that service of works for the irrigation of land in the Indian reservations.

The Carey act, or Federal law of August 18, 1894, granted to each of the states in the arid region 1,000,000 acres of land on condition that the state provide for its irrigation.

Irrigation districts are public corporations that operate under state laws providing for their organization and management, and empowering them to issue bonds and levy and collect taxes, with the object of obtaining funds for the purchase or construction, and for the operation and maintenance of irrigation works.

Cooperative enterprises. These are controlled by the water users under some organized form of cooperation. The most common form is a stock company, the stock of which is owned by the water users.

Commercial enterprises supply water to parties who own no interest in the works. Persons obtaining water from such enterprises are usually required to pay for the right to receive water and to pay, in addition, annual charges based in some instances on the acreage irrigated and in others on the quantity of water received.

Individual and partnership enterprises belong to individual farmers or to neighboring farmers, who control them without formal organization. It is not always possible to distinguish between partnership and cooperative enterprises, as the difference is slight.

#### Source of Water Supply.

As in other states, streams are the principal source of supply of water for irrigating, but in California wells supply much more land than in any other state. Much land receives water from both sources, but most of this is credited to streams.

Source	Acreage irrigated	Per cent distribution
Streams -----	2,246,722	84.3
Lakes -----	18,470	0.7
Wells -----	350,723	13.2
Springs -----	31,779	1.2
Reservoirs -----	16,410	0.6
Totals -----	2,664,104	100.0

The preceding figures show the extent to which underground water is utilized for irrigation in California. The flowing wells, of which there were 2,361, with a total capacity of 477,343 gallons per minute, irrigated 74,128 acres. The great majority of these wells are in southern California and the San Joaquin Valley, and the land thus irrigated is

situated in Kern, Kings, Los Angeles, Orange, Riverside, San Bernardino, Santa Clara, and Tulare counties. Of the 10,724 pumped wells, 5,248 were in the counties named and 4,503 in Fresno, Merced, Monterey, Sacramento, San Benito, San Diego, San Joaquin, and Ventura counties. The pumped wells in these two groups of counties irrigated 258,687 of the 276,595 acres irrigated by such wells in the entire State. Pumping from lakes and streams has also been practiced extensively in many sections of the State, 32,539 acres having been irrigated in this way in 1909.

The Cost of Irrigation.

The following summary shows the total cost of irrigation enterprises up to July 1, 1910, including construction of works and acquisition of rights, but not operation and maintenance, with the average cost per acre, based on the acreage the enterprises were capable of irrigating in 1910.

	1900	1910	Increase, per cent
Cost of irrigation enterprises.....	*\$19,181,610	\$72,580,030	278.3
Average per acre.....	†13.27	20.05	-----
Estimated final cost of existing enterprises .....		84,392,844	-----
Average per acre included in projects.....	-----	15.37	-----

\*Exclusive of those on Indian reservations.  
†Exclusive of 242 acres in Indian reservations.

The cost of irrigation systems shows the largest increase of any item, amounting to 278.3 per cent. In the average cost per acre there was also a considerable increase, compared with 1900. The large increased cost of irrigation enterprises is due in a considerable measure to the expensive equipment installed to secure a water supply and protect it from loss by seepage and evaporation, in sections where water is scarce and crop values are high. A number of large enterprises are under construction upon which considerable expenditures have been made, but which are irrigating little land as yet, making the average cost higher than the true average. The average, based on the estimated final cost and the acreage included in projects, \$15.37 per acre, probably more truly represents the average cost per acre of irrigation in California.

In the county showing the lowest average cost, Mono, where much of the irrigated land consists of flooded pastures, enterprises were capable of irrigating in 1910 at \$1.29 per acre. The highest average cost per acre, \$368.40, is in Nevada County, where the unusual cost is due to the fact that many of the ditches now used for irrigation were originally constructed at heavy expense for mining purposes.

Irrigated Crops.

(From the Reports of the Bureau of the Census.)

The information relating to irrigated crops is to some extent incomplete; it shows, however, the relative importance of the different irrigated crops, and is sufficiently complete to afford reliable averages of yields and for comparison with totals for the State.



## Acreage Yield.

Crop	Total for State	Irrigated		Total for State	On irrigated land
		Amount	Per cent of total		
<b>Cereals—</b>				Bushels	Bushels
Corn .....	51,935	17,802	34.3	1,273,901	491,978
Oats .....	192,158	5,903	3.1	4,143,688	205,727
Wheat .....	478,217	22,603	4.7	6,203,206	408,706
Barley .....	1,195,158	77,785	6.5	26,441,954	1,844,971
Rye .....	7,027	107	1.5	70,683	1,265
<b>Other grains and seeds—</b>					
Alfalfa seed .....	8,761	2,570	29.3	23,791	5,911
Dry edible beans .....	157,987	11,384	7.2	3,328,218	244,624
Dry peas .....	2,959	290	9.8	57,468	9,902
<b>Hay and forage—</b>				Tons	Tons
Timothy alone .....	13,725	8,026	58.5	20,001	11,236
Timothy and clover mixed .....	46,661	20,880	44.7	73,183	34,177
Clover alone .....	8,519	1,176	13.8	20,380	2,689
Alfalfa .....	484,134	366,692	75.7	1,639,707	1,280,105
Other tame or cultivated grasses .....	92,556	6,504	7.0	122,103	10,656
Wild, salt or prairie grasses .....	253,127	153,672	60.7	281,033	189,964
Grains cut green .....	1,604,745	101,187	6.3	2,019,526	146,013
Coarse forage .....	25,868	7,593	29.4	60,611	19,151
<b>Sundry crops—</b>				Bushels	Bushels
Potatoes .....	67,688	32,735	48.4	9,824,005	5,180,006
				Tons	Tons
Sugar beets .....	78,671	14,657	18.6	843,269	171,494
Orchard fruits .....	*	73,491	*		
Small fruits .....	9,687	6,876	71.0		
Tropical fruits .....	*	98,969	*		
Nuts .....	*	22,429	*		
Grapes .....	*	74,984	*		

\*Agricultural returns only give number of trees, not acreage.

## Acreage of Irrigated Crops.

Of the entire acreage of the crops in the preceding table, slightly less than one fifth is irrigated, the proportion irrigated varying widely for the different crops.

The cereals are very generally grown without irrigation, only 6.5 per cent of the total acreage of the cereal crops above given being irrigated. The hay and forage crops are more generally irrigated than the cereals, the irrigated acreage forming 26.3 per cent of the total for these crops, alfalfa being the highest, 75.7 per cent. Of the entire acreage for potatoes 48.4 per cent was irrigated, and that in small fruits 71 per cent.

Sugar beets are grown for the most part without irrigation in California, only 18.6 per cent of the total acreage of the crop being irrigated. While many of the crops irrigated are well distributed geographically, there is a tendency toward the concentration of certain crops in particular localities.

## Irrigation Acreage in Orchards.

The following summary gives the counties having the largest acreage of the principal irrigated crops, with the proportions which each contains of the total irrigated acreage of these crops in the State:

Of the orchard fruits irrigated: Fresno County has 31.9 per cent; Placer, 14.8 per cent; Tulare, 8.4 per cent; Santa Clara, 6.5 per cent.

Of small fruits: Los Angeles County, 30.4 per cent; Santa Clara, 13.9 per cent; Sacramento, 10.9 per cent; Santa Cruz, 7.2 per cent.

Tropical fruits: San Bernardino County, 25.6 per cent; Los Angeles, 24.8 per cent; Riverside, 14.2 per cent; Tulare, 11.6 per cent.

Nuts: Orange County, 46 per cent; Los Angeles, 34.7 per cent; Ventura, 12.1 per cent.

Grapes: Fresno County, 62.6 per cent; Tulare, 12.2 per cent; Kings, 6.2 per cent; Sacramento, 5.7 per cent.

Of the total irrigated acreage of fruit trees and vines not bearing in 1909 (amounting to 59,031), 36.1 per cent was in Fresno County, 14 per cent in Tulare County, 8 per cent in Orange County, and 7.2 per cent in Los Angeles County.

SUMMARY OF IRRIGATED FARMS AND IRRIGATION ENTERPRISES IN  
1900 AND 1910.

	1900	1910	Increase	Per cent
Number of farms in State.....	72,542	88,197	15,655	21.6
Number of farms irrigated.....	25,675	39,352	13,677	53.3
Acreage irrigated.....	1,446,114	2,664,104	1,217,990	84.2
Acreage enterprises were capable of irrigating in 1910.....	*	3,619,378	-----	-----
Acreage included in projects.....	*	5,490,360	-----	-----
Percentage of number of farms irri- gated.....	35.4	44.6	9.2	-----
Percentage of improved lands in farms irrigated.....	12.1	23.4	11.3	-----
Irrigation enterprises—				
Number of independent enter- prises.....	*	13,970	-----	-----
Total length of ditches (miles)....	*	21,129	-----	-----
Number of main ditches.....	*	8,590	-----	-----
Length of main ditches (miles)....	*	12,620	-----	-----
Capacity of cubic feet per second....	*	89,597	-----	-----
Number of lateral ditches.....	*	6,143	-----	-----
Length of lateral ditches (miles)....	*	8,509	-----	-----
Number of reservoirs.....	*	1,583	-----	-----
Capacity (acre feet).....	*	743,269	-----	-----
Number of flowing wells.....	*	2,361	-----	-----
Capacity, gallons per minute.....	*	477,343	-----	-----
Number of pumped wells.....	*	10,724	-----	-----
Capacity, gallons per minute.....	*	4,119,575	-----	-----
Acreage irrigated with pumped wells.....	*	276,595	-----	-----
Acreage irrigated with flowing wells.....	*	74,128	-----	-----
Acres irrigated with pumped water from all sources, includ- ing lakes and streams.....	*	309,134	-----	-----
Number of pumping plants.....	*	9,297	-----	-----
Engine capacity, horsepower.....	*	128,143	-----	-----
Pumping capacity, gallons per minutes.....	*	5,276,298	-----	-----
Total cost of irrigation systems.....	\$19,181,610	\$72,580,030	\$53,398,420	278.3
Average cost per acre.....	\$13 27	\$20 05	\$6 76	51.0

NOTE.—Reservoirs are those filled by collecting storm water, or from water courses that are usually dry. When reservoirs are filled from streams or wells the primary source is considered the source of supply. The "acre-foot" is the volume of water required to cover one acre to a depth of one foot or 43,560 cubic feet.

\*Not reported in 1900.



## Irrigation in 1910 Compared with the Year 1900.

The increase in irrigation during the last decade has been very large. The total number of farms irrigated was 39,352, against 25,657 in 1900, an increase of 13,677, or 53.3 per cent. The per cent irrigated of the whole number of farms was 44.6, compared with 35.4 per cent in 1900, showing an increase of 9.2 per cent during the ten years.

The total acreage irrigated in 1910 was 2,664,104 acres, against 1,446,114 acres in 1900, an increase of 1,217,990 acres, or 84.2 per cent. The total acreage which all enterprises were capable of irrigating in 1910 was 3,619,378, an excess of 955,274 acres over the area irrigated in 1909. The area included in projects either contemplated or under construction in 1910 was 5,490,360 acres. This indicates in a general way the area which will be available within the next few years for the extension of irrigation, and shows that the area irrigated in 1910 can be more than doubled without the construction of additional works.

The number of independent enterprises in 1910 was 13,970. The total length of all ditches was 21,129 miles, of which there were 8,590 main ditches, extending 12,620 miles, and 6,143 lateral ditches, with 8,509 miles. The length of main ditches in 1900 was 5,106 miles, showing an increase in the ten years of 7,493 miles, or 146.7 per cent.

The number of reservoirs reported was 1,583, having a capacity of 743,269 acre feet.

The number of wells pumped for irrigation was 10,724, with a capacity of 4,119,575 gallons per minute. The number of pumping plants was 9,297, with an engine capacity of 128,143 horsepower and a pumping capacity of 5,276,298 gallons per minute. The flowing wells numbered 2,361, with a capacity of 477,343 gallons a minute.

The total cost of irrigation systems in 1910 was \$72,580,030, against \$19,181,610 in 1900, an increase of \$53,398,420, or 278.3 per cent.

The average cost per acre was \$20.05 in 1910, against \$13.27 in 1900.

## Dry Farming.

The United States Government is not only interested in settling its irrigated lands, but also in developing all parts of its territory, and for this reason the various bureaus of the Department of Agriculture have been studying the soils of the West and also scouring the world to find crops suited for these regions. Dry farming is meeting with a certain amount of success in various parts of the country, and the combined efforts of all of these endeavors to make fertile and productive these lands will result in an era of unprecedented prosperity for the entire West.

*The Orland Project.* This project is in the Sacramento Valley and includes about 14,000 acres in Glenn and Tehama counties, principally in the former. The canals of the Lemon Home and Stony Creek irrigation companies have been purchased and, together with storage on Stony Creek, assume a continuous supply of water. The present boundaries may be extended in the future, as surveys have been completed for the Iron Canyon reservoir, on the Sacramento River above Red Bluff, which, if completed, will furnish water to large areas in Shasta, Butte, Tehama, and Glenn counties.

*Yuma or Laguna Project.* This project is principally in Arizona, but will cover about 17,000 acres of the Colorado desert, in Imperial County. The Laguna dam is situated on the Colorado River, about

twelve miles above Yuma, and diversions will be made to both sides. The land on the California side is included in the Yuma Indian reservations, and all but 4,000 acres, reserved for the Indians, is open to bona fide settlers. The dam was completed in April, 1909, and water is now being carried through the canals.

*Klamath Project.* This covers land in Oregon and California, and is largely a drainage proposition in California, being the reclamation of swamp land surrounding Lower Klamath Lake, and the lowering of the water level in Tule Lake, in Siskiyou and Modoc counties.

#### Irrigation Districts.

*Modesto District.* This district lies entirely in Stanislaus County, between the Tuolumne and Stanislaus rivers and contains 81,143 acres of valley land. The irrigated area is increasing rapidly, and during 1909 more than 22,000 acres were served by the canals.

*Turlock District.* This district lies just across the Tuolumne River from the Modesto district, and extends southwest to the Merced River. It includes nearly all the valley land between these two streams in Stanislaus and Merced counties, and comprises 176,210 acres. It was opened in 1901, and nearly 52,000 acres were irrigated in 1909.

*Alta District.* This district is located in Fresno, Tulare, and Kings counties, and covers 130,000 acres, extending from the east and south bank of the Kings River to the Sierra foothills. It was organized in July, 1888, and the 1876 canal system was purchased to supply the water. The company did not have an early right on Kings River, and the water cut off usually in July, but receives it again in October and November by agreement with the earlier appropriators. About 80,000 acres are under irrigation, mostly around Reedley and Dinuba.

*Tulare District.* This district was organized in June, 1889. It obtains water from the Kaweah and St. John rivers, in Tulare County, and includes 37,400 acres, of which 12,000 were irrigated in 1909. Water rights are similar to those in the Alta district, and pumping is resorted to during the summer to augment the supply.

*South San Joaquin and Oakdale Districts.* These districts were organized in 1909. The South San Joaquin district includes about 71,000 acres on the north side of the Stanislaus River, and the Oakdale district includes 65,000 acres, lying on both sides of the river.

#### Private Irrigation Systems.

The following are a few of the most important of the very large number of private systems in various parts of the State:

*California Development Company.* This company diverts water from the west bank of the Colorado River close to the Mexican border. Its main canal passes through a portion of the Mexican territory of Lower California, where about 100,000 acres are served. It enters the State again at about sea level, and covers about 400,000 acres, mostly below sea level, in the Imperial Valley, of which upward of 225,000 acres are irrigated. The company does not own any of the land, most of which has been taken up under the Desert Land Act. The company has organized the farmers on the main laterals into mutual companies, each of which controls its own separate system and elects and appoints its officials.

*San Diego Flume Company.* This system, which is typical of the coast region of southern California, irrigates about 7,000 acres to the north and east of the city of San Diego from the San Diego River and the storage reservoirs. The main reservoir, known as the Cuyamaca, is on the headwaters of Boulder Creek, at an elevation of 4,600 feet, and has a capacity of about 12,250 acre feet. The water is diverted from San Diego River at the mouth of Boulder Creek, twelve miles below the reservoir, and carried to the irrigated orchards by means of a 4 by 6 foot wooden flume thirty-five miles long. There are five tunnels and numerous high trestles along the route. The San Diego River is dry for four or five months in the year, at which time the stored water is used.

*Riverside Water Company and Gage Canal Company.* These two systems serve the valuable lands between the south bank of the Santa Ana River and the hills from the section east of Colton, through the Riverside district, in San Bernardino and Riverside counties, but are in no way connected with each other. The former company covers the lower lands, while the latter furnishes water to those nearer the foothills, including Arlington Heights. The Riverside Water Company was organized by the irrigators under it with 24,000 shares of stock, two shares being held for each acre, 12,000 acres being the limit of service. In 1908 9,050 acres were irrigated, nearly two thirds of which were in orange orchards, and the greater part of the balance in alfalfa. The main canal is lined with concrete cement, and the distributary system is largely pipe lines, conveying water to the highest point on each ten acres. The value of the entire system, which includes the municipal supply of Riverside, is estimated at \$2,500,000, the irrigating portion alone being valued at nearly \$1,000,000.

The Gage Canal Company diverts water from the Santa Ana River; its flow is largely augmented during the summer by numerous artesian wells and pumping plants. About 9,500 acres were irrigated in 1907, mostly orange orchards, but the system will cover 2,000 acres more. This is probably the most highly-developed system in the United States, no expense being spared to prevent seepage loss or to give satisfactory service.

*Kern County Land Company.* The Kern County Land Company is interested in numerous canal projects and corporations, taking water from both sides of Kern River, irrigating lands in what is called the Kern delta, lying south, west, and southwest of Bakersfield. Of these lands there are about 80,000 acres in alfalfa, 12,000 acres in grain, 10,000 acres in pasture, wild grass, and 15,124 acres in orchards, vines, gardens, etc. The right to the use of water on these lands is appurtenant thereto.

*Kern Valley Irrigation Company.* The Kern Valley Water Company's canal, belonging to Miller & Lux, irrigates the riparian lands lying between Buena Vista Lake and Tulare Lake. About 63,000 acres of this land are in cultivation, mostly in alfalfa. The flood waters of Kern River are stored in the Buena Vista Lake reservoir, and the water so stored belongs to the Kern Valley Water Company. The Kern Valley Water Company's canal also serves to carry off the water in time of excessive floods.



*Fresno and Consolidated Canals Company.* These two systems, although kept separate, are operated by the same people and cover practically all the irrigated lands in Fresno County, amounting to about 360,000 acres. The points of diversion for the various canals are all along the west bank of the Kings River, close to where it enters the valley. The Fresno canal system is one of the oldest of the large irrigation concerns in the valley, having been organized in 1871, when it took over some of the small canals constructed a year or two earlier, and this was the beginning of the great agricultural development of this county. The Gould and Enterprise canals are also included in this system.

The Consolidated includes the Fowler Switch and the Centerville and Kingsburg canals, as well as a majority of the stock of the Emigrant canal. The latter is on the lower Kings River, and diverts water from the river six miles west of Kingsburg to irrigate lands on the Laguna de Tache Rancho, which belongs largely to this company.

The water rights do not represent any rights in the affairs of either company, being merely a right to use the water, and when located on the lands they are appurtenant thereto and can not be removed. The Fresno system has an early priority on the Kings River, amounting to 1,000 cubic feet per second, which gives 1,000 first-class rights, but as a considerable area of the earlier irrigated section does not require water on account of the high water-table, second-class rights have been sold. By agreement, these rights are entitled to the water not used under the first-class rights, and do not receive any if the first-class rights demand the entire flow of the canal. Little trouble has been experienced thus far by the holders of these second-class rights. Water can be obtained usually under this system up to September 1st, and in some years to October 1st.

The Consolidated has later priorities on the river, and its flow is cut off from the middle of June to August 1st, so that its rights are not so valuable as the Fresno canal rights. An annual charge is made for the maintenance of the main canals, amounting to 62½ cents per acre under the Fresno and 75 cents per acre under the Consolidated. The lateral ditches are owned and controlled by the irrigators. No measurements are made to users, each irrigator taking what he needs in accordance with the rights held by him. Considering its area, it is the most highly developed district in the State.

*The San Joaquin and Kings River Canal and Irrigation Company.* This system diverts water from the west bank of the San Joaquin River about 1½ miles north of the town of Mendota, in Fresno County. It is the oldest large canal in the valley, having been organized in February, 1871. The area tributary to it extends for seventy miles along the west bank of the river, in Fresno, Merced, and Stanislaus counties. The company belongs to Miller & Lux, who have riparian rights on the river, and their own lands are very largely included. About 340,000 acres of land are irrigable from this system, although at present about one third is served, of which 40,000 acres are in private ownership and purchase water from the company. No water rights are sold; the water is measured to the users and charged for on the basis of a flow of 1 cubic foot per second for twenty-four hours. The lands under this system include a large area of swamp and overflow land along the river. This is flooded during the high water by means of large checks, and produces pasturage during the summer and fall months for large herds of cattle

belonging to the company. The improved lands under this system are in alfalfa principally, with some orchards and vineyards in the Dos Palos Colony.

*The Crocker-Huffman Land and Water Company.* The Merced River furnishes the supply for the 220,000 acres irrigable from its canals. These lands extend from the foothills, near where the river enters the valley, to the country surrounding the city of Merced and between that city and Livingston. Only a small portion of the land is irrigated at present, but settlement is going on rapidly, especially near Atwater.

*The Butte County and the Sutter County Canals.* These two canals are controlled by the same people, using the same main canal, but are separately incorporated. The Butte canal serves the area in Butte County and the Sutter canal serves that in Sutter County. This combined system covers about 80,000 acres, 30,000 in Butte and 50,000 in Sutter County, composed of lands between the Feather River, the Marysville Buttes, and the swamp lands along the Sacramento River south to where the slough which leaves the Feather River near Marysville joins the Sutter basin. The point of diversion is on the west bank of the river, six miles northeast of Biggs. The canal follows the high land parallel and near to the Feather River, and irrigates the land on both sides. About 10,000 acres are under irrigation, the principal crop being alfalfa, although orchards and vineyards are being planted also.

*Sacramento Valley Irrigation Company.* This is a recent enterprise, backed by large Eastern financial interests, which have secured the rights of the Central Irrigation District by the purchase of all outstanding district bonds for 35 per cent of their par value. They have secured control, also, of 100,000 acres in the above district, and are carrying on extensive work in preparing for the irrigation and drainage of the 225,000 which will be included in their system. The central irrigation canal, which diverts water from the west bank of the Sacramento River, about two miles south of the county line between Tehama and Glenn counties, will be their main canal. This canal runs first to Willows, and from there to the town of Arbuckle, in Colusa County. All lands between this main canal and the Sacramento River are included in the project. The installation of a drainage system at the same time as the irrigating will insure the lands against damage from a high water-table, which has ruined many fertile acres of irrigated lands in the State.\*

#### Imperial Valley and the Salton Sea.

The Colorado River is the division line between California and Arizona. It empties into the Gulf of California about sixty miles below Yuma, Arizona. The Colorado has been called the Nile of America, as it is subject to a large rise annually. Its waters have turned the desert lands of Imperial Valley into fertile lands, and more will be reclaimed by the Yuma project of the United States Reclamation Service.

The Salton Sea, or sink, originally formed a part of the Colorado desert, which comprises an area of nearly 2,000 square miles. The desert comprises two fertile valleys, one in Riverside County, known as the Coachella Valley, the other as Imperial Valley, in Imperial County.

\*See "Irrigation in California," by F. W. Roeding, United States Department of Agriculture.



Salton Sea, which partly fills the sink, lies between the two valleys. On December 31, 1908, its surface was 206 feet below mean sea level, and was nearly 45 miles long and from 9 to 15 miles wide, its maximum depth 67 feet and its area about 443 square miles.

In 1891 the Colorado overflowed into Salton Sink; in 1905 the flood repeated on a much larger scale. The old channel of the Alamo River was transformed into a deep, wide gorge, and another channel, now called New River, was formed. Practically all the water received by Salton Sea enters through Alamo and New rivers, but chiefly through the former. These rivers run through Imperial Valley and are drainage channels for waste water from irrigation systems and power plants.

#### Lakes.

There are several good-sized lakes in the northeastern part of the State, namely, Lower Klamath Lake, near Brownell, which has an area of about 21,000 acres; Tule, Clear, Goose, and Upper, Middle and Lower Alkali lakes. All of these are shallow and more or less alkaline. Farther south there are the Eagle and Honey lakes, the water of the latter sweet, and the former rather alkaline.

South of these is Lake Tahoe, at an elevation of 6,000 feet, with a surface area of about 250 square miles, partly in California and partly in Nevada. It has an average depth of about 1,000 feet, and is the source of the Truckee River.

Mono and Owens lakes, like many others, have no outlet, and are strongly alkaline.

Tulare Lake is a shallow body of water, about thirty miles south of Fresno and forty miles northwest of Bakersfield. In 1852-1854 the area was nearly 1,000 square miles, the lake being full, and about 35 feet deep. The flood of 1867 was the last to fill the lake to overflowing and about 1870 it began to recede, until in 1898 the lake bed became practically dry, brought about by the water being diverted for irrigation and light precipitation for a number of years. After partly refilling in 1901 it became completely dry in 1905, and in the early spring of 1906 was entirely under cultivation. On March 15, 1906, the first water reached the lake bed at the mouth of the Kings River and spread over a large area. A few days later water from Kaweah and Tule rivers reached the lake. On June 1st the water was 7 feet deep and covered about 200 square miles. On June 23d overflow water from Kern Basin cut through the sand ridge to the south and flowed into the lake. On August 4th the water reached its greatest height for the year 1906, and the lake had an area of about 300 square miles and a maximum depth of 12.7 feet. The total rise of the lake that year was 10.8 feet. In November, 1907, the lake had an area of about 274 square miles, a depth of about 12.4 feet, and an average length of 20 miles, and a width of 13.5 miles. The lake reached its greatest height in July of 1907, when it had a maximum depth in the summer of nearly 14 feet. Since then it has been subsiding, and is about 11 feet deep. It is probable that the lake will continue to fluctuate very much as in the past, but whether it is to fill and subside alternately are questions of great importance.

The sudden reappearance of the lake resulted in the loss of millions of dollars, but permanent reclamation is ultimately hoped for.\*

\*For further valuable details, see Water Supply Paper, Part XI, by W. B. Clapp and F. F. Henshaw, United States Geological Survey.

Buena Vista Lake is the outlet of Kern River, and is connected with Tulare Lake by sloughs.

Clear Lake, in Lake County, is the only natural body of sweet water in the Coast Range worthy of consideration. It has a surface area of 64 square miles, and is the source of Cache Creek, which enters the Sacramento River near Woodland.

## IRRIGATION RESOURCES OF CALIFORNIA.\*

(Compiled from the report of the Conservation Commission of California.)

### Summary of Agricultural and Irrigated Areas in Northern California.

Division	Valley agricultural land, acres	Valley plains, acres	Foothill agricultural land, acres	Areas irrigated, acres
Northern coastal counties.....	503,000	-----	-----	2,290
North central mountain valleys.....	435,000	-----	-----	99,910
Northeastern plateaus and valleys.....	867,000	-----	-----	161,850
Feather River valleys.....	158,000	-----	-----	50,600
Sierra foothills.....	-----	-----	789,000	45,250
Sacramento Valley.....	2,659,000	790,000	-----	123,800
Totals.....	4,622,000	790,000	789,000	483,700

### Summary of Agricultural and Irrigated Areas in Central California.

Division	Valley agricultural land, acres	Valley plains, acres	Foothill agricultural land, acres	Area irrigated, acres
Coastal valleys.....	887,000	-----	-----	87,000
San Joaquin Valley.....	6,530,000	1,046,000	-----	1,728,975
Sierra foothills above San Joaquin Valley.....	-----	-----	730,000	10,620
Lands east of the Sierra Nevada.....	472,000	-----	-----	137,760
Totals.....	7,889,000	1,046,000	730,000	1,959,355

### Summary of Agricultural, Irrigated, and Estimated Irrigable Lands in Southern California.

Area	Agricultural land, acres	Irrigated land, acres	Estimated area that ultimately will be irrigated, acres
Santa Barbara and Ventura counties.....	509,250	49,656	322,500
Los Angeles and San Gabriel River lands.....	441,986	167,454	381,500
Santa Ana River lands.....	876,671	213,407	279,000
San Diego County.....	363,668	19,880	87,100
Colorado Desert and River valleys.....	1,550,750	279,600	766,500
Mojave Desert.....	2,328,000	15,489	113,000
Totals.....	6,070,325	745,486	1,949,600

\*For further valuable details, see Water Supply Paper, Part XI, by W. B. Clapp and F. F. Henshaw, United States Geological Survey.

†For detailed tables containing summary of agricultural land and irrigated areas in northern and central California, see Report for 1912, pages 200-204, and for the San Joaquin Valley, page 206, and southern California, pages 209-211.

NOTE.—For a full description of irrigated areas in the State and of land that it is possible to irrigate, see Report of the Conservation Commission of California, 1912, which contains a large number of valuable maps; also "Irrigation Resources of California and Their Utilization," by Frank Adams, irrigation manager in charge of work in California. Experiment Station Bulletin 254.

## Summary of Areas Irrigated, 1909-1911, Revised to 1912.

Division	Agricultural areas in irrigation zones, acres	Areas irrigated, acres	Total areas it is estimated may ultimately be irrigated, acres	Approximate per cent of total estimated as ultimately irrigable
Northern California -----	6,200,200	487,805	3,450,000	56
Central California -----	9,665,000	1,959,355	4,300,000	44
Southern California -----	6,000,000	745,486	1,949,600	33
Totals -----	21,865,200	3,192,646	9,699,600	44

## Drainage Area in Square Miles, Annual Flow in Cubic Feet of Rivers and Creeks in Sacramento Valley, 1875-1910.

Streams and point of measurement	Number of years	Drainage area, square miles	Mean flow, cubic feet per second	Total mean annual run-off, acre-feet
Sacramento River, Red Bluff -----	16	9,300	14,300	10,400,000
Sacramento River, Collinsville -----	7	26,200	35,900	26,000,000
Stony Creek, Fruto -----	10	600	802	581,000
Feather River, Oroville -----	9	3,640	8,320	6,020,000
Yuba River, near Smartsville -----	7	1,220	4,440	3,220,000
Bear River, Van Trent -----	6	263	574	416,000
Cache Creek, Yolo -----	8	1,230	960	695,000
Putah Creek, Winters -----	5	805	712	515,000
American River, Fair Oaks -----	6	1,910	5,060	3,660,000
Cosumnes River, Michigan Bar -----	3	524	571	404,000

## Available Storage on Sacramento Valley Streams.

Name of reservoir	Description	Capacity of reservoir basin as surveyed, acre-feet	Probable amount available annually from watershed, acre-feet
Guenoc -----	Putah Creek -----	188,000	80,000
Monticello -----	Putah Creek -----	130,000	130,000
Clear Lake -----	Cache Creek -----	100,000	100,000
Little Indian Valley -----	Cache Creek -----	76,500	50,000
Briscoe -----	Stony Creek -----	14,385	14,385
East Park -----	Stony Creek -----	26,000	26,000
Mill Site -----	Stony Creek -----	43,735	43,735
Iron Canyon -----	Sacramento River -----	226,900	226,900
Jess Valley -----	South Fork Pit River -----	224,560	-----
West Valley -----	South Fork Pit River -----	94,579	-----
Warm Spring Valley -----	Pit River -----	559,015	-----
Round Valley -----	Ash Creek -----	184,732	-----
Big Valley -----	Pit River -----	3,196,188	*1,000,400
Big Meadows -----	North Fork Feather River -----	780,384	780,384
Indian Valley -----	Indian Creek -----	688,000	500,000
Concow -----	North Fork Feather River -----	10,012	10,012
Butte -----	North Fork Feather River -----	107,000	107,000
American Valley -----	North Fork Feather River -----	86,055	86,055
Spanish Ranch Valley -----	North Fork Feather River -----	8,469	8,469
Buck Valley -----	North Fork Feather River -----	37,843	37,843
Grizzly Valley -----	Middle Fork Feather River -----	61,820	20,000
Mohawk Valley -----	Middle Fork Feather River -----	12,626	12,626
Oregon House Valley -----	North Fork Yuba River -----	90,823	90,823
Greenwood -----	American River -----	65,952	65,952
Totals -----	-----	7,013,578	3,390,184

\*This estimate includes discharge from Goose Lake drainage.



## Drainage Area in Square Miles, Mean and Annual Flow in San Joaquin Valley.\*

Rivers, creeks, and measurement at edge of foothills*	Number of years	Drainage area, square miles	Mean flow, cubic feet	Total mean annual run-off, acre-feet
<b>San Joaquin River, and North:</b>				
Mokelumne River -----	12	657	1,380	1,000,000
Calaveras River -----	6	491	520	377,000
Stanislaus River -----	18	1,051	1,930	1,400,000
Tuolumne River -----	21	1,635	2,870	2,080,000
Merced River -----	15	1,090	1,700	1,228,000
Bear Creek -----	6	166	65	47,000
Mariposa Creek -----	6	122	46	33,000
Chowchilla River -----	6	268	152	110,000
Fresno River -----	6	272	167	121,000
Upper San Joaquin River -----	16	1,640	2,850	2,060,000
<b>Totals -----</b>	<b>11</b>	<b>7,392</b>	<b>11,680</b>	<b>8,456,000</b>
<b>South of San Joaquin River:</b>				
Kings River -----	23	1,740	2,647	1,920,000
Kaweah River -----	13	520	736	533,000
Tule River -----	9	266	204	148,000
Kern River -----	22	2,345	1,063	770,000
Caliente Creek -----	6	423	191	138,000
Poso Creek -----	6	289	128	92,000
White Creek -----	6	90	40	29,000
Deer Creek -----	6	110	49	35,000
<b>Totals -----</b>	<b>11</b>	<b>5,738</b>	<b>5,053</b>	<b>3,665,000</b>
<b>Grand totals -----</b>	<b>11</b>	<b>13,175</b>	<b>16,738</b>	<b>12,121,000</b>

\*From records of California Engineering Department.

## Irrigation From Underground Waters in the Central Coast Valleys and the San Joaquin Valley.

## CENTRAL COAST VALLEYS IN 1909.

Counties	Areas irrigated from pumped wells, acres*	Areas irrigated from flowing wells, acres*
Alameda -----	1,125	-----
Contra Costa -----	68	-----
Monterey -----	4,428	-----
San Benito -----	1,812	847
San Francisco -----	383	-----
San Luis Obispo -----	109	18
San Mateo -----	1,057	-----
Santa Clara -----	15,947	7,415
Santa Cruz -----	247	2
<b>Totals -----</b>	<b>25,176</b>	<b>8,282</b>

## SAN JOAQUIN VALLEY IN 1909 AND 1912.

Counties	Area irrigated by pumping plants, 1909, acres*	Area irrigated from flowing wells, 1909, acres*	Total irrigated from ground waters, 1909, acres*	Area reported irrigated in 1912, acres†
Fresno -----	21,729	-----	21,729	27,620
Kern -----	4,290	2,097	6,387	12,240
Kings -----	1,042	11,400	12,442	30,780
Madera -----	1,663	-----	1,663	9,300
Merced -----	2,002	262	2,264	4,680
San Joaquin -----	8,642	-----	8,642	11,380
Stanislaus -----	5	-----	5	440
Tulare -----	31,286	6,556	37,942	75,320
<b>Totals -----</b>	<b>70,659</b>	<b>20,415</b>	<b>91,074</b>	<b>171,760</b>

\*From the census reports in 1909. †California Conservation Commission.

NOTE.—The increase for the three years, 1909-1912, in the San Joaquin Valley, has averaged 30 per cent per year.

## CALIFORNIA RIVERS AND CREEKS IN 1911.\*

(Compiled from the Reports of the U. S. Geological Survey.)

Rivers or creeks, and canals	Drainage area, square miles	Drainage in second-feet		Total run-off	
		Maximum	Minimum	Depth in inches on drainage area	Total in acre-feet
<i>Southern Pacific Ocean Drainage Basins.</i>					
Tia Juana River Basin—					
Cottonwood Creek (and conduit), near Jamul.....	270	97	.0	-----	4,860
Sweetwater River, near Descanso.....	40	182	.0	2.57	5,490
San Diego River Basin—					
San Diego River (and flume) at Lakeside.....	208	660	.0	1.31	14,400
San Dieguito River Basin—					
Santa Ysabel Creek, near Escondido.....	128	-----	-----	-----	3,410
San Luis Rey River, near Pala.....	318	-----	-----	-----	31,000
Santa Ana River Basin—					
Santa Ana River, near Mentone and Pacific Light and Power canal.....	182	1,900	39	9.91	96,500
San Gabriel River and canal, near Azusa.....	222	9,160	32	23.33	276,000
Los Angeles River Basin—					
Arroyo Seco, near Pasadena.....	16.4	-----	-----	-----	3,250
Santa Ynez River Basin—					
San Ynez River, near Santa Barbara.....	207	-----	-----	-----	51,500
Santa Ynez River, near Lompoc.....	725	20,400	30	13.86	537,000
Salinas River Basin—					
Arroyo Seco, near Soledad.....	215	13,300	11	25.51	292,000
<i>San Francisco Bay Drainage Basins.</i>					
San Joaquin River Basin—					
San Joaquin River, near Friant (formerly Pollasky)....	1,640	38,800	297	40.81	3,570,000
Kern River (and power canal) at Isabella.....	1,220	5,750	245	13.02	846,000
Kern River, near Bakersfield.....	2,345	4,623	281	8.10	1,010,000
Tule River, near Porterville.....	266	2,780	14	8.58	122,000
Kaweah River, near Three Rivers.....	520	6,610	62	19.69	546,000
Kings River, near Sanger.....	1,740	20,500	270	30.58	2,840,000
Merced River, near Merced Falls.....	1,090	37,200	100	36.32	2,110,000
Tuolumne River, near Lagrange (and three canals).....	1,500	52,600	16	-----	3,380,000
Modesto Canal, near Lagrange.....	-----	618	.0	-----	184,000
Turlock Canal, near Lagrange.....	-----	1,030	.0	-----	302,000
Lagrange Water and Power Co.'s canal, near Lagrange.....	-----	66	.0	-----	43,400
Stanislaus River, Stanislaus Water Co.'s canal and shell ditch at Knight's ferry.....	935	36,900	182	46.58	2,320,000
Mokelumne River, near Clements.....	642	16,700	75	44.29	1,520,000
Cosumnes River at Michigan Bar.....	524	22,400	24	31.24	874,000
Sacramento River Basin—					
Sacramento River at Antler.....	461	14,000	245	39.84	979,000
Sacramento River, near Red Bluff (including Goose Lake Basin).....	10,400	130,000	5,110	17.27	9,580,000



## California Rivers and Creeks—Continued.

Rivers or creeks, and canals	Drainage area, square miles	Drainage in second-feet		Total run-off	
		Maximum	Minimum	Depth in inches on drainage area	Total in acre-feet
<i>San Francisco Bay Drainage Basins—Continued.</i>					
Pit River, near Ydalpom (includes Goose Lake drainage basin, 1,090 square miles)-----	6,350	20,600	3,080	11.91	4,040,000
McCloud River at Baird-----	665	12,600	1,240	46.45	1,650,000
North Fork of Cottonwood Creek at Ono-----	52	2,460	5	33.21	92,100
Stony Creek, near Fruto-----	601	15,400	15	16.20	519,000
Little Stony Creek, near Lodi-----	102	4,980	2	17.41	94,800
Feather River at Oroville-----	3,640	75,400	1,060	25.27	6,850,000
Yuba River, near Smartsville--	1,220	39,000	410	53.09	3,460,000
North Fork of Yuba River at Goodyear Bar-----	214	4,570	120	63.74	727,000
North Fork of North Fork of Yuba River at Downieville--	71.2	2,290	42	71.10	270,000
Rock Creek at Goodyear Bar--	10.8	545	.5	59.40	34,200
Goodyear Creek at Goodyear Bar-----	12.2	1,180	3	106.95	69,600
Bear River at Van Trent-----	263	22,200	23	36.43	510,000
American River at Fair Oaks--	1,910	69,100	-----	53.01	5,400,000
Rubicon River, near Quintette.	198	3,000	5	37.66	398,000
Little South Fork of Rubicon River at mouth, near Quintette (1909-1911)-----	57.8	616	2	33.72	104,000
Cache Creek at Lower Lake----	500	1,410	3	9.47	252,000
Cache Creek at Yolo-----	1,230	18,400	.0	7.573	496,000
<i>Northern Pacific Ocean Drainage Basins.*</i>					

\*This includes the Russian River basin, Mattole Creek basin, Eel River basin, Yager Creek, Van Duzen River, Mad River basin, and Redwood Creek basin, but the records available are not sufficient to enable these details to be given.

In addition to these there are a large number of other rivers and streams, the details of which are not so complete as the above. See Water Supply Paper 311, U. S. Geological Survey, 1912, and Water Supply Paper 300, 1913.

NOTE.—There are four drainage areas in California: The South Pacific Coast area—Tia Juana River, Sweetwater River, San Diego River, San Dieguito River, San Luis Rey River, Santa Ana River, San Gabriel River, Malibu Creek, Santa Ynez River, Santa Maria River, Salinas River; North Pacific Coast area—Russian River, Eel River, Mad River, Klamath River (includes Trinity and Scott rivers); Big Basin area—Susan River, Willow Creek, Truckee River, Owens River; Great Valley area—Sacramento Valley, San Joaquin Valley, San Joaquin River basin, Tulare Lake basin, Kern River basin.

TABLE XXXIV.

## Irrigated Farms—Acreage and Cost, 1910.

(Compiled from the Reports of the Bureau of the Census.)

Counties	Number of farms irrigated	Acreage irrigated	Acreage capable of irrigation, 1910	Acreage capable of irrigation in projects	Cost of enterprises to July 1, 1910	Average cost per acre capable irrigation, 1910
Alameda -----	50	1,859	1,872	2,605	\$57,156	\$30 53
Alpine -----	32	3,349	3,399	3,435	7,493	2 20
Amador -----	73	826	3,973	4,139	265,608	66 85
Butte -----	556	28,754	115,075	233,500	1,231,894	10 71
Calaveras -----	154	1,275	3,161	3,919	121,033	38 29
Colusa -----	112	4,276	16,541	18,783	76,112	4 60
Contra Costa -----	78	26,856	32,562	32,640	90,503	2 78
Del Norte -----						
El Dorado -----	244	5,122	5,501	20,264	346,939	63 07
Fresno -----	5,310	402,318	560,326	633,652	1,898,460	3 39
Glenn -----	196	5,661	16,804	220,664	1,519,561	90 43
Humboldt -----	33	208	333	966	29,027	87 17
Imperial -----	1,250	190,711	242,000	375,000	4,955,272	20 48
Inyo -----	408	65,163	71,815	92,319	962,698	13 41
Kern -----	876	190,034	217,418	402,806	1,788,635	8 23
Kings -----	1,126	190,949	289,523	310,523	687,381	2 37
Lake -----	43	582	828	1,268	12,124	14 64
Lassen -----	355	77,079	89,815	149,530	884,965	9 85
Los Angeles -----	4,669	145,586	183,506	241,794	7,817,023	42 60
Madera -----	158	38,705	51,230	82,321	512,098	10 00
Marin -----	6	67	71	71	3,380	47 61
Mariposa -----	56	376	546	767	13,440	24 62
Mendocino -----	39	371	590	1,365	30,297	51 35
Merced -----	1,417	151,998	248,670	281,719	3,748,211	15 07
Modoc -----	437	82,075	89,476	124,166	301,040	3 36
Mono -----	76	49,027	50,007	84,973	64,282	1 29
Monterey -----	258	15,056	27,176	29,914	495,916	18 25
Napa -----	36	1,191	2,035	2,443	53,948	26 51
Nevada -----	300	3,839	4,259	5,267	1,569,028	368 40
Orange -----	2,215	55,056	63,486	71,444	1,948,246	30 69
Placer -----	618	16,845	23,365	61,751	2,798,740	119 78
Plumas -----	151	36,602	37,529	37,901	107,118	2 85
Riverside -----	2,174	71,436	103,233	210,452	5,648,469	54 72
Sacramento -----	1,053	53,683	69,970	74,588	1,452,471	20 76
San Benito -----	240	7,186	13,790	20,067	177,924	12 90
San Bernardino -----	2,463	70,278	86,107	152,415	9,416,960	109 36
San Diego -----	890	24,944	31,205	45,535	3,753,127	120 27
San Francisco -----	25	383	383	383	21,975	57 38
San Joaquin -----	1,452	59,811	77,083	173,563	1,689,720	21 92
San Luis Obispo -----	91	1,687	2,416	2,539	32,311	13 37
San Mateo -----	75	3,648	3,653	3,983	90,921	24 89
Santa Barbara -----	137	12,012	13,572	13,603	307,186	27 28
Santa Clara -----	1,101	37,637	50,939	60,140	1,337,216	26 25
Santa Cruz -----	106	1,201	1,313	2,232	76,621	58 36
Shasta -----	639	33,004	36,564	72,653	430,766	11 78
Sierra -----	94	17,504	17,505	18,249	69,650	3 98
Siskiyou -----	636	60,301	66,866	79,161	370,627	5 54
Solano -----	150	3,610	7,160	8,192	135,532	18 93
Sonoma -----	38	631	761	951	13,801	18 14
Stanislaus -----	1,911	84,015	141,785	340,914	4,051,870	28 58
Sutter -----	39	1,173	1,361	1,959	18,800	13 81
Tehama -----	366	14,281	23,167	36,020	263,055	11 35
Trinity -----	201	6,324	7,127	9,513	173,414	24 33
Tulare -----	3,048	265,404	337,938	466,735	5,634,379	16 67
Tuolumne -----	157	2,035	2,083	5,958	180,474	84 64
Ventura -----	489	25,273	49,407	56,357	2,262,205	45 79
Yolo -----	333	11,754	14,697	55,967	311,660	21 21
Yuba -----	112	3,073	6,401	46,322	198,268	30 97
Totals -----	39,352	2,664,104	3,619,378	5,490,360	\$72,580,030	av. \$20 05

TABLE XXXV.

Irrigated Farms—Main Ditches, Laterals, Flowing Wells and Pumped Wells, 1910.

Counties	Main ditches		Laterals		Wells	
	Number	Length, miles	Number	Length, miles	Number of flowing wells	Number of pumped wells
Alameda	49	21				56
Alpine	25	34	3	1		
Amador	55	185	12	56		
Butte	135	270	145	170		46
Calaveras	148	124	32	31	6	7
Colusa	38	44	10	7		3
Contra Costa	176	172			1	26
Del Norte						
El Dorado	56	285	25	55		
Fresno	254	831	688	1,354	3	855
Glenn	50	136	554	1,073		105
Humboldt	33	26	4	2		2
Imperial	12	117	179	890		
Inyo	184	396	326	168	10	1
Kern	178	441	418	257	25	140
Kings	27	137	51	159	75	20
Lake	44	26	21	2	1	3
Lassen	295	368	263	116		
Los Angeles	601	800	494	500	376	1,673
Madera	34	79	30	294		33
Marin	5	5				1
Mariposa	49	21				2
Mendocino	33	19	8	6		6
Merced	45	261	353	352	29	78
Modoc	446	637	490	175	45	2
Mono	85	172	101	65		
Monterey	106	223	23	32		102
Napa	26	8	3	3		2
Nevada	110	236	46	32		5
Orange	309	180	115	246	588	580
Placer	35	194	46	108		2
Plumas	147	201	62	16	3	
Riverside	301	500	262	288	553	792
Sacramento	213	238	5	8		1,168
San Benito	64	61	12	33		87
San Bernardino	291	466	237	283	79	449
San Diego	288	259	244	140		438
San Francisco	24	7				39
San Joaquin	298	308	49	192		1,618
San Luis Obispo	51	42	5	3	4	12
San Mateo	57	58				40
Santa Barbara	76	75	4	5	7	113
Santa Clara	458	228	39	27	438	800
Santa Cruz	81	41			2	58
Shasta	446	678	130	81	2	34
Sierra	119	150	4	1		
Siskiyou	595	688	172	41		3
Solano	20	22				125
Sonoma	32	21				11
Stanislaus	23	153	34	274		8
Sutter	13	6				18
Tehama	136	164	41	40	1	141
Trinity	208	228	41	13		1
Tulare	752	1,033	577	629	79	794
Tuolumne	62	153	11	24	2	4
Ventura	148	177	53	87	32	157
Yolo	8	87	8	83		58
Yuba	36	128	13	87		11
Totals	8,590	12,620	6,143	8,590	2,361	10,724



## PART VII.

# PETROLEUM, NATURAL GAS, MINERALS AND MINERAL SPRINGS.

**Petroleum by Counties and Fields. Production 1870-1913. Production in Other States. World's Output. Imports and Exports. Natural Gas. Minerals. Mineral Springs.**

## PRODUCTION OF PRINCIPAL MINERALS—1900-1913.

Value of Principal Minerals, Value by Counties, Mineral Springs in California.

### PETROLEUM.

The existence of petroleum in California has long been known. The native Indians used it in the form of asphaltum for various purposes, and it was utilized by the Catholic Fathers for roofing their missions and other buildings. For nearly half a century Russia was the largest producer of petroleum in the world, but now occupies the second place, the first being held by California.

Until the year 1875 practically all the oil produced in the United States came from Pennsylvania and New York; in 1876 California, West Virginia, and Ohio became producers, but California soon took the lead and has kept on increasing it ever since, and promises to retain this supremacy for future years.

### Early History of California Fields.

Ventura was the pioneer county in California in the second successful search for oil. In June, 1865, the first well was started, but it was a failure. In 1876 oil of good quality was found, and by 1883 the production was well developed.

In Los Angeles the industry dates from February, 1892, when two wells were dug, and at 150 feet oil was found. The wells were near the intersection of West street and Lake Shore avenue, but the production was only two to three barrels a day. By the end of 1895 there were more than 300 wells within an area of four million square feet, and by June, 1900, 1,300 wells were drilled within the city.

In Santa Barbara County oil was first struck in the Summerland district in 1893, many of the wells being sunk beyond low-water mark. The Santa Maria district up to 1899 was entirely unknown as an oil-producing district. A favorable report having been made on lands of the Carreaga ranch, three prospect holes were drilled, and in August, 1901, paying quantities were obtained. In 1902 the Pinal Oil Company of Santa Maria began operations on the north side of Graciosa Ridge, and many other companies have since undertaken operations in this field. The developed fields lie on the low, rolling hills between the Santa Maria and Lompoc valleys, and the wells are known to obtain their oil from the Monterey shale which underlies this region. The Hartnell well, a gusher, struck in 1904, produced 10,000 barrels daily for several months, and at the time was said to be the greatest well ever drilled in the United States.

In the Coalinga field the first well was drilled about the year 1890 to the depth of 163 feet, and a windmill pump was attached, which raised 20 barrels of oil in two days. In 1895 the Producers' and Consumers' Oil Company of Selma was organized by J. A. McClurg and others. In 1897 the Home Oil Company of Selma was formed by S. W. Terril and others, which drilled wells ranging from 900 to 1,700 feet. The production in 1897 was 70,140 barrels; in 1898, 154,000 barrels; in 1900, 582,000 barrels, and in 1903 it first passed the million mark, with 2,214,160 barrels.

In Orange County prospecting for oil commenced as early as 1867, but it was not until 1897 that the Santa Fe Railroad made a strike in the Fullerton district, and since then developments have been steady.

In Kern County the production of oil first commenced in 1898, with an output of 10,000 barrels, increased to 15,000 the following year, and is now the largest oil-producing county in the State.

The Midway district, in Kern County, is the largest producer, followed by Coalinga.

#### Duration of Oil Fields.

An estimate made by Mr. Ralph Arnold for the Geological Survey states that the known oil fields of the State can furnish a minimum of 5,000,000,000 barrels, and a probable maximum of 8,000,000,000 barrels of oil. In other words, a supply of cheap and most efficient fuel is available in California for a century to come.

The National Conservation Committee in 1908 estimated the petroleum area in California as 850 square miles, and the natural gas area as 310 square miles.

A vast system of pipe lines has been constructed from the various fields to the coast. There are several lines in the Coalinga fields, two of 133 miles in length to Point Richmond, on the bay of San Francisco, another of 110 miles to Monterey, another to Salinas, and one to Port Costa, 198 miles long. There is also another to Port Harford, about 100 miles in length, which makes a junction in the Devil's Den district with a line coming north from McKittrick, Midway, and Bakersfield.

The Kern River field has a pipe line to Port Costa and Point Richmond, a line from Midway connecting with them.

The Santa Maria oil field has three pipe lines, two from Orcutt and Lompoc to Harford, and another to Gaviota.

#### Petroleum Reserves in California.

Two reserves of public lands have been established to assure the Navy a supply of oil in case of need. These reserves are in the Elk Hills and the Buena Vista Hills, Kern County. The public lands within these areas have been withdrawn from all forms of entry during the last three years, and in 1912 a special reservation for naval purposes was made.

#### Exports of Petroleum From the United States.

The quantity of oil exported from the United States is enormous, and has increased from 967,262,000 gallons in 1900 to 1,989,772,000 in 1913, and the value has increased during this period from \$68,247,000 to \$137,237,000.



**Production and Value of Petroleum in California in 1911 and 1912, by Districts and Counties, in Barrels.\***

District and county	1911			1912		
	Quantity	Value	Price per barrel	Quantity	Value	Price per barrel
<b>Coastal and southern:</b>						
Los Angeles County—						
Los Angeles city-----	397,424	\$268,574	\$0.676	344,789	\$211,896	\$0.615
Newhall -----						
Puente -----						
Salt Lake-Sherman -----						
Whittier -----						
Orange County—						
Fullerton -----	16,247,804	10,281,176	.633	15,863,404	9,775,105	.616
Ventura County—						
Santa Paula -----						
Santa Barbara County—						
Lompoc -----						
Santa Maria -----						
Summerland -----	63,238	45,458	.719	65,376	44,295	.677
San Luis Obispo County--						
Santa Clara County-----	20,462	12,072	.590	20,123	11,977	.596
<b>San Joaquin Valley:</b>						
Fresno County—						
Coalinga -----	18,483,751	9,100,371	.492	19,911,820	8,768,303	.441
<b>Kern County—</b>						
Lost Hills -----				1,367,359	\$652,927	.477
Kern River -----	13,225,713	\$4,922,735	.372	12,558,489	5,399,914	.422
McKittrick <sup>1</sup> -----	5,149,226	1,798,279	.349	5,881,996	2,350,096	.399
Midway -----	21,196,475	9,830,922	.464	23,928,368	9,713,362	.405
Sunset -----	6,350,298	2,459,493	.387	6,509,093	2,285,713	.351
<b>Totals -----</b>	<b>45,921,712</b>	<b>\$19,011,429</b>	<b>.414</b>	<b>50,245,255</b>	<b>\$20,402,012</b>	<b>.406</b>
<b>Grand totals -----</b>	<b>81,134,391</b>	<b>\$38,719,080</b>	<b>.477</b>	<b>86,450,767</b>	<b>\$39,213,588</b>	<b>.454</b>

<sup>1</sup>Includes Lost Hills.

**Production of Petroleum in California, 1903-1912, by Counties, in Barrels.**

Year	Fresno	Kern	Los Angeles	Orange	Santa Barbara	Ventura	San Mateo	Santa Clara	Total
1903 -----	2,138,058	18,077,900	2,087,627	1,413,782	306,066	348,295	5,187	5,607	24,382,472
1904 -----	5,114,958	19,608,045	2,102,592	1,473,335	789,006	517,770	1,500	41,928	29,649,434
1905 -----	10,967,015	14,487,967	3,469,433	1,429,688	2,684,837	337,970		50,563	33,427,473
1906 -----	7,991,039	14,520,854	3,449,119	2,032,637	4,774,361	299,124		131,464	33,098,598
1907 -----	8,871,723	15,652,156	3,477,235	2,604,982	8,708,077	357,094		177,108	39,748,375
1908 -----	10,386,168	18,132,893	4,692,495	3,558,714	7,816,682	379,044		188,741	44,854,737
1909 -----	14,795,459	23,831,768		16,774,195				170,179	55,471,601
1910 -----	18,387,750	37,896,727		16,665,678				160,405	73,010,560
1911 -----	18,483,751	45,921,712		16,708,466				120,462	81,134,391
1912 -----	19,911,820	50,245,255		16,273,569				120,123	86,450,767

\*From Reports of the U. S. Geological Survey.

<sup>1</sup>Includes oil produced in San Luis Obispo County.

<sup>2</sup>Production of Santa Clara and San Luis Obispo Counties.

**Production of Petroleum in California in 1911 and 1912, by Districts and Counties,  
With Increase or Decrease and Percentage Thereof, in Barrels.\***

District and county	1911	1912	Increase	Decrease	Percentage	
					Increase	Decrease
<b>Coastal and southern:</b>						
Los Angeles County—						
Los Angeles city.....	397,424	344,789		52,635		13.24
Newhall .....						
Puente .....						
Salt Lake-Sherman .....						
Whittier .....						
Orange County—						
Fullerton .....	16,247,804	15,863,404		384,400		2.37
Ventura County—						
Santa Paula .....						
Santa Barbara County—						
Lompoc .....						
Santa Maria .....						
Summerland .....	63,238	65,376	2,138		3.38	
San Luis Obispo County..	20,462	20,123		339		1.66
Santa Clara County.....						
<b>San Joaquin Valley:</b>						
Fresno County—						
Coalinga .....	18,483,751	19,911,820	1,428,069		7.73	
Kern County—						
Los Hills <sup>1</sup> .....						
Kern River .....	13,225,713	12,558,439		667,274		5.05
McKittrick <sup>2</sup> .....	5,149,226	7,249,355	2,100,129		40.79	
Midway .....	21,196,475	23,928,368	2,731,893		12.89	
Sunset .....	6,350,298	6,509,093	158,795		2.50	
<b>Totals .....</b>	<b>45,921,712</b>	<b>50,245,255</b>	<b>4,323,543</b>		<b>9.42</b>	
<b>Grand totals .....</b>	<b>81,134,391</b>	<b>86,450,767</b>	<b>5,147,744</b>		<b>6.34</b>	

<sup>1</sup>Included in McKittrick.<sup>2</sup>Includes Lost Hills.

**Production and Value of Petroleum in California, 1908-1912, by Districts, in Barrels.**

Year	Coastal and Southern		San Joaquin Valley		Total	
	Quantity	Value	Quantity	Value	Quantity	Value
1908 .....	16,335,676	\$9,296,743	28,519,061	\$14,136,759	44,854,737	\$23,433,502
1909 .....	16,844,374	9,737,616	38,627,227	21,019,097	55,471,601	30,756,713
1910 .....	16,726,083	10,532,080	56,284,477	25,217,393	73,010,560	35,749,473
1911 .....	16,728,928	10,607,280	64,405,463	28,111,800	81,134,391	38,719,080
1912 .....	16,293,692	10,043,273	70,157,075	29,170,315	86,450,767	39,213,588

\*From the Reports of the U. S. Geological Survey.

## Estimated Production by Fields, in 1913.

Field	Wells completed	Wells producing January, 1913	Total production, barrels
Kern River .....	33	1,397	9,980,940
McKittrick .....	49	254	5,731,087
Midway and Sunset.....	241	1,214	39,024,973
Lost Hills and Belridge.....	80	185	4,040,085
Coalinga .....	64	867	13,604,597
Lompoc and Santa Maria.....	16	221	5,816,711
Ventura County and Newhall.....	37	409	1,022,117
Los Angeles, Puente and Salt Lake.....	17	682	2,915,334
Whittier-Fullerton .....	36	514	10,640,362
Summerland .....		122	62,365
Watsonville .....	2		27,375
Totals .....	575	5,865	97,865,946
Total production, 1913.....			97,865,946
Consumption .....			97,083,728
Surplus .....			782,218
Gain in production, 1913.....			7,792,744
Gain in consumption, 1913.....			13,674,098
Total surplus January 1, 1914.....			47,870,177

## Estimated Monthly Production, 1913.

	Barrels
January .....	7,566,789
February .....	7,206,198
March .....	7,986,407
April .....	7,927,041
May .....	8,049,715
June .....	8,030,111
July .....	8,427,081
August .....	8,812,793
September .....	8,655,341
October .....	8,236,649
November .....	8,367,151
December .....	8,491,438
Total .....	97,756,714

## SUMMARY.

## Production of Petroleum in California, 1870-1913.

Year	Barrels of 42 gallons	Value
1870	3,600	\$5,125
1871	5,200	7,370
1872	6,500	9,876
1873	7,200	10,920
1874	7,700	11,540
1875	8,400	12,090
1876	12,000	15,410
1877	13,000	18,140
1878	15,227	22,780
1879	19,858	29,672
1880	40,552	68,450
1881	99,862	130,678
1882	128,636	172,730
1883	142,857	207,540
1884	262,000	428,600
1885	325,000	613,920
1886	377,145	642,785
1887	678,572	1,357,144
1888	690,333	1,380,666
1889	303,220	368,048
1890	307,360	384,200
1891	323,600	401,264
1892	385,049	561,333
1893	470,179	608,092
1894	783,078	1,064,521
1895	1,245,339	1,000,235
1896	1,257,780	1,180,793
1897	1,911,569	1,918,269
1898	2,249,088	2,376,420
1899	2,677,875	2,660,793
1900	4,329,950	4,152,928
1901	7,710,315	2,961,102
1902	14,356,910	4,692,189
1903	24,340,839	7,313,271
1904	29,736,003	8,317,809
1905	34,275,701	9,007,820
1906	32,624,000	9,238,020
1907	40,311,171	16,783,943
1908	48,306,910	26,566,181
1909	58,191,723	32,398,187
1910	73,010,560	35,749,473
1911	78,195,139	40,552,088
1912	90,073,202	43,000,000
1913 (estimated)	97,756,714	46,000,000

The estimates of the output do not always agree, as some authorities include the quantity used in the field, which amounts to about 5,000,000 gallons annually.

Of the fourteen states now producing petroleum, the date of first production was as follows:

Year	State	Barrels
1859	Pennsylvania and New York	2,000
1876	California	12,000
1876	West Virginia	120,000
1876	Ohio	31,763
1883	Kentucky and Tennessee	4,755
1887	Colorado	76,295
1889	Indiana	33,375
1889	Illinois	1,460
1889	Kansas	500
1889	Texas	48
1889	Missouri	20
1891	Oklahoma	30
1894	Wyoming	2,369
1902	Louisiana	548,617



## Rank of Producing State With Quantity and Value of Petroleum Produced in 1912.

State	Rank	Quantity	Per-centage	State	Rank	Value	Per-centage
California ----	1	86,450,767	38.92	California ----	1	\$39,213,588	23.94
Oklahoma ----	2	51,427,071	23.15	Oklahoma ----	2	34,672,604	21.17
Illinois ----	3	28,601,308	12.88	Illinois ----	3	24,332,605	14.85
West Virginia ----	4	12,128,962	5.46	West Virginia ----	4	19,927,721	12.16
Texas ----	5	11,735,057	5.28	Pennsylvania ----	5	12,886,752	7.87
Louisiana ----	6	9,263,439	4.17	Ohio ----	6	12,085,998	7.38
Ohio ----	7	18,969,007	4.04	Texas ----	7	8,852,713	5.40
Pennsylvania ----	8	7,837,948	3.53	Louisiana ----	8	7,023,827	4.29
Kansas ----	9	1,592,796	.72	New York ----	9	1,401,880	.86
Wyoming ----	10	1,572,306	.71	Kansas ----	10	1,095,698	.67
Indiana ----	11	970,009	.44	Indiana ----	11	885,975	.54
New York ----	12	874,128	.39	Wyoming ----	12	798,470	.49
Kentucky ----	13	484,368	.22	Kentucky ----	13	424,842	.26
Colorado ----	14	206,052	.09	Colorado ----	14	199,661	.12
Michigan ----	15	2	-----	Michigan ----	15	2	-----
Total -----		222,113,218	100.00	Total -----		163,802,334	100.00

<sup>1</sup>Includes Michigan.<sup>2</sup>Included in Ohio.

## World's Production of Crude Petroleum, 1909-1912, by Countries, in Barrels and Metric Tons.

Country	1909	1910	1911	1912			
				Rank	Barrels	Metric tons	Per-centage of total production
United States ----	183,170,874	209,557,248	220,449,391	1	222,113,218	29,615,096	63.25
Russia ----	65,970,350	70,336,574	66,183,691	2	68,019,208	9,317,700	19.37
Mexico ----	2,488,742	3,332,807	14,051,643	3	16,558,215	2,207,762	4.71
Dutch East Indies ----	11,041,852	11,030,620	12,172,949	5	10,845,624	1,478,132	3.09
Roumania ----	9,327,278	9,723,806	11,107,450	4	12,991,913	1,806,942	3.70
Galicia ----	14,932,799	12,673,688	10,519,270	6	8,535,174	1,187,007	2.43
India ----	6,676,517	6,137,990	6,451,203	7	7,116,672	989,801	2.03
Japan ----	1,889,563	1,930,661	1,658,903	9	1,671,405	222,854	.48
Peru ----	1,316,118	1,330,105	1,368,274	8	1,751,143	233,486	.50
Germany ----	1,018,837	1,032,522	1,017,045	10	995,764	140,000	.28
Canada ----	420,755	315,895	291,096	11	243,614	32,612	.07
Italy ----	42,388	42,388	74,709	12	186,286	112,000	.02
Other ----	130,000	130,000	1200,000	-----	250,000	33,333	.07
Total -----	298,326,073	327,474,304	345,512,185	-----	351,178,236	47,276,725	100.00

<sup>1</sup>Estimated.

## Imports of Petroleum, 1900-1913.

Year	Free gallons	Value	Dutiable gallons	Value
1900 ----	2,354,720	\$217,405	19,509	\$3,042
1910 ----	13,693,228	609,400	*2,156	644
1911 ----	38,775,884	2,143,661	-----	-----
1912 ----	160,502,114	3,654,453	-----	-----
1913 ----	529,737,973	9,216,980	-----	-----

\*From July 1st to August 5th, all mineral oils became free on August 6, 1910. Note the enormous increase of 369,235,859 gallons in 1913.



## Petroleum Exports (Domestic) in 1900 and 1913.

Description	Gallons	Value
<b>1900</b>		
Mineral, crude, including all natural oils, without regard to gravity.....	133,023,656	\$7,364,162
Mineral, refined or manufactured:		
Naphthas and all lighter products of distillation.....	21,998,093	2,016,802
Illuminating oil.....	721,027,637	55,979,566
Lubricating and heavy paraffin oil.....	74,583,769	9,744,367
Residium, tar and all from which the light bodies have been distilled.....	16,629,186	506,853
<b>Total mineral oils.....</b>	<b>967,262,341</b>	<b>\$68,247,588</b>
<b>1913</b>		
Mineral, crude, including all natural oils, without regard to gravity.....	195,642,935	\$7,570,767
Mineral, refined or manufactured:		
Naphtha and all lighter products of distillation:		
Illuminating oil.....	1,048,894,297	66,189,265
Gasoline.....	81,698,917	10,831,490
All other illuminating oil.....	101,821,572	14,269,878
Lubricating and heavy paraffin oil.....	213,671,499	29,574,410
Gas oil and fuel oil.....	320,529,925	8,305,715
All other.....	27,513,568	496,237
<b>Total refined.....</b>	<b>1,794,129,778</b>	<b>\$129,666,995</b>
<b>Total mineral.....</b>	<b>1,989,772,713</b>	<b>\$137,237,762</b>

NOTE.—California petroleum is exported to all quarters of the globe.

## NATURAL GAS.

Since 1889, when natural gas was first produced and used in California, the natural gas industry has become of great importance, and to the United States belongs the credit of making natural gas a commercial product. In 1912 the pipe line, 117 miles long, was completed which conveys natural gas from the Buena Vista Hills, of Kern County, to consumers in Los Angeles and surrounding towns. This pipe line was built under great difficulties and the cost was enormous.

In 1912 the estimated value of the gas consumed was \$1,134,456, as compared with \$800,714 in 1911. This increase was not brought about by the discovery of new fields, but by an increased production and consumption of gas from districts already reported, particularly the Midway field, which came into prominence as a gas producer in 1910–1911, and is the most important and productive gas field in California at the present time. It is located in Kern County, near Taft. Large volumes of gas accompany the oil gushers in this field, and several wells are exclusively gas producers. Some of these wells have a capacity of 50,000,000 cubic feet or more per day. At the close of 1912 there were 15 gas wells in the Midway gas field and 3 in progress of drilling. The number of domestic consumers supplied in California in 1912 was 18,171, as compared with 10,598 in 1911, and the quantity and value of the gas consumed for domestic purposes increased from 543,392,000 cubic feet, valued at \$317,467, in 1911, to 974,796,000 cubic feet, valued at \$525,428, in 1912.

The gas is supplied to domestic consumers in the following towns: Bakersfield, Taft, Fellows, Maricopa, Sacramento, Stockton, Santa Maria, Guadalupe, Betteravia, Suisun, Fairfield, Cement, Oxnard, Ventura, and Santa Paula.

Large quantities of gas are consumed in the oil fields for drilling and operating: It is estimated that the total quantity and value of the gas consumed in California for power purposes was 8,379,632 cubic feet, valued at \$609,028, an average price of 7.27 cents per thousand cubic feet. A considerable quantity of gas produced from the oil wells of this State goes to waste annually, there being no means of disposing of it. The number of gas wells at the close of 1912 was 71, as compared with 66 at the beginning of the year.

Gasoline Produced in California, 1900-1912.

Year	Value
1900	\$79,083
1901	67,602
1902	120,648
1903	104,521
1904	114,195
1905	133,696
1906	134,560
1907	168,397
1908	307,652
1909	446,933
1910	476,697
1911	800,714
1912	1,134,456

Acreage Controlled by Natural Gas Companies in 1912, by States.

State	In fee	Leased	Gas rights	Total
Alabama	570	216,000		216,570
Arkansas	600	20,059		20,659
California	2,434	7,690		10,124
Colorado		195		195
Illinois	3,568	165,337	17,342	186,247
Indiana	120,020	173,979	8,692	302,691
Kansas	25,405	366,475	17,870	409,750
Kentucky	2,970	113,947		116,917
Louisiana	15,625	301,664		317,289
Missouri	4,077	1,660		5,737
New York	10,689	490,506	1,205	502,400
North Dakota		20,000		20,000
Ohio	14,834	1,711,552	29,781	1,756,167
Oklahoma	7,047	1,058,144	95,857	1,161,048
Pennsylvania	115,242	1,675,116	397,030	2,187,388
Tennessee	500			500
Texas	7,660	153,919	6,369	167,948
West Virginia	124,880	2,202,642	691,794	3,019,316
Wyoming	2,968	3,970		6,938
Totals	459,089	8,682,855	1,265,940	10,407,884

## MINERALS.

California is rich in minerals, but as yet comparatively little has been done, with the exception of gold mining, and in more recent years in the petroleum fields, to develop its vast resources. The great difficulty in the way of opening up some of these valuable deposits is the want of transportation facilities.

The existence of gold had long been known in California, and washing had been carried on in the southern part of the State, near San Fernando Mission, as early as 1841. After the discovery of gold in the northern part of the State in 1848 there was a rush of immigration during the fall and winter of that year, and the excitement continued during the three succeeding years, but fell off in a marked degree in 1854. In 1852 the "hydraulic process" was introduced. The auriferous belt of California extends through the northern and central parts of the State and from the summit of the Sierra to the San Joaquin and Sacramento valleys. The gold occurs in three types of deposits: River gravels, or placers, high panels, and veins. A great series of these veins, called the "Mother Lode," extends across Tuolumne, Calaveras, Amador, and El Dorado counties.

The State annually produces about \$19,000,000 to \$20,000,000 in gold, much depending on the "water season." The largest amount, \$81,294,700, was produced in 1852. When the snow is light, many quartz mills have to shut down for a few months, owing to lack of water for power and the want of water to wash the gravels of the placers.

Of the placers the most important producers are the gold dredges, which yield about 85 per cent of the placer gold, or 40 per cent of the total gold output of the State from all sources, and the production by dredging has been gradually increased in recent years.

Borax, magnesite, and chrome production in the United States come solely from California. Eighty per cent of the domestic supply of quicksilver and platinum is mined in this State. California leads all other states in the Union in the value of petroleum and gold produced; is first of all states west of the Mississippi in the value of her total mineral production, and is only outranked by a few of the great iron and coal producing states of the East. The value of the total mineral output for 1913 is estimated at \$95,000,000.

In addition to the precious metals, the output of a number of other selected minerals is also given for a number of years, as an illustration of the varied resources of the State, as space will not allow a complete list in detail. The following summaries are compiled from the reports of the State Mining Bureau:

**Total Gold Production of California, 1909-1913.\***

Gold is more widely distributed than any other substance thus far mined in California, thirty-three counties out of the fifty-eight in the State showing a gold yield in 1909, and gold is known to exist in several others. Gold was discovered by James W. Marshall, on January 24, 1848, at Sutter's Mill, near Coloma, El Dorado County. The value of

\*The complete Output and Value of Minerals for 1913 has not yet been issued.

the gold produced since that year, until 1912, amounts to about \$1,567,680,946.

Year	Value	Year	Value
1890 -----	\$12,309,793	1902 -----	\$16,910,320
1891 -----	12,728,869	1903 -----	16,471,264
1892 -----	12,571,900	1904 -----	19,109,600
1893 -----	12,422,811	1905 -----	19,197,043
1894 -----	13,923,281	1906 -----	18,732,452
1895 -----	15,334,317	1907 -----	16,727,928
1896 -----	17,181,562	1908 -----	18,761,559
1897 -----	15,871,401	1909 -----	20,237,870
1898 -----	15,906,478	1910 -----	19,715,440
1899 -----	15,336,031	1911 -----	19,738,908
1900 -----	15,863,355	1912 -----	19,713,478
1901 -----	16,989,044	1913 (estimated) -----	20,000,000

Total value, 1848-1912 (65 years), \$1,567,680,946.

#### Silver.

Year	Value	Year	Value
1900 -----	\$1,510,344	1907 -----	\$751,646
1901 -----	1,229,356	1908 -----	873,057
1902 -----	616,412	1909 -----	896,250
1903 -----	517,444	1910 -----	993,646
1904 -----	873,525	1911 -----	673,336
1905 -----	678,494	1912 -----	799,584
1906 -----	817,830	1913 (estimated) -----	800,000

The total value of silver obtained since 1887 is estimated at \$22,844,000, and the average price in 1911, 53 cents per ounce, and in 1912, 61½ cents.

Silver is found in twenty-six counties, Shasta being the leading producer.

#### Quicksilver.

Year	Flasks	Value	Year	Flasks	Value
1900 -----	26,317	\$1,182,786	1907 -----	17,379	\$663,178
1901 -----	26,720	1,285,014	1908 -----	18,039	763,520
1902 -----	29,552	1,276,524	1909 -----	16,217	773,788
1903 -----	32,094	1,335,954	1910 -----	17,665	799,002
1904 -----	28,876	1,086,323	1911 -----	19,109	879,205
1905 -----	24,655	886,081	1912 -----	20,600	866,024
1906 -----	19,516	712,334	1913 (estimated) -----		700,000

NOTE.—Flasks contain 75 pounds since June 1, 1904. Average price in San Francisco in 1901, \$48.46; in 1906, \$36.50; in 1911, \$46.01, and in 1912, \$42.04.

Eight counties reported a production of quicksilver during 1912, against 9 for 1911. California supplies about 80 per cent of the quicksilver production in the United States. San Benito County is the largest producer, followed by Santa Clara, Lake, San Luis Obispo, Sonoma, and Fresno.



## Copper.

Year	Pounds	Value	Year	Pounds	Value
1900	29,515,512	\$4,748,242	1907	32,602,945	\$6,341,387
1901	34,931,788	5,501,782	1908	40,868,772	5,350,777
1902	27,860,162	3,239,975	1909	65,727,736	8,478,142
1903	19,113,861	2,520,997	1910	53,721,032	6,680,641
1904	29,974,154	3,969,995	1911	36,838,024	4,604,753
1905	16,997,489	2,650,605	1912	34,169,997	5,638,049
1906	28,726,448	5,522,712	1913	(estimated)	5,500,000

Copper is produced in thirteen counties, Shasta being by far the largest producer.

## Platinum.

Year	Ounces	Value	Year	Ounces	Value
1900			1907	300.07	\$6,255
1901	250	\$3,200	1908	706	13,414
1902	39	468	1909	416	10,400
1903		1,052	1910	337	8,386
1904		1,849	1911	511	14,873
1905	200	3,320	1912	603	19,731
1906	91.46	1,647			

## Gems.

Year	Value	Year	Value
1900	\$20,500	1907	\$232,642
1901	40,000	1908	208,950
1902	162,100	1909	193,700
1903	110,500	1910	237,475
1904	136,000	1911	51,824
1905	148,500	1912	23,050
1906	497,090		

Gems are found in six counties, San Diego and Tulare counties being the largest producers.

## Asphalt.

Year	Tons	Value	Year	Tons	Value
1900	12,575	\$253,950	1907	79,718	\$1,058,400
1901	21,634	313,219	1908	105,443	1,082,376
1902	34,511	349,344	1909	136,664	1,707,159
1903	41,670	503,659	1910	184,967	2,125,122
1904	56,187	672,910	1911	180,000	2,250,000
1905	40,304	285,290	1912	250,000	2,500,000
1906	77,756	777,560			

Asphalt is found in eight counties, principally in Kern and Los Angeles.



**Bituminous Rock.**

Year	Tons	Value	Year	Tons	Value
1900 -----	25,306	\$71,495	1907 -----	24,122	\$72,835
1901 -----	24,052	66,354	1908 -----	30,718	109,818
1902 -----	33,490	43,411	1909 -----	34,123	116,436
1903 -----	21,944	53,106	1910 -----	87,547	165,711
1904 -----	45,280	175,680	1911 -----	75,125	117,279
1905 -----	24,753	60,436	1912 -----	44,073	87,467
1906 -----	16,077	45,204			

Only two counties produce bituminous rock, Santa Cruz leading in the production.

**Coal.**

Year	Tons	Value	Year	Tons	Value
1900 -----	176,956	\$535,531	1907 -----	23,734	\$55,849
1901 -----	150,724	401,772	1908 -----	18,496	55,503
1902 -----	88,460	248,622	1909 -----	49,389	216,913
1903 -----	93,026	265,383	1910 -----	11,033	23,484
1904 -----	79,062	376,494	1911 -----	11,047	18,297
1905 -----	46,500	144,500	1912 -----	14,848	39,092
1906 -----	24,850	61,600			

**Borax.**

Year	Pounds	Value	Year	Pounds	Value
1900 -----	51,674,000	\$1,013,251	1907 -----	106,825,000	\$1,200,913
1901 -----	14,442,000	982,380	1908 -----	44,400,000	1,117,000
1902 -----	34,404,000	2,234,994	1909 -----	33,257,000	1,163,960
1903 -----	68,860,000	661,400	1910 -----	33,656,000	1,177,960
1904 -----	91,294,000	698,810	1911 -----	50,945,000	1,456,672
1905 -----	97,068,000	1,019,158	1912 -----	42,135,000	1,122,713
1906 -----	116,346,000	1,182,410			

**Salt.**

Year	Tons	Value	Year	Tons	Value
1900 -----	89,338	\$204,754	1907 -----	88,063	\$310,967
1901 -----	126,218	366,376	1908 -----	121,764	281,469
1902 -----	115,208	205,876	1909 -----	155,680	414,708
1903 -----	102,895	211,365	1910 -----	174,920	395,417
1904 -----	95,968	187,300	1911 -----	173,332	324,255
1905 -----	77,118	141,925	1912 -----	185,721	383,370
1906 -----	101,650	213,228			

Salt is produced by seven counties, Alameda being the largest producer.

**Magnesite.**

Year	Tons	Value	Year	Tons	Value
1900 -----	2,252	\$19,333	1907 -----	6,405	\$57,720
1901 -----	4,726	43,057	1908 -----	10,582	80,822
1902 -----	2,830	20,655	1909 -----	7,942	62,588
1903 -----	1,361	20,515	1910 -----	16,570	113,887
1904 -----	2,850	9,298	1911 -----	8,858	67,430
1905 -----	3,933	16,221	1912 -----	10,512	105,120
1906 -----	4,032	40,320			

Magnesite is found in Fresno, Riverside, Santa Clara, and Tulare counties, the latter having the largest output.

## TABLE XXXVI.

## Production of Minerals by Counties, 1910-1912.

(From the California State Mining Bureau.)

Substance	1910	1911	1912
Asbestos -----	\$20,000 00	\$500 00	\$2,700 00
Barytes -----	5,640 00	2,207 00	2,812 00
Bituminous rock -----	165,711 00	117,279 00	87,467 00
Borax -----	1,177,960 00	1,456,672 00	1,122,713 00
Brick -----	2,934,731 00	2,638,121 00	2,940,290 00
Cement -----	7,485,715 00	9,085,625 00	6,074,661 00
Chrome -----	9,707 00	14,197 00	11,260 00
Clay -----	324,099 00	252,759 00	215,683 00
Coal -----	23,484 00	18,297 00	39,092 00
Copper -----	6,680,641 00	4,604,753 00	5,638,049 00
Crushed rock <sup>1</sup> -----	1	3,610,357 00	<sup>2</sup>
Feldspar -----	5,720 00	4,560 00	6,180 00
Fuller's earth -----	3,820 00	5,294 00	6,500 00
Gems -----	237,475 00	51,824 00	23,050 00
Gold -----	19,715,440 00	19,738,908 00	19,713,478 00
Granite -----	417,898 00	355,742 00	<sup>3</sup>
Gypsum -----	129,152 00	101,475 00	117,388 00
Infusorial earth -----	17,617 00	19,670 00	17,074 00
Iron ore -----	900 00	558 00	2,508 00
Lead -----	134,082 00	63,173 00	61,653 00
Lime -----	1,058,891 00	390,988 00	464,440 00
Limestone -----	<sup>4</sup>	452,790 00	570,248 00
Macadam -----	1,104,526 00	<sup>5</sup>	<sup>6</sup>
Magnesite -----	113,887 00	67,430 00	105,120 00
Manganese -----	4,235 00	40 00	400 00
Marble -----	50,200 00	54,103 00	74,120 00
Mineral paint -----	2,040 00	1,184 00	1,800 00
Mineral water -----	522,009 00	590,654 00	529,384 00
Natural gas -----	1,676,367 00	491,859 00	940,076 00
Paving blocks -----	198,916 00	210,819 00	<sup>7</sup>
Petroleum -----	37,689,542 00	40,552,088 00	41,868,344 00
Platinum -----	8,386 00	14,873 00	19,731 00
Pumice -----	None	None	2,500 00
Pyrite -----	179,862 00	182,954 00	203,470 00
Quicksilver -----	799,002 00	879,205 00	866,024 00
Rubble -----	1,673,164 00	<sup>8</sup>	<sup>9</sup>
Salt -----	395,417 00	324,255 00	383,370 00
Sand, glass -----	8,165 00	8,672 00	15,404 00
Sand, quartz -----	10,100 00	None	None
Sandstone -----	80,443 00	127,314 00	22,574 00
Silver -----	993,646 00	673,336 00	799,584 00
Slate -----	8,000 00	None	None
Soapstone -----	7,260 00	None	7,350 00
Soda -----	11,862 00	52,887 00	37,094 00
Stone industry* -----			5,473,928 00
Tungsten -----	208,245 00	127,706 00	206,000 00
Zinc -----	None	152,751 00	298,866 00
Totals -----	\$86,293,957 00	\$87,497,897 00	\$88,972,385 00
Asphalt -----	2,125,122 00	2,250,000 00	2,500,000 00
Total including asphalt -----	\$88,419,079 00	\$89,747,879 00	\$91,472,385 00

<sup>1</sup>Given as macadam and rubble. <sup>2</sup> <sup>3</sup> <sup>4</sup> <sup>5</sup> <sup>6</sup> <sup>7</sup> <sup>8</sup> <sup>9</sup>Included in "stone industry." <sup>4</sup>Included in lime. <sup>5</sup>Included in crushed rock.

\*Stone industry includes all crushed rock, granite, paving blocks, etc.

NOTE.—For production and value of minerals, by counties, for 1900, and 1906-1911, see Report for 1912, pages 231-232.

TABLE XXXVII.

Value of Minerals Produced, by Counties, 1910-1912.

(From the California State Mining Bureau.)

County	1910	1911	1912
Alameda -----	\$1,205,387 00	\$799,639 00	\$794,961 00
Alpine -----			*
Amador -----	2,785,767 00	2,993,670 00	2,925,202 00
Butte -----	2,529,179 00	2,406,856 00	2,403,675 00
Calaveras -----	2,026,166 00	1,970,059 00	2,051,781 00
Colusa -----	148,005 00	138,227 00	70,165 00
Contra Costa -----	484,923 00	594,256 00	829,811 00
Del Norte -----	5,845 00	1,750 00	3,950 00
El Dorado -----	194,631 00	153,918 00	122,001 00
Fresno -----	9,505,699 00	9,711,463 00	8,897,685 00
Glenn -----	34,020 00	51,430 00	32,950 00
Humboldt -----	77,437 00	76,858 00	268,116 00
Imperial -----	97,656 00	105,044 00	30,000 00
Inyo -----	704,473 00	710,033 00	483,330 00
Kern -----	19,614,014 00	21,176,534 00	23,097,003 00
Kings -----	10,085 00	900 00	1,850 00
Lake -----	142,427 00	100,296 00	123,286 00
Lassen -----	83,152 00	<sup>1</sup>	
Los Angeles -----	5,525,317 00	5,407,863 00	5,594,513 00
Madera -----	133,766 00	80,201 00	112,285 00
Marin -----	183,885 00	232,731 00	122,200 00
Mariposa -----	346,245 00	175,752 00	214,294 00
Mendocino -----	500 00	1,600 00	300 00
Merced -----	71,064 00	49,548 00	45,000 00
Modoc -----	5,513 00	20,238 00	29,187 00
Mono -----	445,115 00	298,405 00	454,268 00
Monterey -----	162,523 00	74,536 00	132,749 00
Napa -----	244,410 00	220,399 00	266,708 00
Nevada -----	2,553,204 00	2,219,214 00	2,108,543 00
Orange -----	3,220,164 00	4,113,585 00	4,518,275 00
Placer -----	583,659 00	539,246 00	881,537 00
Plumas -----	200,870 00	230,010 00	196,997 00
Riverside -----	507,406 00	622,489 00	782,627 00
Sacramento -----	1,660,970 00	2,109,678 00	2,171,399 00
San Benito -----	584,343 00	558,846 00	494,068 00
San Bernardino -----	447,836 00	710,108 00	1,428,057 00
San Diego -----	374,874 00	419,008 00	305,683 00
San Francisco -----	120,126 00	119,636 00	151,147 00
San Joaquin -----	376,149 00	189,593 00	210,040 00
San Luis Obispo -----	215,322 00	75,556 00	31,564 00
San Mateo -----	279,872 00	233,985 00	216,582 00
Santa Barbara -----	5,334,960 00	3,411,107 00	4,111,258 00
Santa Clara -----	420,782 00	461,611 00	557,585 00
Santa Cruz -----	400,794 00	338,814 00	270,207 00
Shasta -----	8,203,677 00	5,406,461 00	5,825,819 00
Sierra -----	313,365 00	467,117 00	736,423 00
Siskiyou -----	527,178 00	553,037 00	598,713 00
Solano -----	255,169 00	188,848 00	203,073 00
Sonoma -----	283,113 00	238,610 00	346,306 00
Stanislaus -----	223,061 00	315,219 00	295,673 00
Tehama -----	4,400 00	500 00	1,300 00
Trinity -----	508,433 00	620,950 00	733,755 00
Tulare -----	206,050 00	158,335 00	142,890 00
Tuolumne -----	755,591 00	1,240,734 00	1,353,706 00
Ventura -----	392,974 00	362,810 00	595,399 00
Yuba -----	3,209,645 00	3,011,689 00	2,775,132 00
Unapportioned -----	9,487,888 00	11,028,877 00	7,821,357 00
Totals -----	<sup>2</sup> \$88,419,079 00	\$87,497,879 00	\$88,972,385 00

\*Included in Stanislaus. <sup>1</sup>Included in Colusa. <sup>2</sup>Including asphalt.

## CALIFORNIA MINERAL SPRINGS.

There are a very large number of valuable mineral springs in California, which contain the same curative properties as the most famous spas of Europe, but they are not so widely known as they deserve. Among these are to be found alkaline, carbonated, chalybeate, epsom salts, saline, sulphur, soda, vichy, cold, warm, and hot, and also hot mud springs.

Mineral waters are generally divided into four classes: Acidulous, sulphurous, chalybeate, and saline.

Acidulous or carbonated waters are those charged with carbonic acid.

Sulphur waters are those impregnated with sulphureted hydrogen or soluble sulphides.

Chalybeate or ferruginous waters are those which contain in solution the salts of iron.

The fourth class, saline springs, embrace waters of the greatest diversity.

There was a considerable decrease in the mineral water sales of California during 1912, the sales reported being 2,089,951 gallons, as compared with 2,310,237 gallons in 1911, a decrease of 220,286 gallons, or 9.54 per cent. The value fell off \$45,468, or 7.86 per cent, the average price of 25 cents per gallon remaining the same.

Regardless of the fact that half of California mineral water is reported to be sold for table use, California is second in the value of the medicinal water-output. There are resorts at nineteen of the springs with accommodation for nearly 4,500 patrons, and the water at seventeen springs is used for bathing. Spring owners reported a total of 40,000 gallons of water used for the manufacture of soft drinks.

Production and Value of Mineral Waters in California, 1908-1912.

Year	Commercial springs	Quantity sold, gallons	Value	Price per gallon received at springs, cents
1908 -----	40	1,960,770	\$393,920	20.1
1909 -----	44	2,179,187	444,230	20.4
1910 -----	41	2,008,697	394,841	19.7
1911 -----	40	2,310,237	578,439	25.0
1912 -----	41	2,089,951	532,971	25.0

Summary of Mineral Springs.

Name of spring	Description	County
Adams Springs -----	Alkaline—Carbonated water -----	Lake.
Aetna Soda Springs -----	Alkaline water -----	Napa.
Aqua Calienta Springs -----	Sulphur (hot) -----	San Diego.
Aqua Calienta Springs -----	Sulphur (hot) -----	Kern.
Aqua de Vida Springs -----	Alkaline-saline. Sulphureted -----	Alameda.
Alabaster Cave Springs -----	-----	El Dorado.
Alameda Warm Springs -----	-----	Alameda.
Alder Glen Springs -----	-----	Sonoma.
Alhambra Mineral Spring -----	-----	Contra Costa.
Alkali Springs -----	-----	Mono.
Allen Springs -----	Alkaline-Saline. Carbonated -----	Lake.
Alma Springs -----	Alkaline and chalybeate -----	Santa Clara.



## Summary of Mineral Springs—Continued.

Name of spring	Description	County
Anderson Mineral Springs	Mild alkalo—Sulphureted chalybeate and saline-acidulous; also hot sulphurous springs.	Lake.
Arrowhead Hot Springs	Upwards of 20 hot springs	San Bernardino.
Arroyo Grande Springs	Alkaline and carbonated	San Luis Obispo.
Azule Springs	Carbonated	Santa Clara.
Barcal Mineral Spring		Sonoma.
Bartlett Springs	Alkaline. Carbonated	Lake.
Bear Valley Hot Springs	Saline and calcic	San Bernardino.
Benton Hot Springs	Very hot, slightly alkaline	Mono.
Bitter Springs	Cold saline	San Bernardino.
Black Lake	Sulphurous and saline	Mono.
Blank's Hot Springs	Hot sulphur	Colusa.
Blodgett's Soda Springs	Alkalo-carbonated and sulphur	Santa Clara.
Boiling Lakes	Alkaline	Plumas.
Boiling Springs	Alkaline	Inyo.
Boiling Sulphur Springs	Alkalo-sulphureted	Mono.
Boyes Hot Spring		Sonoma.
Bonanza Hot and Cold Springs.	Hot carbonated and hot sulphureted.	Lake.
Borax Pond	Biborate of soda (borax)	Lake.
Borax Hot, Borax Marsh, and Borax Patch.	Borax	San Bernardino.
Borax Springs	On the edge of Clear Lake	Lake.
Boyd's Hot Springs	Alkaline, charged with carbonic acid gas.	Modoc.
Branhick's Boiling Springs.	Alkaline	Lassen.
Buckman's Spring		San Diego.
Byron Springs	Hot and cold; muriated saline, sulphurous, chalybeate, black sulphurous, mud and others.	Contra Costa.
Bythnia Springs		Santa Barbara.
California Geysers	Many various kinds; also mud springs.	Sonoma.
Calistoga Mineral Springs	Light sulphureted water; also hot.	Napa.
Campbell's Hot Springs	One cold and two hot; slightly saline and mildly sulphurous.	Sierra.
Carbonated Springs		Siskiyou.
Casa Diablo Hot Springs.	Saline and sulphureted; also small boiling geysers.	Mono.
Castalian Mineral Springs	Mostly cold, sulphurous, alkaline and carbonated; one of the heaviest waters on the coast.	Inyo.
Castle Rock Springs	Sulphureted and carbonated soda.	Shasta.
Chalybeate Mineral Springs.		Tehama.
Coal Valley Boiling Springs.	Very hot; soda	Modoc.
Cold Soda Lake	Alkaline	Plumas.
Cold Soda Springs	Alkaline and carbonated	Tuolumne.
Congress Springs	Muriated-alkaline	Santa Clara.
Console Mineral Springs		San Bernardino.
Cook's Springs	Saline and sulphurous	Colusa.
Coronado Mineral Springs	Light alkalo carbonated	San Diego.
Corral De Leoz Warm Springs.	Highly charged with sulphur	San Diego.
Crystal Springs	Carbonated alkaline	Napa.
Crystal Springs		Los Angeles.
Cuyana Hot Springs	Sulphurous	Santa Barbara.
Desert or Cave Springs	Alkaline carbonated	Kern.
Duncan Springs	Alkaline-calcic	Mendocino.
El Granito Mineral Spring		San Diego.
Elliott's White Sulphur Spring.		Riverside.



## Summary of Mineral Springs—Continued.

Name of spring	Description	County
Elysian Springs	-----	Los Angeles.
Elsinore Springs	Hot and cold; carbonated	San Diego.
Eureka Springs	Chlorinated—heavy; hot mud	Humboldt.
Fairmont Mineral Springs	Alkaline and carbonated	Sonoma.
Felt's Mineral Springs	-----	Humboldt.
Fouts Springs	-----	Colusa.
Fresno Hot Springs	-----	Fresno.
Geyser Spa or Soda Springs.	Alkaline and chalybeate	Sonoma.
Gilroy Hot Springs	Alkalo-sulphureted	Santa Clara.
Glen Alpine Springs	Carbonated and chalybeate	El Dorado.
Gordon's Mineral Springs	Alkalo-saline	Lake.
Grizzle Springs	-----	Colusa.
Harbin Hot Sulphur Springs.	Saline-sulphureted, arsenic and others.	Lake.
Hibb's Soda Springs	-----	Shasta.
Highland Springs	Alkalo-saline and chalybeate, heavy saline and others.	Lake.
High Rock Springs	Hot alkaline	Lassen.
Hot Borate Springs	Borate water	Lake.
Hot Mud Springs	Sulphur	Siskiyou.
Hot Springs	(On Pahoa Island in Mono Lake)	Mono.
Hough's Mineral Springs	-----	Lake.
Howard Springs	Alkalo-carbonated	Lake.
Iodine Springs	-----	Lake.
Klamath Hot Springs	Alkalo-saline and sulphurous	Siskiyou.
Lake Tahoe or Carnelian Hot Springs.	Hot and cold; sulphurous and saline.	Placer.
Lepori Vichy Springs	-----	Napa.
Kellogg's Springs	Saline and sulphureted	Napa.
Lane's Mineral Springs	Alkalo-sulphurous and chalybeate.	Calaveras.
Las Cruces Hot Springs	-----	Santa Barbara.
Little Yosemite Soda Springs.	Alkalo-carbonated	Tulare.
Lytton Seltzer Springs	Alkalo-carbonated and chalybeate.	Sonoma.
Mark West Springs	Hot sulphur and hot mud	Sonoma.
Matilija Hot Springs	Hot and cold; sulphureted	Ventura.
Mission San Jose Hot Springs.	-----	Alameda.
Mono Basin Warm Springs	Chlorinated and alkaline	Mono.
Mono Lake	Chlorinated (the Dead Sea of California).	Mono.
Montecito Hot Springs	Sulphurous	Santa Barbara.
Monterey Mineral Well	-----	Monterey.
Napa Soda Springs	Alkaline-chalybeate	Napa.
Newsom's Arroyo Grande Springs.	Light saline-sulphureted	San Luis Obispo.
New Almaden Vichy Springs.	Vichy-alkalo-chalybeate	Santa Clara.
Nicholas Springs	Epsom salts and iron salts	Santa Cruz.
Nuvida Springs	-----	San Diego.
Ojai Hot Sulphur Springs	Hot and cold; carbonated and sulphureted.	Ventura.
Orr's Hot Springs	-----	Mendocino.
Owen's Lake	The second Dead Sea in California; highly chlorinated and alkaline.	Inyo.
Pacific Congress Springs	Alkalo-chalybeate	Santa Clara.
Palm Springs	-----	Riverside.
Paraiso Hot Springs	Sulphur; hot soda, similar to Carlsbad of Austria.	Monterey.
Paso Robles Springs	Hot and cold, sulphur mud springs; alkaline-saline, sulphined.	San Luis Obispo.
Piedmont White Sulphur Springs.	Chalybeate and sulphur	Alameda.

## Summary of Mineral Springs—Continued.

Name of spring	Description	County
Pinkhams Springs	-----	Santa Barbara.
Purity Springs	-----	Marin.
Radium Sulphur Springs	-----	Los Angeles.
Redwing Springs	-----	Lake.
Samuel Springs	-----	Napa.
San Benito Springs	-----	San Benito.
Rubicon Soda Springs	-----	Placer.
San Bernardino Hot Springs.	Calcic and saline	San Bernardino.
San Jacinto Springs	Arsenic, white sulphur, soda, and mud.	Los Angeles.
San Juan Capistrano	Light carbonated	San Bernardino.
San Luis Hot Springs	-----	San Luis Obispo.
San Marcos Sulphur Springs.	-----	Santa Barbara.
San Rafael Springs	Slightly saline and carbonated.	Marin.
Santa Barbara Hot Springs.	Sulphurous, saline and chalybeate.	Santa Barbara.
Santa Rosa White Sulphur Springs.	Light-salino-sulphurous	Sonoma.
Santa Ysabel Cold and Hot Sulphur Springs.	Salino-sulphureted, sulphur mud springs and others.	San Luis Obispo.
Saratoga Springs	-----	Inyo.
Saratoga Mineral Springs	Cold, contain sulphur, soda and iron.	Lake.
Seigler's Springs	Arsenic, soda, epsom salts	Lake.
Seltzer Springs	Alkaline-saline-calcic, carbonated.	Mendocino.
Shafer's Hot Springs	Saline and sulphates	Lassen.
Shasta Soda Springs	Carbonated and ferruginous	Siskiyou.
Simmons' Hot Sulphur Springs.	-----	Colusa.
Skagg's Hot Springs	Alkalo-carbonated (heavy)	Sonoma.
Springs of Dos Palos	Chlorinated, warm	San Diego.
Summit Soda Springs	Alkalo-chalybeate	Placer.
Tamalpais Springs	-----	Marin.
Tassajara Hot Springs	Saline and sulphurous	Monterey.
Thermal Acid Springs	Acid, sulphate	Inyo.
Tia Juana Springs	-----	San Diego.
Tolenas Springs	Alkalo-saline and chlorinated	Solano.
Tule River Soda Springs	-----	Tulare.
Tusean or Lick Springs	Saline and sulphurous	Tehama.
Upper Soda Springs	Alkalo-carbonated or soda class	Siskiyou.
Vallejo Sulphur Springs	-----	Solano.
Valley Springs	-----	Calaveras.
Veronica Medicinal Spring	-----	Santa Barbara.
Vito Nuevo Springs	-----	Mono.
Vichy Springs	Alkalo-carbonated or soda class	Mendocino.
Volcanic Mineral Springs	(In Death's Valley)	Inyo.
Warner Hot Springs	Hot, sulphurous and saline	San Diego.
Watters Springs	-----	Napa.
Wheeler's Hot Springs	-----	Ventura.
White Sulphur Springs	Light sulphurated and alkaline.	Napa.
Wilbur Springs	Thermal salino-sulphureted	Colusa.
Witter's Mineral Springs	Saline-chalybeate. Sulphureted	Lake.
Young's Natural Gas Well and Mineral Springs.	-----	Lake.
Zem Zem	Highly carbonated	Lake.

NOTE.—There are many other unnamed and undeveloped springs in California, including geysers, salt, thermal, hot, warm and white sulphur springs. For fuller details and analysis of the numerous springs, see "Mineral Springs and Health Resorts of California," by Winslow Anderson, 1890, and "Mineral Waters of the United States," by Jas. K. Crook, 1899.

## PART VIII.

CALIFORNIA FORESTS. THE LUMBER  
INDUSTRY. MANUFACTURES.

## NATIONAL FORESTS.

**Grazing Permits; Ownership of Forests by Counties; National Monuments; Lumber Industry—Lumber Cut, 1880-1909; Value of Lumber, 1850-1909.**

## MANUFACTURES.

**Summary of Fourteen Leading Manufactures; Manufacturing Industry, 1850-1909; Twenty-one Leading Cities; Transportation by Water—River Traffic.**

The total area within the boundaries of the national forests was decreased in 1911 by presidential proclamation, which eliminated 4,598,705 acres and added 2,806,267 acres. While it will doubtless be necessary in the future to make small additions and eliminations from time to time, as conditions change, it is believed that the boundaries now established or planted may be regarded as fairly stable.

As the national forests consist largely of unsurveyed lands, the gross area figures are subject to correction. The area in California is larger than any other state in the Union, Idaho and Montana ranking next, with 19,000,000 acres each.

California	Acres
Gross area, June 30, 1910.....	27,968,510
Additions .....	732,378
Eliminations .....	883,400
Gross area, September 30, 1911.....	27,667,695
Alienated area .....	6,676,130
Net area, September 30, 1911.....	20,991,565

The amounts paid to the State to be expended for roads and schools from the national forest receipts for 1910 was \$60,752.91; for 1911, \$53,716.87; for 1912, \$62,052.82; for 1913, \$74,541.

In the timber-sale policy of the Forest Service, provision is first made for local needs, present and future, and sale of timber which will enter into the general markets is considered only when it is clear that an excess over the permanent supply required by local industries exists.

## Number of Timber Sales. Classified According to Amount of Sale, 1913.

Amount	Number
Under \$100 .....	555
From \$100 to \$500.....	24
From \$500 to \$1,000.....	5
From \$1,000 to \$5,000.....	14
Over \$5,000 .....	9
Total number of sales.....	607

**Timber Sold and Cut in National Forests.**

Year	Timber sold, board-feet	Value	Timber cut under sales, board-feet	Value
1911 -----	112,438,000	\$295,536 22	37,899,000	\$80,243 65
1912 -----	109,214,000	232,697 81	43,914,000	97,239 33
1913 -----	1,064,804,000	2,324,936 03	52,419,000	108,708 74

Total number of timber sales in 1912 was 635, compared with 543 in 1911.

Free timber is accorded to residents in or near the national forests who need material for personal use and who can not reasonably be expected to purchase. Special consideration is given to new settlers and prospectors for minerals. Free use is also granted on a liberal scale for cooperative enterprises and public purposes.

**Free Use of Timber.**

Year	Number of permits	Board-feet	Value
1911 -----	3,085	9,197,000	\$17,359 02
1912 -----	2,756	8,490,000	14,797 95
1913 -----	3,118	8,918,000	18,011 55

**Reforestation.**

Year	Sown acres	Planted acres	Total
1911 -----	2,659	169	2,828
1912 -----	632.69	188.60	821.29
1913 -----	133.16	276.77	409.93

**Grazing Permits.**

Year	Number of permits	Cattle, number	Horses, number	Hogs, number	Number of permits	Sheep and lambs	Number of goats
1911 -----	2,382	151,582	9,824	3,867	298	368,781	13,464
1912 -----	2,521	169,361	10,403	3,480	367	432,974	15,235
1913 -----	2,664	169,951	11,765	2,360	377	435,856	13,249

**Predatory Animals Destroyed.**

Animal	1910	1911	1912	1913
Bears -----	73	37	12	6
Mountain lions -----	23	5	3	3
Wolves -----	2	3	2	-----
Wolf pups -----	-----	2	-----	-----
Coyotes -----	903	743	478	337
Wildcats -----	309	193	160	132
Lynxes -----	37	15	2	2
Totals -----	1,347	*998	657	480

\*Also 2 wolverines and 6 foxes, or total of 1,006 animals.



## LAND CLASSIFICATION.

A system of land classification has been established to cover all the forests affording any prospect of agricultural development within them. Its purpose is to segregate and make available for the establishment and development of homes all national forest land which will serve its best use by being brought under cultivation.

## Land Classification Projects in California.

National forest	Project	Area, acres
Angeles -----	Cajon -----	135,000
	San Gabriel -----	175,000
Cleveland -----	Laguna -----	165,000
Klamath -----	Klamath River -----	80,000
Lassen -----	Hat Creek -----	80,000
Santa Barbara -----	Matilija -----	160,000
Santa Clara River -----		75,000
Total -----		870,000

## Location, Date Latest Proclamation Effective, and Area of the National Forests on September 30, 1911, in California.

(From reports of the Forest Service, Department of Agriculture.)

State or territory and forests	Proclamation effective	Area
California:		
Angeles -----	Nov. 25, 1910	1,265,300
California -----	Oct. 12, 1910	1,061,000
Cleveland -----	Dec. 16, 1910	2,220,800
Crater <sup>1</sup> -----	July 1, 1911	61,100
El Dorado <sup>2</sup> -----	July 28, 1910	835,800
Inyo <sup>3</sup> -----	Feb. 23, 1911	1,337,780
Kern -----	Jan. 30, 1911	1,934,275
Klamath <sup>4</sup> -----	July 1, 1911	1,688,580
Lassen -----	Dec. 30, 1910	1,397,000
Modoc -----	Dec. 23, 1910	1,578,200
Mono <sup>5</sup> -----	June 30, 1911	883,150
Monterey -----	Dec. 12, 1910	501,150
Plumas -----	July 28, 1910	1,433,600
Santa Barbara -----	July 1, 1910	2,348,200
Sequoia -----	July 1, 1910	1,220,000
Shasta -----	Dec. 16, 1910	1,578,200
Sierra -----	July 1, 1910	1,743,000
Siskiyou <sup>6</sup> -----	July 1, 1911	406,260
Stanislaus -----	July 12, 1910	1,136,500
Tahoe <sup>7</sup> -----	July 28, 1910	1,210,500
Trinity -----	Dec. 16, 1910	1,827,300
Total -----		27,667,695
Alienated -----		6,676,130
Net area -----		20,991,565

<sup>1</sup>Total of Crater in California and Oregon, 1,080,500 acres.

<sup>2</sup>Total of El Dorado in California and Nevada, 836,000 acres.

<sup>3</sup>Total of Inyo in California and Nevada, 1,413,110 acres.

<sup>4</sup>Total of Klamath in California and Oregon, 1,697,780 acres.

<sup>5</sup>Total of Mono in California and Nevada, 1,366,440 acres.

<sup>6</sup>Total of Siskiyou in California and Oregon, 1,694,250 acres.

<sup>7</sup>Total of Tahoe in California and Nevada, 1,272,470 acres.

The acreage of National Reserves in California is 27,667,000; the acreage of state timber lands 2,000; and the acreage of private lands 8,500,000.



Of the standing timber in this State a very large percentage is now in private ownership, the total acreage amounting to 4,555,941.

#### Forest Fires in California.

Forest fires do a vast amount of damage, most of which could be prevented.

#### Ownership of Forests.

County	Acres	County	Acres
Alpine -----	3,270	Plumas -----	224,717
Amador -----	17,903	Riverside -----	4,784
Butte -----	89,737	San Benito -----	2,960
Calaveras -----	68,663	San Bernardino -----	10,940
Del Norte -----	109,600	San Diego -----	23,460
El Dorado -----	96,820	San Luis Obispo -----	2,040
Fresno -----	19,983	Santa Barbara -----	160
Glenn -----	16,796	Santa Cruz -----	19,956
Humboldt -----	486,950	Shasta -----	429,512
Kern -----	8,600	Sierra -----	134,176
Lake -----	10,320	Siskiyou -----	693,180
Lassen -----	244,434	Sonoma -----	162,474
Madera -----	23,176	Tehama -----	126,358
Marin -----	11,597	Trinity -----	333,840
Mariposa -----	35,073	Tulare -----	33,358
Mendocino -----	475,318	Tuolumne -----	131,378
Modoc -----	265,317	Ventura -----	803
Mono -----	15,320	Yuba -----	19,400
Monterey -----	81,518		
Nevada -----	60,101	Total -----	4,555,941
Placer -----	156,949		

Year	Number of fires	Area burned, acres	Damage, value
1906 -----	120	650,000	-----
1907 -----	305	75,060	\$8,601
1908 -----	572	163,216	103,259
1909 -----	638	357,269	600,000
1910 -----	553	367,344	407,569
1911 -----	797	66,508	51,083
1912 -----	998	156,241	31,906
1913 -----	1,971	559,370	511,077

#### National Monuments.

There are 159 national forests in the United States, of which 21 are in California.

The following five national monuments, situated within national forests, have been created under the act of June 8, 1906, for the preservation of objects of historic or scientific interest:

State or territory and forests	Proclamation effective	Area, acres
Cinder Cone, Lassen -----	May 6, 1907	5,120
Devil Postpile, Sierra -----	July 6, 1911	800
Lassen Peak, Lassen -----	May 6, 1907	1,280
Muir Woods -----	Jan. 9, 1908	295
Pinnacles -----	Jan. 16, 1908	2,080

## THE LUMBER INDUSTRY.

The timber of California is found upon the Sierra Nevada and Coast ranges, north of San Francisco Bay. A little is found in the Coast ranges farther south, and in those of southern California. The species consists mainly of yellow and sugar pine, redwood, and red fir. Redwood is found in a narrow strip stretching from the Oregon line southward, closely bordering the coast, nearly to the bay of San Francisco. In this strip, comprising some 2,000 square miles, there is estimated to be 75,000,000,000 feet of redwood in a pure forest. This is probably the densest forest, as measured by the amount of lumber per acre, in the world. Lumbering is carried on mainly about Humboldt Bay, at Crescent City, near the Oregon line, and at various points in Mendocino County.

Yellow pine is found along the entire length of the Sierra Nevada and in the northern Coast ranges. It occupies in the Sierra a well-defined belt, which, in the southern part of the range, is limited by a contour 3,000 feet above sea level, while northward it gradually descends, coming down to about 1,500 feet in the upper Sacramento Valley. Its upper limit is on an average about 8,000 feet, above which it is succeeded by species which are fitted to a colder climate. Throughout its range it is accompanied by sugar pine in the average proportion of about three of the former to one of the latter. The forest also contains a notable amount of incense cedar and of red fir. The composition of the forests in the northern part of the Coast ranges is quite similar to that in the Sierra, excepting that the proportion of red fir is somewhat greater.

Scattered about in the yellow pine forests, on the slope of the Sierra Nevada, at altitudes ranging from 4,000 to 6,000 feet, are ten groves, differing greatly in magnitude, of *Sequoia gigantea*, the big tree. These trees range in height up to 325 feet, and in diameter to a little over 30 feet. They do not appear in pure growth, but scattered through the yellow pine forest.

The wooded land of the State is estimated to have an area of 44,700 square miles, or 22 per cent of the total area of the State. The total amount of standing timber in the State was estimated in 1900 to be at least 200,000,000,000 feet, the principal species being redwood and yellow pine, with smaller amounts of sugar pine, red fir, and incense cedar. Redwood is the only important kind of lumber, the production of which is limited to one state. California has no competitor in its production, nor can it ever have, since there is no commercial supply of redwood timber elsewhere.

Lumber Cut, 1905-1912.

Year	Million feet, board measure	Year	Million feet, board measure
1905 -----	1,077,499	1909 -----	1,143,507
1906 -----	1,348,599	1910 -----	1,254,826
1907 -----	1,345,943	1911 -----	1,207,561
1908 -----	996,115	1912 -----	1,203,059

## Lumber, Lath and Shingles in 1909.

Species	Number of active mills	Million feet, board measure	Value	Average per thousand feet
Soft woods:				
Redwood .....	69	521,630	\$7,720,124	\$14 80
Douglas fir .....	100	88,852	943,608	10 62
Spruce .....	28	13,241	196,099	14 81
Western or yellow pine.....	184	364,748	6,752,076	18 51
Cedar .....	67	14,834	192,100	12 95
Sugar pine .....	71	88,822	1,634,325	18 40
White fir .....	72	48,306	676,767	14 01
Laurel .....		26	650	25 00
Hemlock .....		416	4,044	
Lodgepole .....		452	4,068	
Total soft woods.....		1,141,301	\$18,123,211	
Hard woods:				
Oak .....		2,180	141,678	
All other .....		26	650	
Total hard woods.....		2,206	\$142,328	
Total soft woods.....		1,141,301	18,123,211	
Grand totals .....	305	1,143,507	\$18,265,539	

## Rough Lumber, Lath and Shingles in 1909.

Product	Quantity		Value, 1909
	1899	1909	
Rough lumber, thousand feet b. m.....	737,035	1,143,507	
Laths, thousands .....	11,507	32,615	\$73,384
Shingles, thousands .....	650,090	574,342	833,671

## Lumber, Lath and Shingles in 1912.

Lumber sawed (thousand feet, board measure) by 229 active mills.

Soft woods		Hard woods	
Douglas fir .....	105,625	Oak .....	3,667
Hemlock .....	1,348	Birch .....	150
Spruce .....	12,847	Ash .....	210
Western pine .....	365,169	Cottonwood .....	2
Redwood .....	496,796	All other .....	2,038
Cedar .....	18,507		
Sugar pine .....	128,376	Total hard woods.....	6,067
White fir .....	68,324	Total soft woods.....	1,196,992
Total soft woods.....	1,196,992	Grand total .....	1,203,059
Laths produced .....			
Shingles produced .....			18,954
			471,592

During the ten years, 1899 to 1909, the output of rough lumber in California increased 55.1 per cent and that of laths 183.4 per cent, while the production of shingles decreased 11.7 per cent. The period of most rapid growth in the industry was from 1899 to 1904, when the output of lumber increased 46.2 per cent. The woods which supply the raw material are almost exclusively conifers, the hardwood cut in 1909, practically all of which was California or tanbark oak, forming only one fifth of 1 per cent of the total lumber production during the year. A total of 521,630 thousand feet, board measure, or more than

45.6 per cent of the lumber output in 1909, was California redwood, a species of timber which does not occur in saw-log size outside of California. Chief among the other species sawed into lumber in 1909 were western pine, with a production of 364,748 thousand feet, board measure; Douglas fir, with a production of 88,852 thousand feet; sugar pine, with a production of 88,822 thousand feet. The manufacture of shingles, while carried on to some extent in connection with that of lumber, nevertheless amounts practically to a separate industry. Over 88 per cent of the shingle output of the State for 1909 was manufactured from redwood, which timber possesses in very high degree the qualities most desirable in shingle material.

The term "white fir" is used as a designation for two or three firs of the Rocky Mountains and the Pacific coast. The lumber produced from them in no way resembles that of the Douglas fir, which, botanically, is not a fir at all.

The average value per thousand feet at the mill was \$13.10, the average for individual states ranging from \$10.20 in Oregon to \$14.01 in California.

*Yellow Pine.* Under the general term "yellow pine" is included all pine lumber which was produced east of the Rocky Mountains, with the exception of white, Norway, and jack pine. In the production of redwood, yellow pine, sugar pine, and white fir, California holds the first place.

*Sugar Pine.* The commercial range of this great giant of the white pine family is confined almost entirely to the regions of the Sierra in California, where 91.4 per cent of the total cut of 97,191,000 feet was produced in 1909. The output was 81.5 per cent greater than in 1899. The average value of the product per thousand feet in 1909 was 36 cents greater than in 1908, but \$1.70 less than in 1907.

California Tanbark and Tanning Extract in 1909.

Description	Tons	Cost	Average cost per ton
Oak bark -----	36,005	\$714,146	\$19 83
Myrobalan nuts -----	620	20,470	33 02
All others -----	495	10,152	20 51
Totals -----	37,120	\$744,768	\$20 06

The average cost per ton in 1909, \$10.31, was 73 cents more than in 1908. The highest average cost per ton was reported by California, \$20.06. In the total quantity of bark, etc., used in 1909, eleven out of the twenty-one states showed gains over 1908, the greatest being 9,605 tons in California.

The lumber industry includes three distinct operations, which are in some cases carried on by the same organization, in others separately:

1. The logging industry, including the felling of timber, cutting it into lengths, and transporting it by rail or river or flume to the mill.

2. The sawmill industry, in which the raw material consists of sawlogs, the product of the lumber camps; the finished product of rough lumber, including beams, joists, scantling, boards, shingles, laths, etc.

3. The planing mill industry, in which the raw material consists of rough lumber and the finished product planed lumber, with such minor



manufactures as are carried on in connection with these mills. In the United States this industry ranks fourth among the greatest manufacturing industries of the country, being exceeded in value of products only by iron and steel, the textile, and the slaughtering and meat-packing industries.

Value of California Lumber Industry, 1850-1910.

Year	Value of product
1850	\$959,485
1860	3,943,881
1870	5,227,064
1880	4,428,950
1890	8,794,655
1900	13,764,647
1909	18,265,589

The ten largest holdings of timber lands comprise 2,448,094 acres, or approximately 42 per cent of all the privately-owned timber and cut-over land in the State. They are as follows:

	Acres
Central Pacific Railroad Company (S. P.)	921,311
T. B. Walker and associates	673,665
McCloud River Lumber Company	232,063
Diamond Match Company	159,499
Hammond Lumber Company	94,760
Union Lumber Company	80,350
L. E. White Lumber Company	79,540
Weed Lumber Company	71,458
C. A. Smith	69,768
Sierra Nevada Wood and Lumber Company	65,680

The Southern Pacific holding is the greatest in the United States—106,000,000,000 feet. It is difficult to give an adequate idea of its immensity. It stretches practically 680 miles along that railroad, between Portland and Sacramento. The fastest train over this distance takes thirty-one hours. During all that time the traveler is passing through lands a large portion of which, for 30 miles on each side belongs to the railroad, and in almost the entire strip this corporation is the dominating owner of both timber and land.

The holdings under 2,000 acres are too numerous to publish, but they are summarized as follows:

Size of holdings	Number of holdings	Amount in acres		Total
		Timber	Cut over	
Below 1,000 acres	1,087	460,093	79,071	539,164
1,000 to 2,000 acres	196	195,687	59,321	255,008
2,000 acres and over	286	4,081,794	947,494	5,029,288
Grand total		4,737,554	1,085,886	5,823,440



## MANUFACTURES.

Although agriculture and mining are the principal industries in California, the State shows a marked growth in manufactures during the last forty years. The gross value of products per capita of the total population increased from \$119 in 1869 to \$223 in 1909.

The natural resources of the State give rise to several of its leading industries, such as the lumber industry, canning and preserving, flour milling and gristmilling, petroleum refining, the refining of beet sugar, the wine industry, and the manufacture of cement.

The high cost of fuel, the greater part of which had to be brought from outside of the State, retarded the early development of manufactures, but the development of the oil fields, and the utilization during recent years of electricity generated by water power have given a decided impetus to manufactures in California.

The statistics of manufacture do not include the United States Navy Yard at Mare Island, which in 1909 employed an average of 1,917 wage-earners, and the value of the work performed was \$4,335,000.

The most important manufacturing industries are as follows:

*Lumber and Timber Products.* This industry embraces logging operations, sawmills, planing mills, and establishments engaged in the manufacture of wooden packing boxes. It does not include mills engaged exclusively in custom sawing. The industry is the leading one in the State, giving employment in 1909 to 22,935 wage-earners, or 19.9 per cent of the total for all manufacturing industries, and the value of its products amounted to \$45,000,000, or 8.5 per cent of the total.

The lumber industry is one of the seasonal industries. The number of wage-earners in January, the month of the minimum employment, was 14,585 less than the number in July, the month of maximum employment.

*Slaughtering and Meat-Packing.* This classification includes the wholesale slaughtering and meat-packing establishments and those engaged in the manufacture of sausage only. The animals slaughtered are largely cattle and sheep from the foothills and lower mountain slopes and from the plateau region of the northeastern part of the State, and southeastern Oregon, conditions in these sections being very favorable to stock raising. About half of the stock slaughtered is raised within the State. The fact that within recent years the meat packers have been able to overcome, through refrigeration, climatic difficulties, which required the excessive use of preservatives in salt meats, has been an important factor in the growth of this industry. The total value of products reported for the industry in 1909, \$34,280,000, represents an increase of \$18,463,000, or 116.7 per cent, as compared with the amount reported for 1899.

*Canning and Preserving.* This classification includes the canning of fruits and vegetables, fish, oysters, clams, etc., the preparation of pickled, smoked, and dried fish, the packing of dried fruits by packing houses which make a specialty of such business, and the manufacture of pickles, preserves, jellies, sauces, etc., but it does not include the drying and packing of fruits by the grower on the farm, nor does it include the canning of meats, soups, and similar products in meat-packing

establishments (the statistics for which are included with those for the slaughtering and meat-packing industry). The canning, pickling, smoking and drying of fish and the canning of oysters form comparatively unimportant branches of the industry. California far exceeds any other state in the value of products for this industry, the amount reported for 1909 being \$32,915,000, or 21 per cent of the total for the United States. Canning and preserving is a seasonal industry, giving employment to a large number of persons in July, August, September, and October, and to a comparatively small number during most of the other months of the year. The number of wage-earners employed in the industry varied from 2,781 in February to 16,047 in August.

*Foundry and Machine Shop Products.* This industry embraces, in addition to the general class of foundries and machine shops, establishments engaged in such special lines as the manufacture of gas machines and gas and water meters, hardware, plumbers' supplies, steam fittings and heating apparatus, and structural ironware. It does not, however, include establishments which manufacture distinctive products covered by other classifications, such as cash registers and calculating machines, or electrical machinery, apparatus, and supplies. This industry ranked third among the manufacturing industries of the State in 1909 in number of wage-earners, giving employment to 8,377, or 7.3 per cent of the total for all industries.

*Flourmill and Gristmill Products.* The statistics for all merchant mills grinding wheat, rye, buckwheat, corn or other grains are included in this classification. It does not, however, include factories making fancy cereals or other food preparations as a chief product, or mills doing custom grinding exclusively. The industry shows an increase of \$12,143,000, or 93.1 per cent, in value of products during the decade 1899-1909.

*Printing and Publishing.* This classification includes job printing, the printing and publishing of books, newspapers and periodicals, and music, bookbinding, steel engraving, and lithographing. The 1,240 establishments reporting included 705 publishing newspapers and periodicals and 481 doing book and job work exclusively. The average number of wage-earners employed in the newspaper and periodical branch of the industry was 3,650, and the value of products \$15,239,000; the average number of wage-earners engaged in book and job work was 2,907, and the value of products, \$7,438,000. These two branches of the industry together employed 86.8 per cent of the average number of wage-earners, and reported 90.6 per cent of the total value of products for the entire industry in 1909.

*Cars and General Shop Construction and Repairs by Steam Railroad Companies.* This industry represents the work done in the car shops, but does not cover minor repairs in roundhouses. It is seventh in importance as measured by value of products, and shows a remarkable development for the ten-year period. In 1909 the industry gave employment to an average of 9,342 wage-earners, the second largest number reported for any manufacturing industry in the State, and the value of the work amounted to \$18,719,000.

*Petroleum Refining.* The refining of petroleum has made remarkable progress in the State during the last few years, the value of the products of the industry in 1909 being \$17,878,000, or over twenty-five times as great as in 1899, when it was only \$698,000.

*Butter, Cheese and Condensed Milk.* This industry, which in California is confined chiefly to the manufacture of butter, has made marked progress during the past decade, the value of products increasing from \$3,583,000 in 1899 to \$12,761,000 in 1909, a gain of 256.2 per cent. The manufacture of cheese and condensed milk decreased materially during the period 1904-1909.

*Leather, Tanned, Curried and Finished.* The tanning, currying and finishing of leather did not become prominent in California until about 1861. From that time, however, it grew rapidly, and since 1877 the local supply of hides and skins has not been large enough to satisfy the requirements of the industry, so that it has been necessary to supplement it by hides and skins brought in from other states or imported from foreign countries.

*Malt Liquors.* This industry shows considerable growth for the decade, being greater, however, for the five-year period, 1899-1904, than for the following five-year period.

*Wines.* The extensive vineyards of California have placed the State far ahead of any other in wine industry. In 1909 the value of the products for the industry in the State, \$8,937,000, represented 68.1 per cent of the total for the United States.

*Gas, Illuminating and Heating.* The manufacture of gas is notable in California, because of the extensive use of petroleum. On account of the lack of coal in the State, the product of the gas plant has been limited to the manufacture of carbureted water gas and oil gas. According to the statistics for 1909, the production of oil gas greatly exceeds that of carbureted water gas. The total value of products reported for the industry in 1909 was \$8,927,000, an increase of \$5,765,000, or 182.3 per cent over that for 1899.

*Cement.* California has numerous beds of soft limestone and clay which are relatively low in magnesia and which are being utilized to a considerable extent for the manufacture of Portland cement. In 1904 there were four establishments engaged in the industry, employing 596 wage-earners and reporting products valued at \$1,601,000, while in 1909 the industry had increased to eight establishments, giving employment to an average of 2,407 wage-earners and reporting a product valued at \$6,504,000. The counties in which the industry is most extensively carried on, named in order of importance, are Solano, Santa Cruz, and San Bernardino.

*The Automobile Industry.* This industry, which in California had its beginning but a short time prior to 1904, shows a very high rate of increase, the value of products in 1909 being more than forty times as great as in 1904.

*Engines and Power.* The following shows the number of engines or other motors, according to their character, employed in generating power (including electric motors operated by purchased current) and their total horsepower in 1899 and 1909. The more general use of gas engines is shown, there being 765 such engines, with an indicated



capacity of 10,115 horsepower, in 1909, as against 545 engines with 3,244 horsepower in 1899.

Water wheels show a decrease in number but an increase in total horsepower. The figures also show that the practice of renting electric power is increasing rapidly, 35.4 per cent of the total power being rented electric power in 1909, as against 7.6 per cent in 1899. The proportion for 1909 is larger than for any other state in the Union. The use of electric motors for the purpose of applying the power generated within the establishments is rapidly becoming more common, the horsepower of such motors having increased from 6,138 in 1899 to 27,147 in 1909.

*Fuel.* Of the fuel consumed in generating this power, a notable fact is the large amount of oil and the small amounts of nearly all other kinds of fuel used. The larger part of this oil is crude oil used as fuel in the generation of steam power, but increasing quantities of refined oil are being used in internal-combustion engines.

Anthracite coal, tons.....	4,421
Bituminous coal, tons.....	43,165
Coke, tons.....	113,665
Wood, cords.....	76,323
Oil, including gasoline, barrels.....	8,883,015
Gas, 1,000 feet.....	302,548

#### MANUFACTURING IN CALIFORNIA—1850-1909.

The growth of manufacturing in California has made rapid progress, as is shown by the following summary :

	1850	1860
Number of establishments.....	1,003	8,468
Capital invested.....	\$1,006,197	\$22,043,096
Cost of raw material.....	\$1,201,154	\$27,051,674
Male hands employed.....	3,964	49,169
Female hands employed.....		57
Cost of labor.....	\$3,717,180	\$28,432,687
Value of products.....	\$12,862,522	\$68,253,228

	1870	1880	1890
Number of establishments.....	3,984	5,885	7,923
Capital invested.....	\$39,728,202	\$61,243,784	\$146,797,102
Number of wage-earners.....	29,148	43,693	72,696
Total wages.....	\$13,136,722	\$21,065,905	\$41,172,918
Cost of material used.....	\$35,351,193	\$72,607,709	\$120,243,683
Value of products.....	\$66,594,556	\$116,218,973	\$213,403,996

	1900	1909
Number of establishments.....	12,582	7,659
Capital invested.....	\$205,395,025	\$537,134,000
Average number of wage-earners.....	91,047	115,296
Total salaries and wages.....	\$47,425,947	\$107,097,000
Cost of materials used.....	\$188,125,602	\$325,238,000
Value of products.....	\$302,874,761	\$529,761,000

## Summary of Manufacturing Establishments.

	Number of establishments	
	1889	1899
Number of establishments.....	4,997	7,659
Persons engaged in manufacture.....	*	141,576
Proprietors and firm members.....	*	8,077
Salaried employees.....	6,877	18,203
Wage-earners (average number).....	77,224	115,296
Primary horsepower.....	126,953	329,100
Capital.....	\$175,468,000	\$537,134,000
Expenses.....	\$225,404,000	\$476,154,000
Services—		
Salaries.....	\$7,495,000	\$22,555,000
Wages.....	\$9,890,060	\$4,142,000
Totals.....	\$47,385,000	\$107,097,000
Materials.....	\$164,894,000	\$325,298,000
Miscellaneous.....	\$13,125,000	\$43,819,000
Value of products.....	\$257,386,000	\$529,761,000
Value added by manufacture (value of products less cost of materials).....	\$92,492,000	\$204,523,000

\*Figures not available.

*Laundries.* Statistics for steam laundries are not included in these tables, or in the totals for manufacturing industries. In 1909 there were 321 such establishments in California, 57 of which were in San Francisco, 41 in Oakland, 31 in Los Angeles, and 10 in Sacramento.

The following statement summarizes the statistics:

Number of establishments.....	321
Persons engaged in the industry.....	9,060
Proprietors and firm members.....	308
Salaried employees.....	714
Wage earners (average number).....	8,098
Primary horsepower.....	8,961
Capital.....	\$6,295,915
Expenses.....	8,177,759
Services.....	5,260,743
Material.....	1,612,112
Miscellaneous.....	1,304,904
Amount received for work done.....	9,541,795

## Fourteen Leading Manufactures.

Industry	Number of establishments	Persons engaged*	Salaries	Wages	Capital	Value of product
Automobiles.....	41	589	\$71,000	\$368,000	\$701,000	\$1,470,000
Butter, cheese and condensed milk.....	161	918	202,000	466,000	2,829,000	12,761,000
Canning and preserving.....	196	8,714	1,080,000	3,454,000	18,316,000	32,915,000
Cars and steam railway shop construction and repairs.....	42	9,688	379,000	8,394,000	4,721,000	18,719,000
Cement.....	8	2,521	195,000	1,650,000	24,014,000	6,504,000
Flour mill and grist mill products.....	125	1,392	514,000	732,000	13,424,000	25,188,000
Foundry and machine shops.....	543	10,218	1,832,000	7,312,000	28,693,000	26,731,000
Gas, illuminating and heating.....	74	2,538	824,000	1,408,000	47,075,000	8,927,000
Leather, tanned, curried and finished.....	40	1,547	215,000	988,000	\$ 535,000	9,367,000
Malt liquors.....	83	1,626	545,000	1,391,000	1,804,000	9,319,000
Wines.....	181	1,691	429,000	682,000	1,189,000	8,937,000
Lumber and timber products.....	644	25,079	2,237,000	15,651,000	55,165,000	45,000,000
Petroleum, refining.....	29	1,146	367,000	801,000	13,881,000	17,878,000
Printing and publishing.....	1,240	12,215	3,829,000	6,432,000	17,198,000	25,032,000
Slaughtering and meat packing.....	94	2,135	550,000	1,307,000	11,463,000	34,280,000

\*Includes proprietors and firm members, salaried employees, and wage-earners.



**Manufactures of Twenty-one Cities With a Population of Ten Thousand and Over,  
According to Their Relative Industrial Importance.**

	Capital		Average number of wage-earners		Value of products	
	1899	1909	1899	1909	1899	1909
San Francisco†	\$69,643,000	\$133,824,000	32,555	28,244	\$107,023,567	\$133,041,069
Los Angeles	10,045,000	59,518,000	5,173	17,327	15,133,696	68,586,274
Oakland	5,173,000	19,113,000	2,476	6,905	5,368,258	22,342,926
Sacramento	6,856,000	10,097,000	3,686	4,514	9,494,633	13,976,911
Stockton	4,454,000	8,250,000	1,185	1,594	5,525,391	11,849,252
Fresno	1,435,000	4,933,000	819	1,938	2,752,201	11,090,195
San Jose	2,980,000	3,815,000	1,221	1,430	3,291,641	5,610,427
San Diego	990,000	5,326,000	255	1,071	669,682	4,740,990
Berkeley	456,000	3,465,000	211	1,084	651,286	4,435,374
Eureka	*	3,906,000	*	946	*	3,011,682
Bakersfield	*	1,791,000	*	746	*	2,818,744
Alameda	749,000	3,002,000	372	915	1,335,326	2,554,417
Vallejo	*	1,559,000	*	203	*	1,895,562
Pasadena	313,000	1,347,000	177	499	330,578	1,724,364
San Bernardino	*	1,242,000	*	729	*	1,659,705
Riverside	*	1,102,000	*	267	*	1,177,962
Santa Barbara	*	895,000	*	265	*	1,169,195
Santa Cruz	*	2,605,000	*	274	*	1,161,269
Long Beach	*	1,326,000	*	277	*	927,180
Pomona	*	630,000	*	224	*	559,661
Redlands	*	1,104,000	*	147	*	518,320

\*Figures not available.

†The remarkable increases shown for Alameda and Berkeley, and also for Oakland, are doubtless due largely to the influx of population and business from San Francisco following the earthquake in 1906.

**Engines and Power.**

Power	Number of engines or motors		Horsepower		Per cent distribution of horsepower	
	1899	1909	1899	1909	1899	1909
<b>Owned:</b>						
Steam	2,158	2,520	105,190	193,526	82.9	58.8
Gas	545	765	3,244	10,115	2.6	3.1
Water wheels	171	115	4,680	7,390	3.7	2.2
Water motors	*	47	*	280	*	0.1
Other			1,609	30	1.3	*
<b>Totals</b>	<b>2,874</b>	<b>3,447</b>	<b>114,723</b>	<b>211,341</b>	<b>90.4</b>	<b>64.2</b>
<b>Rented:</b>						
Electric	*	10,802	9,624	116,537	7.6	35.4
Other			2,606	1,222	2.1	0.4
<b>Totals</b>	<b>2,874</b>	<b>14,249</b>	<b>12,230</b>	<b>329,100</b>	<b>100.0</b>	<b>100.0</b>
<b>Electric motors:</b>						
Run by current generated by establishment	281	1,591	6,138	27,147	38.9	18.9
Run by rented power	*	10,802	9,624	116,537	61.1	81.1
<b>Totals</b>	<b>281</b>	<b>12,393</b>	<b>15,762</b>	<b>143,684</b>	<b>100.0</b>	<b>100.0</b>

\*Not reported.

## PART IX.

# MISCELLANEOUS.

### TRANSPORTATION BY WATER: RIVER TRAFFIC.

**California Fisheries:** Quantity and Value of Salmon; Salmon Rivers; Salmon Catch by Counties; Monterey Sardines; California Oysters. **Game:** Deer; Antelope; Mountain Sheep; Bear; Wild Ducks and Geese; Quail; Grouse; Sage-hen; Doves and Pigeons; Pheasants and Wild Turkeys. **Public Roads:** Mileage of Roads by Counties.

### TRANSPORTATION BY WATER.

The largest volume of unused water in California comes from the Sacramento and San Joaquin valleys, and it is here that the greatest development in the future will take place. It is not believed that this increased use of water will seriously injure navigation interests, because a large percentage of the water diverted will return to the streams as waste seepage.

The complete utilization of these two rivers will give California the largest rural population of any state in the Union. Whatever expenditure is necessary to protect navigation interests and enable this to be brought about should be made. Even if it requires the construction of locks and the canalizing of both streams, the improvements will be well worth their cost, and as it is a recognized field for the expenditure of government appropriations, a proper presentation of the situation should prove successful. The above is the opinion of such a high authority as Prof. Elwood Mead.

The navigation of the upper part of the San Joaquin River is now engaging serious attention by those interested in the development of this great valley, and a determined effort is being made to accomplish this great work, by taking active steps to prove its feasibility, and to induce the Federal Government to assist in promoting the undertaking by making the river navigable as far as Herndon, if necessary by a canal for a portion of the distance.

The San Joaquin River fluctuates widely in the course of a year, between a high flood-water level and a lower, or autumn, flow. By gaugings at Friant (formerly called Pollasky), and also at Herndon, the maximum flow of the river has been recorded as high as 59,800 cubic feet per second. The months of the greatest flow are from January to July, inclusive. On the other hand, the minimum flow has fallen as low as 150 feet at Herndon. The months from August to October include the period of low water. In the winter and spring months the average discharge approximates 5,000 to 6,000 feet per second.

From its source in the high Sierra to the point where it joins the Sacramento, at Suisun Bay (about 50 miles by water from San Francisco), the San Joaquin is about 350 miles long; 125 in the mountains and 225 in the valley. It receives the discharge of all the Sierra streams

south of the Mokelumne and from all the smaller creeks draining from the eastern slope of the Coast Range, between San Francisco Bay and the Tehachapi.

San Francisco Bay, which has an area of about 450 square miles, is by far the most important harbor of the State.

#### RIVER TRAFFIC.

The Sacramento is navigable as far as Red Bluff, 262 miles above its mouth, while the San Joaquin is navigable, at high water, as far as Hills Ferry, 195 miles from the mouth. The channel up to Stockton is open throughout the year. The capacity of a typical steamboat of these rivers may average not far from thirty carloads of grain or potatoes. Often a steamer will tow one or more barges laden with grain or other commodities. In addition to the steamboat and barge lines, a number of launches are engaged in the freight and passenger service between Sacramento or Stockton and the smaller river landings. One line is operated between Stockton and Sacramento. In May, 1910, there were at least nine or ten different lines of steamboats and launches carrying passengers or freight to and from Sacramento. Another kind of river craft is the scow schooner, or sail vessel common on these rivers and San Francisco Bay.

Although data showing grain traffic on the Sacramento and San Joaquin are but fragmentary, it is known that much wheat and barley are shipped by steamboat and barges down these streams to tidewater. The grain carried on the San Joaquin in 1907 was reported as 137,306 tons, while 109,427 tons were reported in 1906 and 63,457 tons in 1908; live stock traffic in 1906 amounted to 3,366 tons and to 3,244 tons in 1908.\*

The wheat grown west of the Rocky Mountains enters into a trade distinct from that of the rest of the United States. The farmer of California, Oregon, or Washington looks to Liverpool and other European ports, not to Chicago and Minneapolis, for his market. His product is carried some 18,000 miles before it reaches the English miller, but this route is cheaper than the 2,000-mile haul across the mountains to milling centers of the Mississippi Valley. Local mills grind considerable quantities, but the surplus for export is regularly carried by sea to Europe.

On the upper Sacramento River the rate from Red Bluff, the head of navigation, to San Francisco, a distance of about 387 miles, was in 1910 equivalent to 9 cents per bushel for wheat, or 7.2 cents for barley. The rate from Stockton to San Francisco was less than 2 cents per bushel for wheat, and slightly more than 1.5 cents for barley. River steamers (and the portage railway around the falls) charged for wheat 9.6 to 10.5 cents per bushel between Lewiston, Idaho, and Portland.

This water service is especially valuable to a considerable area of rich farming land situated on islands in the deltas of the two rivers. Not only is grain an important product, but potatoes, beans, asparagus, and other vegetables are also shipped in large quantities.

#### TRANSPORTATION BY WATER.

In a special report issued by the Bureau of Census in 1906 on Transportation by Water, it is stated that from 1875 to June 30, 1907, the

\*For full details on marketing grain and live stock, see Bulletin 89, Bureau of Statistics, United States Department of Agriculture, by Frank Andrews.



Federal Government expended \$878,749 in improving the Sacramento and Feather rivers, the latter being navigable for gasoline boats and launches from its junction with the Sacramento to Marysville. The canalization of the Sacramento and San Joaquin rivers was suggested as part of a plan to furnish an inland waterway from the upper to the lower part of the State.

Navigable Streams—Length and Depth at Low Water.

Name and points connecting	Distance in miles	Navigable length	Depth at low water, feet	Traffic, tons	
				In 1905	In 1906
Redwood Creek:					
Mouth to Redwood.....		1.0	3.0	47,700	
San Joaquin River:					
Mouth to Stockton.....		200	8.0		971,382
Stockton to railroad crossing.....			3.0		
Stockton to Firebaugh.....			A few in ches.		
Mokelumne River:					
Mouth to Galt.....		20.0	2.0		50,000
Mouth to Snodgrass Slough.....	13.0		6.0		to 100,000
Sacramento River:					
Mouth to Red Bluff.....		262.0	2.5		
Mouth to Sacramento.....	64.0		7.0		375,000
Sacramento to Red Bluff.....	198.0		2.5		*
Feather River:					
Mouth to Marysville.....		30.0	1 to 2	5,306	
Petaluma Creek:					
Mouth to Petaluma.....		16.0	4.0		175,025
Napa River:					
Mouth to Napa.....		16.0	4.0		182,642

\*Steamboat lines only.

An act of congress approved March 1, 1903, created the California Débris Commission, to regulate hydraulic mining in the territory drained by the Sacramento and San Joaquin river systems, and to adopt plans to improve and protect the navigation of those rivers.

On Petaluma Creek and Napa River there is a considerable amount of farm and dairy produce carried on light-draft vessels and a small amount of general merchandise. Vessels operating on the Sacramento, San Joaquin, Mokelumne, Old and Middle rivers handle fruit and vegetables from river landings to San Francisco for local consumption and canneries, and to Sacramento for local consumption, canneries, and transcontinental shipment. Return cargoes consist of general supplies and such manufactured products as are consumed in agricultural districts. Other shipments are grain, dried fruits, live stock, general merchandise, and machinery.

The commerce on the lower San Joaquin River between Stockton and San Francisco is large and important. In 1906 the commerce of this river was reported as 971,382 tons, valued at \$14,770,730, exclusive of freight.

The commerce of the upper river is small, the amount of trade reported in 1905 being 10,891 tons. There have been no records kept of the tonnage of the Mokelumne River, the amount of which can only be estimated.



## Tonnage of All Freight and of Grain and Live Stock Carried on San Joaquin and Sacramento Rivers.

(Tons of 2,000 pounds.)

Calendar year	San Joaquin River, all freight, tons	Sacramento River, all freight, tons
1900	270,887	461,314
1901	357,746	452,965
1902	322,000	404,900
1903	366,038	383,724
1904	360,486	353,164
1905	373,186	365,957
1906	440,300	375,000
1907	736,472	367,224
1908	509,233	394,945

## Depth of Channel and Distance From Open Sea for California Ports.

Port	Location	Distance from open sea, nautical miles	Depth of channel		Remarks
			Mean low water, feet	Mean high water, feet	
Eureka	Humboldt Bay	5.5	18½	24	At wharves, 15 to 36 feet deep.
San Francisco	San Francisco Bay	14.8	18½	24	
Oakland	San Francisco Bay	14.8	18½	24	
Monterey	Bay of Monterey	3.0			
Port Harford	On the sea		27		At wharves, 15 to 48 feet.
Santa Barbara	On the sea		25		
Los Angeles ports:					
Port Los Angeles	On the sea		34		
Redondo Beach	On the sea				
San Pedro	San Pedro Harbor	1.9	20	25	
San Diego	San Diego Bay	6.1	25	29¾	

## CALIFORNIA FISHERIES IN 1909.

The principal feature in the California fisheries is a decline in value of products since the year 1904. Although the quantity is greater, fewer men are employed and more motive power in boats.

The quantity of fish, oysters, and whale products caught in 1908 was 645,000 pounds more than in 1899, but the value was \$581,000 less. Cod showed a decline, as did flounders, smelt, sole, and crabs. Oysters fell from \$867,000 in 1899 to \$337,000 in 1908. Salmon showed an increase, the catch amounting to 24 per cent of the total value of the products in 1908, compared with 10 per cent in 1899. Other species that have increased notably are striped bass, barracuda, spiny lobsters, rockfish, catfish, and white sea bass.

The value of the products taken in the shore and boat fisheries in 1908 was \$1,627,000, 38 per cent of which was obtained in the Sacramento River, where salmon was the principal species caught, amounting to 7,292,000 pounds. San Francisco Bay was second in rank, according to the value of products taken in the shore and boat fisheries. Herring was the principal species taken in the bay fisheries, while oysters, smelt, sea bass, rockfish, striped bass, and sardines were also taken in considerable quantities.

The vessel fisheries were credited with products valued at \$343,000, whalebone and whale oil accounting for \$132,000, but the vessel fisheries amounted to only 17 per cent of the total value of the fishery products of the State.

In 1908 salmon stood first, both in quantity and in value, among the species of fish taken in California waters, the State ranking third in the country, both in quantity and in value of the catch of salmon. Of the total quantity, 79 per cent was taken from the Sacramento River. Striped bass ranked second and cod third in value, the latter being taken largely off the coast of Alaska. All were salted, and the catch was 41 per cent less than in 1904.

#### SUMMARY OF QUANTITIES AND VALUES.

In the value of products from fisheries, California ranked second among the Pacific coast states, both at the canvass of 1904 and 1908. The river or inland fisheries are confined almost exclusively to the rivers flowing into San Francisco Bay, the largest and most productive of which is the Sacramento.

The following tabular statement gives a summary of the industry for 1908:

Number of persons employed.....	4,129
Vessels and boats, including outfit.....	\$1,066,000
Apparatus of capture.....	\$502,000
Shore and accessory property and cash.....	\$91,000
Value of products.....	\$1,970,000

The quantity and value of fish taken by the shore and boat fisheries from the different waters of the State in 1908 was as follows:

Fishing ground	Quantity, pounds	Value
Sacramento River .....	11,643,000	\$617,000
San Francisco Bay.....	3,522,000	431,000
Pacific Ocean .....	8,552,000	249,000
Humboldt Bay, including Eel and Mad rivers.....	2,888,000	96,000
Monterey Bay .....	5,248,000	89,000
Monica Bay .....	2,574,000	67,000
Santa Barbara channel.....	1,535,000	62,000
Klamath River .....	433,000	8,900
San Luis Obispo Bay.....	464,000	6,200
Totals .....	36,860,000	\$1,627,000

Of the total products taken by the shore and boat fisheries in 1908, the Sacramento River supplied 32 per cent in quantity and 38 per cent in value. Salmon was the principal fish caught in this river, amounting to 7,292,000 pounds; striped bass was next in importance, the total being 1,690,000 pounds. Catfish, shad, carp, black bass, pike, and sturgeon follow in the order named. San Francisco Bay was second in rank, according to the value of products.

In Humboldt Bay and its tributaries there were taken besides salmon, smelts, flounders, herring, rockfish, and crabs. The sardine catch of Monterey amounted to 1,782,000 pounds. More than two thirds of the

abalone catch of the State is credited to Monterey Bay. Out of a total of 47,477,000 pounds of fish caught in 1908, the principal kinds were:

Varieties of Fish Caught in 1908.

Variety	Pounds	Value
Salmon -----	9,211,000	\$471,000
Chinook -----	8,846,000	460,000
Blueback -----	147,000	4,900
Silver -----	141,000	4,200
Steelhead -----	76,000	2,800
Sardines -----	4,638,000	30,000
Sole -----	3,487,000	65,000
Cod (salted) -----	3,298,000	94,000
Barracuda -----	3,205,000	88,000
Flounders -----	3,193,000	80,000
Rockfish -----	2,319,000	60,000
Striped bass -----	1,776,000	135,000
White sea bass -----	1,337,000	42,000
Catfish -----	1,069,000	56,000
Crabs -----	1,702,000	69,000
Oysters -----	729,000	337,000
Abalone (meat and shells) -----	1,235,000	22,000

#### THE SALMON FISHERIES.

In the last report of the United States Commissioner of Fisheries, attention is called to the enormous destruction of young salmon in the Sacramento River through the medium of irrigation canals and the attacks of black bass during the migration of the salmon to salt water. One of the canals referred to is 85 feet wide at the bottom, and as the fry follow the current in their descent of the river, large numbers are carried into the canal by the inflowing water and are left stranded on adjacent lands. Unless the fry are planted below the intake, or some effective method of screening is resorted to, it will be impossible to maintain the present run of salmon in the Sacramento River.

The California Fish Commission, realizing the futility of maintaining the supply of salmon in the Sacramento and tributaries in the face of such adverse conditions, is contemplating the establishment of a hatchery near tidewater for the development of eggs collected at interior stations.

The largest, best-known, and most valuable species is the Chinook, or King salmon, which is found from Ventura River to North Sound, Alaska. There are two runs of spawning fish in the Sacramento, the "spring run," in April, May, and June, spawning mainly in the cold water of the McCloud and Fall rivers. The second, or "fall run," occurs in August, September, and October, and these fish spawn in the riffles in the main river, between Tehama and Redding.

In former years the San Joaquin, and the American and Feather rivers of the Sacramento system, had large runs of salmon, but excessive fishing and the operation of various mining and irrigation projects have practically depleted them.

The Eel and Mad rivers of northern California have only a fall run, while the Klamath River has both a spring and a fall run, and the Smith River, in the northern part of the State, has a spring run alone.

The salmon rivers and fishing grounds in California are: Smith River, Klamath River, Humboldt Bay and tributaries, Mad River, Eel River, Mattole River, a small river in the southern part of Humboldt

County, Sacramento and San Joaquin rivers, Pitt and McCloud rivers, and Battle Creek.

The principal fishing grounds for salmon are Suisun Bay and the lower part of the San Joaquin and Sacramento rivers. Drift gill nets are used almost exclusively. From Sacramento to Anderson there is considerable commercial fishing with haul seines. The southernmost point on the coast where salmon are taken commercially is Monterey Bay.

*Persons Employed.* The total number of persons employed in the salmon fisheries in 1909 was 2,675, Contra Costa County leading with 774 persons. These are classified as follows:

	Fishermen	Shoremen	Transporters
White -----	2,114	276	-----
Japanese -----	168	5	-----
Chinese -----	15	-----	-----
Indians -----	-----	15	-----
Totals -----	2,297	296	82

The total catch in 1909 amounted to 12,141,937 pounds, valued at \$585,995. Contra Costa leads in catch, followed closely by Solano County. Nearly four fifths of the catch were made with gill nets, while Chinook salmon comprise almost all of the catch.

#### Production and Value by Species.

Species	Pounds	Value
Blueback -----	21,000	\$689
Chinook (fresh) -----	11,893,199	575,542
Chinook (salted) -----	69,049	4,552
Silver (fresh) -----	99,500	2,675
Silver (salted) -----	46,000	1,900
Dog -----	4,200	84
Steelhead trout -----	8,989	553
Totals -----	12,141,937	\$585,995

#### Production and Value of Salmon Catch by Counties in 1909.

County	Pounds	Value
Del Norte -----	655,225	\$12,852
Humboldt -----	864,198	34,124
Marin -----	5,330	310
San Francisco -----	91,063	4,055
Solano -----	3,238,788	168,713
Contra Costa -----	3,949,080	211,166
San Joaquin -----	61,187	2,585
Yolo -----	197,520	10,852
Sacramento -----	599,723	32,690
Sutter -----	62,119	1,917
Butte -----	163,022	8,285
Glenn -----	72,547	3,627
Tehama -----	314,102	16,905
Shasta -----	46,475	2,789
Monterey* -----	1,779,524	73,134
Santa Cruz* -----	41,984	1,991
Totals -----	12,141,937	\$585,995

\*With lines.



## Statistics by Waters.

*Persons Employed.* Of the 2,675 persons employed in the industry, 1,880 were on Sacramento River; the next largest number was employed on Monterey Bay.

	Fishermen	Shoremen	Transporters	Total
Smith River .....	47	32		79
Klamath River .....	37		3	40
Mad River .....	41			41
Humboldt Bay .....	7	6		13
Eel River .....	291	13		304
Sacramento River .....	1,582	219	79	1,880
Monterey Bay .....	292	26		318
Totals .....	2,297	296	82	2,675

## Products and Value of the Salmon Catch by Waters.

Waters	Pounds	Value
Smith River .....	94,000	\$3,200
Klamath River .....	561,225	9,652
Mad River .....	108,900	4,286
Humboldt Bay .....	28,000	840
Eel River .....	727,298	28,998
Sacramento River .....	8,801,006	463,894
Monterey Bay .....	1,821,568	75,125
Totals .....	12,141,937	\$585,995

## Canned and Cured Salmon.

## Mild, Cured, and Smoked Salmon.

River	Mild, cured Chinook		Smoked				Total	
			Chinook		Silver			
	Pounds	Value	Pounds	Value	Pounds	Value	Pounds	Value
Eel	64,000	\$6,400	50,000	\$5,000	3,000	\$300	117,000	\$11,700
Sacramento	4,095,162	450,019	56,550	8,943	4,660	326	4,156,372	459,288
Monterey Bay	728,800	64,049	4,000	700			732,800	64,749
Totals	4,887,962	\$520,468	110,550	\$14,643	7,660	\$626	5,006,172	\$535,737

## Sacramento Canned Salmon, 1895-1905.

The quantity of canned salmon from the Sacramento River since 1873 increased rapidly the first ten years, until it touched upwards of 200,000 cans in 1882; since that year the quantity packed rapidly declined until 1905.

## Sacramento River Canned Salmon.

Year.	Cases	Year.	Cases
1895 .....	24,000	1901 .....	17,500
1896 .....	13,387	1902 .....	14,043
1897 .....	42,500	1903 .....	10,491
1898 .....	28,000	1904 .....	19,698
1899 .....	33,550	1905 .....	2,780
1900 .....	34,000		

NOTE.—See the Salmon Fisheries of the Pacific Coast, by John N. Cobb. Bureau of Fisheries Document No. 751.

**Hatcheries.**

The following is a summary of the distribution from the different hatcheries for the season 1912:

Hatchery	Total shipped and held for breeding
Sisson: Trout, 6 varieties.....	8,913,670
Salmon .....	6,142,555
Tahoe: Eastern brook trout.....	3,111,158
Brookdale: Steelhead trout.....	803,500
Price Creek: Steelhead trout and salmon.....	3,783,660
Ukiah: Steelhead trout.....	433,458
Wawona: Rainbow and black-spotted trout.....	330,472
Sacramento Experiment Station: Salmon.....	900,000
Mill Creek Station: Salmon.....	8,663,230
Black bass—Adult black bass caught up and distributed for breeders .....	1,750

**Summary.**

Trout distributed and held for breeding in State of California during season of 1912.....	14,172,258
Salmon distributed during season of 1912.....	18,909,445
Black bass distributed during season of 1912.....	1,750
Total .....	33,083,453

**Codfish Catch, 1913.**

The codfish catch of the San Francisco fishing fleet amounted to 1,639,847 fish.

**Sardine Fishery.**

A regular sardine fishery exists in Monterey Bay, where large quantities are caught and packed. In 1913 the quantity packed at Monterey amounted to 8,750,000 pounds.

**Pack of Tunny Fish.**

The pack of tunny fish, which was only commenced a year or two ago, shows a steady increase, the output being:

Year	Cases
1911 .....	42,000
1912 .....	90,000
1913 .....	115,000

**California Oysters Produced.**

The production of oysters varies considerably. The figures are not available for every year, but the following summary will give some idea of the size and value of the industry.

Year	Bushels	Value
1890 .....	151,325	\$592,137
1895 .....	163,636	539,497
1899 .....	420,000	867,000
1904 .....	188,613	628,023
1908 .....	104,000	337,000
1912 .....	68,037	280,344

In California the oyster industry, including the cultivation of oysters and the oyster trade, centers in San Francisco, and the oyster grounds

are located chiefly in San Francisco Bay, although there are oyster grounds also in Tomales and Humboldt bays. The oyster product of the State is all obtained from private grounds, and the season extends practically through the entire year. Of the 68,000 bushels produced in 1913 all, except 600 bushels of native oysters, valued at \$1,800, were Eastern oysters, grown from seed oysters brought from the Atlantic coast and planted on the local beds.

### CALIFORNIA GAME.\*

The game animals are so valuable in California that the title to them has been retained by the State, and the fees charged for licenses, which expire annually on June 30th, amount to a considerable sum.

Hunting licenses	Fiscal year, 1910-11	Fiscal year, 1911-12
Residents at \$1.....	\$138,410	\$141,551
Non-residents at \$10.....	1,080	680
Aliens at \$25.....	3,775	3,950
Totals .....	\$143,265	\$146,181

#### Fish and Game Districts.

In California there are so many different conditions of climate and topography that it is almost impossible to create a blanket fish and game law. When deer, for example, are in proper condition to be killed in one section they are out of condition in another. Three years ago the legislature divided the State into six fish and game districts, but by chapter 575, passed at the recent legislature, the number of districts has been increased to seven.

*Deer.* It is reported in many parts of the State that deer are on the increase, but this is doubtful. There are probably killed in the State each year by hunters 10,000 deer. It has been estimated that every mountain lion will kill at least 52 deer a year; estimating the lions at 250, the number devoured by them would amount to 13,000. Coyotes and other animals would probably bring the total number destroyed to near 30,000. In average years the natural death rate is not great; most of them meet violent deaths, so the above number can be accepted as the number of deer dead from all causes in the State.

*Elk and Antelope.* Of the thousands of these animals that formerly ranged the State, there are now but a few scattered bands. In the San Joaquin Valley, near Buttonwillow, and in the Sequoia National Park range are all that are left of the thousands of "tule," a dwarf elk that formerly were found throughout the San Joaquin and Sacramento valleys. This species is peculiar to California, and now only number between 400 and 500 head.

Another variety is found in small numbers in Humboldt and Del Norte counties, in bands numbering from six to twelve, but the total number probably does not exceed 200.

*The Antelope.* The antelope is still found in the extreme eastern part of the State; some are found in Antelope Valley, in the north-eastern part of Los Angeles County, while in the western San Joaquin

\*See Report of the California Fish and Game Commission, 1910-12.

Valley the largest band of the State is found. In Modoc, Lassen, and Siskiyou counties there are several small bands. All told, there are probably about 600 antelope left in the State.

*Mountain Sheep.* These still flourish in considerable numbers in the southeastern part of the State. Formerly this magnificent game animal ranged over the entire Sierra Nevada region and across to the lower Coast Range, as far north as San Luis Obispo County, but they are now restricted to the most inaccessible portions.

*Bear.* The grizzly bear is practically extinct. The common brown or black bear is fairly abundant in some parts. It is for the most part a harmless species, feeding on roots, berries, grubs and insects, and rarely kills sheep or hogs. The pelt of a well-colored bear in prime condition is worth from \$20 to \$40.

*Fur-bearing Animals.* Few people realize the importance of fur-bearing animals in this State, yet each year furs worth nearly \$200,000 are shipped to the various fur centers.

*Wild Ducks and Geese.* These are the most abundant game birds in the State, although neither of them are nearly as numerous as they were in former years. Ducks breed throughout the entire State, and the number killed in California in 1911 is estimated at approximately one million.

*Quail.* Quail are slowly decreasing throughout most of the State, on account of the great number of hunters. In parts of the State there is urgent need of a close season for a number of years if quail are to be kept from extermination. Mountain quail have become very scarce throughout the southern end of the State, and in the coast region below San Francisco. In other parts of the State they are about holding their own.

*Grouse.* Ruffed grouse are fairly abundant in the extreme north-western corner of the State. The blue grouse is becoming scarcer, and where the settlers have engaged in sheep raising, they are almost extinct.

*The Sage Hen.* This bird is found only in the eastern part of the State, in the true sagebrush country. The sage hen is practically never found below an elevation of 3,000 to 4,000 feet, nor out of the true sagebrush country. It is the largest California game bird.

*Doves and Pigeons.* The most difficult bird to arrange a proper season for is the common mourning dove, January being the only month in which they do not nest. On this account many sportsmen advocate the removal of the dove from the list of game birds. There is urgent need for the protection of the wild (band-tail) pigeon. This is the slowest breeding game bird in the United States. One egg is the complete set, and probably only one egg is laid the entire year.

*Pheasants and Wild Turkeys and Hungarian Partridges.* Of the introduced game birds, ring-neck pheasants have done well, especially in Humboldt County; they have also increased in parts of Santa Clara and San Joaquin valleys. Wild turkeys have been liberated in the lower Sierra Nevada region; other plants have been made in San Diego, San Bernardino, Monterey, San Benito, Alameda, Sonoma, and Humboldt counties. Hungarian partridges have been given a good trial, but, as yet, without success.



## PUBLIC ROADS.

The total mileage of public roads in the United States in 1909 was 2,199,645 miles, and the total of improved roads 190,476 miles, made up as follows: Stone 59,237 miles, gravel 102,870 miles, other material 28,372 miles. Indiana leads all other states in the mileage of improved roads, with 24,955 miles; Ohio is second, New York third, California seventh, and Massachusetts eighth. A decrease in improved roads is reported from California, Michigan, Minnesota, and Wisconsin.

The practice of improving the earth roads by the use of oil in California has been, to a large extent, discontinued, and this has had the effect of cutting down the mileage of that class of roads considerably, and so reducing the total mileage of improved roads. The information from some of the counties is not altogether satisfactory, but the figures are as accurate and complete as it was possible to obtain at the time. California had, at the close of 1909, 48,069 miles of public roads, which exceeds the total mileage reported for 1904 by 1,416 miles.

Of the total mileage of public roads in the State, 579 miles are reported as having been surfaced with stone, 6,054 miles with gravel, 1,289 miles with sand clay, and 653 miles with oiled earth, making a total mileage of improved roads of 8,587, or 17.87 per cent. This is about 1 per cent less than was reported in 1904, and this decrease is due principally to the fact that the oiling of earth roads has been abandoned to a large extent, for while there were 2,541 miles of earth roads reported to have been oiled in 1904, there were only 653 miles of oiled roads reported in 1909.

The gain in improved roads is as follows: 160 miles of macadam, 1,289 miles of sand clay, and 210 miles of gravel. No sand clay roads were reported in 1904. There are ten counties in the State which report no improved roads, twenty-one counties have less than 10 per cent improved, and nine counties have from 52 to 80 per cent improved, as follows:

County	Improved
Napa -----	80.89 per cent
Los Angeles -----	72.33 per cent
Santa Clara -----	68.83 per cent
San Benito -----	68.73 per cent
San Mateo -----	65.14 per cent
Sonoma -----	59.92 per cent
Yolo -----	57.72 per cent
Alameda -----	55.55 per cent
Colusa -----	52.24 per cent

TABLE XL.  
Miles of Public Roads In 1909.

Counties	Total mileage of all public roads	Mileage of improved roads				Total	Approximate per centage of roads improved
		Stone	Gravel	Sand clay	Oiled		
Alameda	765	25	400			425	55.55
Alpine	100						
Amador	500	15	20			35	7.00
Butte	1,200	5	400			405	33.75
Calaveras	606	5	40			45	7.42
Colusa	578		302			302	52.24
Contra Costa	500		100	10	40	150	30.00
Del Norte	125		30			142.5	34.00
El Dorado	900			5		5	.55
Fresno	1,500			20	150	170	11.33
Glenn	500		138			138	27.60
Humboldt	1,130	10	300	105		415	36.72
Imperial	726						
Inyo	500						
Kern	1,100	2			100	102	9.27
Kings	500				92	92	18.40
Lake	488		160			160	32.78
Lassen	720		25	25		50	6.94
Los Angeles	1,500	85	1,000			1,085	72.33
Madera	410				30	30	7.31
Marin	309						
Mariposa	355						
Mendocino	1,200						
Merced	450	1	136			137	30.44
Modoc	766		10			10	1.30
Mono	380						
Monterey	600	50	50			100	16.66
Napa	560	3	450			453	80.89
Nevada	600	30				30	5.00
Orange	500		25	5		30	6.00
Placer	775	7				7	.90
Plumas	385		10			10	2.59
Riverside	800	4	48	2		54	6.75
Sacramento	1,500	86	20			106	7.06
San Benito	451		160	150		310	68.73
San Bernardino	3840						
San Diego	5,200			450		450	8.65
San Francisco	4						
San Joaquin	990	12	25			37	3.73
San Luis Obispo	1,100		162		1	163	14.82
San Mateo	350	131	65	15	17	228	65.14
Santa Barbara	750	16	45		5	66	8.80
Santa Clara	1,200	20	600	200	6	826	68.83
Santa Cruz	420	12.25	25	6	7	50.25	11.96
Shasta	1,575		66	170		236	14.98
Sierra	525						
Siskiyou	2,625	5	20	4		24.5	.93
Solano	630	9	25	1		35	5.55
Sonoma	1,260	35	600	120		755	59.92
Stanislaus	470		55			55	11.70
Sutter	350	8	50			58	16.57
Tehama	650	5	60	1		66	10.15
Trinity	200		5			5	2.50
Tulare	2,285				60	60	2.62
Tuolumne	290		52		15	67	23.10
Ventura	700				100	100	14.28

TABLE XL—Continued.

## Miles of Public Roads in 1909.

Counties	Total mileage of all public roads	Mileage of improved roads					Approximate percentage of roads improved
		Stone	Gravel	Sand clay	Oiled	Total	
Yolo -----	680	2.5	360		30	392.5	57.72
Yuba -----	1,000		15			15	1.50
Totals -----	48,069	579.25	6,054	1,289	653	8,587.75	17.87
Increase in Five Years.							
Year 1904 -----	46,653	418.5	5,843.5		2,541	8,803	18.87
Year 1909 -----	48,069	579.25	6,054	1,289	653	8,587.75	17.87
Increase -----	1,416	160.75	210.5	289			

<sup>1</sup>Includes 12.5 miles of wood puncheon road. <sup>2</sup>Bituminous—macadam. <sup>3</sup>This is exclusive of roads in the Mojave Desert, which comprises about 85 per cent of the county. <sup>4</sup>Included in the city of San Francisco. No county roads in this county.

TABLE XLI.

## Cost Data of Roads in 1909.

County	Average cost per mile			
	Sand clay	Gravel	Macadam	Bituminous
Alameda -----		*\$1 35	*\$1 35	
Del Norte -----		2,500 00		
Glenn -----		†89		
Humboldt -----		*60	*95	*
Los Angeles -----				\$11,000 00
Merced -----			9,000 00	
Nevada -----		1,400 00		
Riverside -----		*14		*76
Sacramento -----				7,500 00
San Diego -----	\$625 00			*1 62
San Mateo -----			*59	*1 73
Santa Barbara -----				7,800 00
Santa Clara -----	200 00	1,000 00	6,000 00	8,000 00
Santa Cruz -----			5,200 00	
Shasta -----		1,500 00		
Siskiyou -----		1,000 00		
Sonoma -----		*1 25	*1 87	
Tehama -----		850 00	1,300 00	
Yolo -----		*10	*63	
Average -----	\$412 00	\$1,375 00	\$5,375 00	\$8,575 00

\*Average cost per square yard; Gravel, 69 cents; macadam, \$1.08; bituminous, \$1.37.  
†Cost per cubic yard.

## PART X.

# FINANCE AND TAXATION.

**Tariff Acts 1789-1913; Foreign Trade and California Ports 1880-1913;  
Total Assessed Value by Counties 1910-1913. Assessed Value of  
All Property, 1850-1913.**

### RESOURCES OF STATE AND NATIONAL BANKS IN 1913.

#### STEAM AND ELECTRIC RAILROADS.

#### INSURANCE.

Fire, Marine, Life, Industrial and Fraternal Societies.

#### TARIFF ACTS.

Tariff Acts Passed by Congress.

(From 1789 to 1913.)

1789. July 4th.	1861. August 5th.
1790. August 10th.	1862. July 14th.
1791. March 3d.	1863. March 3d.
1792. May 2d.	1864. June 30th.
1794. June 7th.	1865. March 3d.
1795. January 29th.	1866. July 28th.
1797. March 3d.	1867. March 2d.
1800. May 13th.	1870. July 14th.
1804. March 27th.	1872. June 6th.
1816. April 27th.	1875. February 8th.
1818. April 20th.	1883. March 3d.
1824. May 22d.	1890. June 10th.
1828. May 19th.	1890. October 1st (McKinley bill).
1832. July 14th.	1894. August 27th (Wilson bill).
1833. March 2d.	1897. July 24th (Dingley bill).
1842. August 30th.	1905. March 3d (Philippine tariff).
1846. July 30th.	1909. August 5th (Paine-Aldrich bill).
1857. March 3d.	1909. August 5th (Philippine tariff).
1861. March 2d.	1913. October 3d (Wilson bill).

In addition to the above 38 acts, there are 224 other miscellaneous acts, proclamations, and joint resolutions, making a total of 262 on the subject of the tariff. The act passed last year, which came into effect on October 4, 1913, makes a considerable reduction on agricultural products and places many articles on the free list.

#### FOREIGN TRADE AND CALIFORNIA IMPORTS AND EXPORTS.

*Custom districts and ports.*

*Subports of entry.*

San Francisco -----	Oakland, Port Harford, Monterey.
Los Angeles -----	Santa Barbara, Redondo Beach and San Pedro.
San Diego -----	
Humboldt -----	Eureka.



TABLE XLII.  
TARIFF CHANGES, 1909 AND 1913.  
Summary of Principal Agricultural Products.

Article	Act of August 5, 1909	Act of October 3, 1913
Agricultural implements and machines.....	15 per cent	Free
Apples, peaches, pears, quinces, cherries, plums.....	25¢ bushel	10¢ bushel
Apricots and peach kernels.....	4¢ pound	3¢ pound
Bananas.....	Free	No change
Beans and peas, prepared.....	2½¢ pound	1¢ pound
Beans.....	45¢ bushel	25¢ bushel
Beeswax.....	Free	No change
Beets.....	25 per cent	5 per cent
Beets (sugar).....	10 per cent	5 per cent
Berries, in natural state.....	1¢ quart	¾¢ quart
Brandy and other spirits.....	\$2.60 proof gal.	No change
Casks, barrels, packing boxes.....	30 per cent	15 per cent
Champagne.....	\$9.60 per dozen	No change
Cider.....	5¢ per gallon	2¢ per gallon
Cotton, raw.....	Free	No change
Cranberries.....	25 per cent	10 per cent
Currants, Greek.....	2¢ pound	1½¢ pound
Dates.....	1¢ pound	No change
Eggs (fresh).....	Free	No change
Evaporated fruits.....	2¢ pound	1¢ pound
Figs.....	2½¢ pound	2¢ pound
Fruit plants, tropical.....	Free	No change
Grapes (in packages).....	25¢ cubic foot	No change
Honey.....	20¢ gallon	10¢ gallon
Lemons.....	1½¢ pound	*
Oranges, limes, pomeloes.....	1¢ pound	*
Nursery stock.....		
Nuts—	25 per cent	15 per cent
Almonds, unshelled.....	6¢ pound	4¢ pound
Walnuts, shelled.....	4¢ pound	3¢ pound
Walnuts, unshelled.....	5¢ pound	4¢ pound
Filberts, shelled.....	3¢ pound	2¢ pound
Filberts, unshelled.....	5¢ pound	4¢ pound
Peanuts, shelled.....	3¢ pound	2¢ pound
Peanuts, unshelled.....	1¢ pound	¾¢ pound
All other nuts.....	½¢ pound	¾¢ pound
All other nuts.....	1¢ pound	No change
Olives, in bottles, less than 5 gallons.....	25¢ gallon }	15¢ gallon
Olives, in packages over 5 gallons.....	15¢ gallon }	
Olive oil in bottles, less than 5 gallons (edible).....	50¢ gallon	30¢ gallon
Other olive oil.....	40¢ gallon	20¢ gallon
Olive oil fit only for mechanical or manufacturing purposes.....	Free	No change
Petroleum and mineral oils.....	Free	No change
Onions.....	40¢ bushel	20¢ bushel
Peas, green or dried.....	25¢ bushel	10¢ bushel
Pickles and sauces.....	40 per cent	25 per cent
Pineapples in barrels or packages.....	8¢ cubic feet	6¢ cubic feet
Pineapples preserved in own juice.....	25 per cent	20 per cent
Potatoes (from countries imposing duty on American potatoes).....	25¢ bushel	10 per cent
Potatoes.....	25¢ bushel 60 lbs.	Free
Poultry, live.....	3¢	1¢
Poultry, dead.....	5¢	2¢
Prunes.....	2¢ pound	1¢ pound
Raisins and dried grapes.....	2½¢ pound	2¢ pound
Rice cleaned.....	2¢ pound	1¢ pound
Rice uncleaned.....	1½¢ pound	¾¢ pound
Sugar.....	Various rates	†
Sugar beets. See beets.		
Vegetables prepared or pickled.....	40 per cent	25 per cent
Vegetables, natural, not otherwise specified.....	25 per cent	15 per cent
Vinegar.....	7½¢ per proof gal.	4¢ per proof gal.
Wine and brandy.....	Various rates	No change

In packages, capacity 1½ cubic feet, or less, 18¢ per package; exceeding 1½ cubic feet and not exceeding 2½ cubic feet, 35¢ per package; exceeding 2½ cubic feet and not exceeding 5 cubic feet, 70¢ per package; exceeding that size or in bulk, ½ of 1¢ per pound.

†No change till March 1, 1914, when a reduction of about 12½ per cent took place. After May 1, 1916, sugar will be admitted free.

TABLE XLII—Continued.  
Farm Animals and Dairy Products.

Commodity	Before October 4, 1913	October 4, 1913, and after
<b>Animals:</b>		
Asses .....	Breeding purposes and teams of immigrants, free; all other, 20 per cent ad valorem.	Breeding purposes and teams of immigrants, free; all other, 10 per cent ad valorem.
Cattle .....	Breeding purposes and teams of immigrants, free; all other: less than 1 year, \$2 per head; all other, worth not over \$14, \$3.75 per head; worth over \$14, 27½ per cent ad valorem.	Free.
Goats .....	20 per cent ad valorem.	Free.
Horses .....	Breeding purposes and teams of immigrants, free; all others: worth \$150 or less per head, \$30; worth over \$150, 25 per cent ad valorem.	Breeding purposes and teams of immigrants, free; all other, 10 per cent ad valorem.
Mules .....	Same as horses.	Same as horses.
Sheep .....	Breeding purposes, free; all other: less than 1 year old, 75 cents per head; 1 year old and over, \$1.50.	Free.
Swine .....	Breeding purposes, free; all other, \$1.50 per head.	Free.
<b>Dairy products:</b>		
Butter .....	6 cents per pound.	2½ cents per pound.
Cheese .....	6 cents per pound.	20 per cent ad valorem.
Cream .....	5 cents per gallon.	Free.
Milk .....	Fresh, 2 cents per gallon; condensed and evaporated, 2 cents per pound.	Free.
Hides and skins, raw .....	Free	Free.
<b>Meat:</b>		
Beef and veal .....	Fresh beef, 1½ cents per pound; other beef, 25 per cent ad valorem; veal, 1½ cents per pound.	Free.
Mutton and lamb .....	1½ cents per pound.	Free.
Pork .....	Fresh, 1½ cents per pound; bacon and hams, 4 cents per pound; other pork, 25 per cent ad valorem.	Free.
Sausage .....	Bologna, or frankfurter, free; other sausage, 25 per cent ad valorem.	Free.
Wool .....	Class 1, clothing, etc., wools: unwashed, 11 cents per pound; washed, 22 cents; scoured, 33 cents. Class 2, combing, etc., wools: unwashed, 12 cents per pound; washed, 12 cents; scoured, 36 cents. Class 3: value not over 12 cents per pound, 12 cents; over 12 cents, 21 cents.	Free on and after Dec. 1, 1913.

## Cereals, Hay, Hops, and Straw.

Barley, 30¢ per bushel of 48 pounds .....	15¢ per bushel
Broom corn, \$3 per ton .....	Free
Buckwheat, 15¢ per bushel of 48 pounds .....	Free
Corn, 15¢ per bushel of 56 pounds .....	Free
Oats, 15¢ per bushel of 32 pounds .....	6¢ per bushel
Rye, 10¢ per bushel .....	Free
Wheat, 25¢ per bushel .....	Free
Wheat flour, 25 per cent ad valorem .....	Free
Hay, \$4 per ton .....	\$2 per ton
Hops, 16¢ per pound .....	No change
Straw, \$1.50 per ton .....	50¢ per ton

TABLE XLIII.

Imports and Exports of Gold and Silver (Coin and Bullion) of California Ports,  
1870-1913, for fiscal year ending June 30.

## San Francisco.

Year	Gold		Silver		Total imports	Total exports
	Imports	Exports	Imports	Exports		
1870	\$743,272	\$9,489,281	\$5,108,282	\$12,495,262	\$5,851,554	\$21,984,543
1871	839,480	5,218,056	3,567,132	5,396,246	4,406,612	10,614,302
1872	4,024,103	12,650,072	2,084,128	5,241,937	6,108,231	17,892,009
1873	2,622,397	11,419,424	4,120,416	5,841,463	6,742,813	17,260,887
1874	1,107,646	4,644,587	4,405,213	7,333,110	5,512,859	11,977,697
1875	1,536,377	1,042,354	3,483,863	6,222,099	5,020,240	7,264,453
1876	1,497,543	773,354	4,152,810	7,716,713	5,650,353	8,490,067
1877	1,165,462	1,804,703	5,533,952	16,323,843	6,699,414	18,128,546
1878	2,461,568	979,085	3,465,135	16,952,302	5,926,703	17,571,387
1879	1,041,789	571,120	4,893,346	7,735,811	5,935,135	8,306,931
1880	1,540,965	488,753	4,502,601	7,511,220	6,043,566	7,999,973
1881	2,278,330	677,489	4,446,256	6,202,923	6,724,586	6,880,412
1882	6,389,944	600,438	4,252,817	4,641,837	10,642,761	5,242,275
1883	5,181,343	559,346	4,069,905	7,189,264	9,251,248	7,748,610
1884	4,985,213	708,375	3,718,082	10,840,447	8,703,295	11,548,822
1885	1,916,568	1,145,747	4,002,454	17,165,290	5,919,022	18,311,037
1886	6,437,801	980,821	2,848,395	16,565,653	9,286,196	17,546,464
1887	2,402,193	1,288,960	3,602,675	16,313,852	6,094,868	17,602,812
1888	4,943,871	766,330	2,795,346	14,038,956	7,739,217	14,805,286
1889	3,862,226	799,563	3,084,454	18,100,182	6,946,680	18,899,745
1890	4,751,582	1,520,262	3,269,267	13,258,391	8,020,849	14,778,653
1891	6,358,074	1,646,118	3,634,455	5,609,371	9,992,529	7,255,489
1892	9,736,872	803,791	3,086,706	9,458,354	12,823,578	10,262,145
1893	5,508,193	1,110,013	2,661,819	13,870,229	8,170,012	14,980,242
1894	2,693,636	1,202,443	2,126,973	12,142,267	4,820,609	14,344,710
1895	1,858,878	708,293	1,971,768	13,344,012	3,830,646	14,052,305
1896	1,206,234	854,554	2,642,372	11,763,449	3,848,606	12,618,003
1897	9,647,628	1,083,945	2,611,694	9,459,133	12,259,322	10,543,078
1898	25,799,405	1,217,490	2,472,347	9,514,531	28,271,752	10,732,021
1899	32,124,013	1,774,717	2,551,666	4,889,974	34,675,679	6,664,691
1900	10,574,256	2,025,189	3,096,775	7,502,120	13,671,031	9,527,309
1901	24,911,109	364,758	3,738,814	7,927,900	28,649,923	8,292,658
1902	14,338,906	781,826	4,169,221	8,368,761	18,508,127	9,150,587
1903	9,263,674	3,114,023	2,679,547	6,392,414	11,943,221	9,506,437
1904	40,366,770	652,277	3,492,909	4,600,950	43,859,679	5,253,227
1905	15,590,871	5,905,700	3,003,796	6,622,002	18,594,667	12,527,702
1906	4,233,579	5,366,189	2,513,861	9,417,951	6,747,440	14,784,140
1907	14,504,917	22,391	3,414,584	2,410,717	17,919,501	2,433,108
1908	3,759,329	34,539	3,164,428	5,182,657	6,923,757	5,217,196
1909	3,588,424	3,033,975	2,652,954	6,886,849	6,241,378	9,920,824
1910	3,362,104	27,008,324	2,582,352	7,314,954	5,944,456	34,323,278
1911	8,111,108	20,690	1,579,109	9,262,759	9,690,217	9,283,449
1912	4,532,321	7,034,962	1,453,089	9,905,094	5,985,410	16,940,056
1913	3,914,975	113,108	1,808,461	11,753,927	5,723,436	11,867,035

Imports of gold and silver into San Diego and Los Angeles from 1900 to 1911:

Year	San Diego		Los Angeles	
	Gold	Silver	Gold	Silver
1900	\$62,319	\$948	\$50	
1901	67,392			
1902	46,690	948		
1903	14,233			\$172
1904	16,774	418		25
1905	32,565			
1906	9,695			*172
1907	4,915	996		
1908	10,553		25	
1909	29,066		50	
1910	26,638			
1911	11,481			
1912†				
1913†				

\*\$1,000 in silver exported. †Included under "All other Pacific districts."



TABLE

## Imports and Exports of Foreign and Domestic

(For fiscal year

Year.	San Francisco		Los Angeles	
	Imports	Exports	Imports	Exports
1880	\$35,221,751	\$32,358,929		
1881	37,943,695	35,096,856		
1882	41,001,636	53,476,356		
1883	45,702,530	44,959,420	\$80,671	\$4,800
1884	35,857,698	37,050,598	216,113	125,212
1885	35,040,350	38,115,624	187,348	252,673
1886	37,142,117	30,228,424	206,957	167,686
1887	40,707,708	32,711,043	341,082	152,630
1888	46,692,905	27,684,891	482,851	34,442
1889	48,425,760	37,673,376	451,628	724
1890	48,751,223	36,876,091	169,955	220
1891	50,943,299	40,168,771	315,226	
1892	47,135,684	40,737,044	398,517	42,535
1893	45,291,099	31,144,180	502,044	
1894	38,146,626	24,903,009	445,966	102,943
1895	36,269,637	24,873,148	657,671	6,696
1896	41,400,317	31,582,910	679,944	30,487
1897	34,375,945	39,647,606	504,028	7,499
1898	42,822,945	41,223,759	476,042	110,440
1899	35,746,577	30,214,904	769,472	4,090
1900	47,869,628	40,368,288	1,011,090	
1901	35,161,753	34,596,792	885,473	30
1902	35,102,981	38,183,755	676,615	80
1903	36,454,283	33,502,616	1,019,481	682
1904	37,542,978	32,547,181	1,292,560	503
1905	46,675,545	49,924,026	810,000	291
1906	44,433,271	39,915,269	827,059	12,105
1907	54,094,570	33,026,664	1,559,322	45,000
1908	48,251,476	28,000,069	1,538,199	187,247
1909	49,998,111	31,669,370	1,305,341	193,221
1910	49,350,643	31,180,760	1,942,647	135,911
1911	53,885,021	40,624,903	2,655,558	86,415
1912	59,235,471	49,249,734	3,225,618	161,735
1913	62,501,681	66,021,385	2,747,601	253,562

NOTE.—The customs district of San Francisco was established September 28, 1850; that of San Diego in 1879; Los Angeles (Wilmington) and Humboldt in 1883.

\*For the imports and exports, 1851-1879, see Report for 1912, pages 266-267.

## XLIV.

Merchandise From California Ports, 1880-1913.\*  
ending June 30.)

San Diego		Humboldt		Total	
Imports	Exports	Imports	Exports	Imports	Exports
\$107,537	\$64,883	-----	-----	\$35,329,288	\$32,423,812
160,203	372,034	-----	-----	38,103,898	35,468,890
678,892	531,078	-----	-----	41,680,528	54,007,434
284,588	198,548	-----	\$171,123	46,067,789	45,333,891
135,889	127,966	\$6,373	224,464	36,216,073	37,528,240
71,106	66,504	1,731	201,865	35,300,535	38,636,666
119,173	72,307	5,710	163,295	37,473,957	30,631,712
185,595	165,949	5,744	113,576	41,240,129	33,143,198
827,808	375,891	2,830	142,207	48,006,394	28,237,431
514,014	375,924	4,586	122,757	49,395,988	38,172,781
437,665	264,644	1,549	108,051	49,360,392	37,249,006
538,066	394,824	4,005	154,503	51,800,596	40,718,098
380,770	441,200	3,925	151,553	47,918,906	41,372,332
407,236	79,443	1,571	138,008	46,201,950	31,361,631
383,399	379,586	-----	106,750	38,975,991	25,492,288
346,155	45,225	2,110	106,594	37,275,573	25,031,663
324,465	196,419	1,460	102,440	42,406,186	31,912,256
222,063	199,540	1,183	162,027	35,103,219	40,016,672
198,477	491,139	1,181	146,725	43,498,645	41,972,063
397,115	1,425,861	2,006	195,678	36,915,170	31,840,533
559,585	2,739,174	1,528	253,616	49,441,831	43,361,078
511,661	963,014	-----	163,682	36,558,887	35,723,518
440,239	255,833	1,908	319,550	36,221,743	30,759,218
417,557	168,993	3,423	497,810	37,894,744	34,170,101
459,786	317,830	7,107	550,436	39,302,431	33,415,950
275,631	320,533	1,821	140,441	47,762,997	50,385,291
464,634	299,579	4,283	737,940	45,729,247	40,964,893
653,789	809,809	1,173	677,092	56,308,854	34,558,565
722,359	641,223	10,736	759,726	50,522,770	29,788,265
535,257	397,626	4,862	894,228	51,843,571	33,154,445
741,916	928,994	6,317	1,031,182	52,041,523	33,276,847
875,184	1,022,481	6,779	1,058,615	57,422,542	42,792,414
1,076,990	1,092,159	7,622	1,231,441	63,545,701	51,735,069
1,022,904	1,137,116	8,330	1,028,046	66,280,516	68,440,109

TABLE XLV.

Grand Total Value of All Assessed Property in California.\*  
(From the reports of the State Controller's Department.)

Counties	1910	1911	1912	1913
Alameda	\$199,424,502	\$206,308,270	\$243,043,586	\$256,363,895
Alpine	509,180	535,819	539,905	546,189
Amador	5,877,174	6,187,293	6,081,630	6,154,014
Butte	22,832,012	23,906,913	25,469,997	25,135,048
Calaveras	6,540,979	6,657,802	6,607,594	7,920,748
Colusa	13,373,570	13,626,337	14,685,281	15,485,375
Contra Costa	35,399,378	39,658,989	42,631,665	47,731,341
Del Norte	4,365,256	4,813,887	4,880,765	5,079,461
El Dorado	6,142,693	6,528,442	6,785,170	6,954,117
Fresno	65,263,906	70,616,735	78,998,660	92,261,816
Glenn	14,088,244	15,888,617	16,980,132	17,261,076
Humboldt	29,149,177	29,716,743	34,958,314	34,164,968
Imperial	12,148,180	16,034,094	17,802,655	21,554,632
Inyo	4,907,480	5,763,912	6,268,862	9,505,223
Kern	52,350,546	65,843,625	73,253,382	80,529,757
Kings	13,160,692	14,283,622	15,356,486	16,021,104
Lake	3,646,189	3,662,007	4,824,106	4,850,106
Lassen	7,272,217	6,990,498	7,431,405	8,338,937
Los Angeles	530,837,659	607,182,762	726,110,668	804,111,796
Madera	10,622,886	11,125,904	14,388,045	14,848,773
Marin	19,709,273	20,285,223	21,003,985	22,020,030
Mariposa	2,491,892	3,480,405	3,567,315	3,608,137
Mendocino	15,699,059	15,617,974	16,334,097	18,147,700
Merced	20,961,031	22,251,637	25,001,574	25,366,168
Modoc	6,135,543	6,488,434	6,691,970	7,709,392
Mono	1,350,815	1,349,890	1,437,518	1,946,359
Monterey	28,369,676	31,103,836	31,769,895	32,702,889
Napa	16,688,744	17,210,355	17,419,458	18,053,729
Nevada	8,063,262	8,173,371	8,100,054	8,060,030
Orange	30,597,532	35,593,063	44,526,688	48,185,593
Placer	13,275,928	12,959,724	13,379,216	12,973,772
Plumas	6,777,118	7,346,851	8,960,958	8,429,018
Riverside	26,925,831	29,079,084	31,532,687	31,984,516
Sacramento	61,646,032	78,296,179	86,589,795	91,000,053
San Benito	7,879,250	8,365,538	8,184,027	8,453,146
San Bernardino	49,899,287	52,428,789	58,285,281	60,176,743
San Diego	44,197,729	53,735,870	59,140,997	73,685,084
San Francisco	515,421,025	545,398,908	605,141,664	624,182,130
San Joaquin	46,589,011	56,067,807	64,715,657	65,557,627
San Luis Obispo	18,285,413	19,995,045	20,207,375	20,662,282
San Mateo	27,573,681	30,346,078	30,739,041	31,692,918
Santa Barbara	31,141,395	31,911,978	32,722,992	33,380,447
Santa Clara	73,144,102	76,283,890	77,987,556	80,072,624
Santa Cruz	17,821,451	19,809,398	19,915,174	20,903,743
Shasta	16,072,141	16,006,099	15,642,300	15,181,888
Sierra	2,429,947	2,381,360	2,394,194	2,428,636
Siskiyou	17,615,841	18,516,606	21,583,145	22,137,012
Solano	22,822,851	23,718,764	24,941,957	25,406,702
Sonoma	36,814,714	39,131,641	40,110,583	40,781,686
Stanislaus	24,078,757	25,793,669	29,878,470	31,158,943
Sutter	8,163,960	8,583,856	9,184,568	12,963,082
Tehama	13,897,891	14,457,968	14,474,792	15,644,158
Trinity	2,884,208	3,021,775	3,052,887	3,088,170
Tulare	37,545,540	44,672,734	45,397,614	46,842,975
Tuolumne	8,485,327	8,805,098	9,885,945	9,946,773
Ventura	25,516,650	26,468,131	30,763,999	30,834,087
Yolo	20,338,955	20,926,947	22,085,786	24,051,914
Yuba	7,721,519	8,520,444	9,493,367	9,898,108
Totals	\$2,372,944,301	\$2,602,344,993	\$2,919,342,889	\$3,114,136,640

\*For the figures for 1880 and 1890, see Report for 1912, pages 268-269.

TABLE XLVI.

Grand Total Value of All Assessed Property in California, 1850-1913.

(From the reports of the State Controller's Department.)

Year	Total assessed value of property in California	Year	Total assessed value of property in California
1850	\$57,670,689	1882	\$608,555,960
1851	49,231,052	1883	765,729,430
1852	64,579,375	1884	821,078,767
1853	95,335,646	1885	859,512,384
1854	111,191,630	1886	817,445,729
1855	103,887,193	1887	956,740,805
1856	115,007,440	1888	1,107,952,700
1857	126,059,461	1889	1,111,550,979
1858	125,955,877	1890	1,101,137,290
1859	131,060,279	1891	1,242,300,434
1860	148,193,540	1892	1,275,678,322
1861	147,811,617	1893	1,216,380,398
1862	160,369,071	1894	1,204,347,291
1863	174,104,955	1895	1,132,512,903
1864	179,164,730	1896	1,264,973,043
1865	183,534,312	1897	1,089,373,316
1866	200,368,826	1898	1,132,230,221
1867	212,205,339	1899	1,193,961,761
1868	237,483,175	1900	1,217,648,863
1869	260,563,879	1901	1,241,359,555
1870	277,538,134	1902	1,290,238,964
1871	267,868,126	1903	1,597,944,240
1872	637,232,823	1904	1,545,698,785
1873	428,747,043	1905	1,624,023,172
1874	611,495,197	1906	1,594,231,577
1875	618,083,315	1907	1,879,950,692
1876	595,073,177	1908	1,990,256,945
1877	586,953,022	1909	2,439,566,433
1878	584,578,036	1910	2,372,944,301
1879	549,142,610	1911	2,602,344,933
1880	666,399,985	1912	2,919,342,889
1881	659,835,762	1913	3,114,136,640

## Summary.

	1912	1913
Total value of property as returned by auditor	\$2,771,971,280 00	\$2,963,022,898 00
Value of railroads as assessed by State Board of Equalization	147,371,609 00	151,113,742 00
Funded debt of counties	35,863,600 00	47,250,200 00
Floating debt with estimated interest of counties	254,881 00	96,340 52
Total county indebtedness	36,118,481 00	47,346,540 52



# CALIFORNIA BANKS.

State banks, June 4, 1913.....	548
National banks, August 9, 1913.....	255
Total number of banks.....	803

## Summary of Resources.

Total resources and liabilities of all reporting banks in California :

STATE BANKS.	
146 commercial banks.	Commercial banks ----- \$203,715,452 95
180 departmental banks.	Savings banks ----- 491,719,242 69
136 savings banks.	Trust companies ----- 10,436,646 16
80 branch banks.	Total ----- \$705,871,341 80
6 trust companies.	Total national banks----- 489,865,804 52
548	Grand total ----- \$1,195,737,146 32
	Postal savings fund----- 1,080,478 03

## The Banking Resources of California Counties.

The following figures prove the enormous financial resources of the State, and the remarkable totals of some counties with a comparative small population. The statements of the State and National banks, not being taken on the same day, the combined totals are, of necessity, not exact, but for all practical purposes they are close enough to prove the enormous wealth of California.

Compared with last year, there is an increase of 29 State banks and 24 National banks, making a total increase of 53 banks. The total resources of all banks show an increase of \$27,524,641, compared with 1912, and the savings banks an increase of \$616,236.

The total resources of the State banks on June 4, 1913, amounted to \$705,871,341.80, and the National banks, on August 9, 1913, \$489,865,-804.52, or a total of \$1,195,737,146.32.

In 1912 California was fifth in point of banking strength among the states, being exceeded only by such old states as New York, Pennsylvania, Massachusetts, and Illinois, in the order named. This holds good whether reference is made to capital and surplus, deposits, or total resources, according to the annual report of the Comptroller of the Currency for 1912. In savings bank deposits alone California outranks Illinois, and is exceeded only by New York, Massachusetts, and Pennsylvania. The average amount to each depositor in the different states varies considerably, Nevada taking the lead, but California being a close second, the figures being as follows:

Nevada -----	\$793 17	Southern states -----	\$230 85
California -----	681 16	Middle Western states-----	360 33
New England states-----	411 88	Western states -----	212 72
Eastern states -----	493 67	Pacific states -----	625 18

The average amount to each depositor for the whole United States in 1912 was \$444.72.

Among the counties, the two holding the largest amounts in 1912 are San Francisco, with \$504,600,000, and Los Angeles, with \$247,100,000, but other counties also make a striking display of strength, no less than ten having total resources amounting to upwards of ten millions.

Ten Counties With Resources of Over \$10,000,000 in 1912.

Counties	Amount	Counties	Amount
Alameda -----	\$81,600,000	Sonoma -----	\$17,400,000
Sacramento -----	37,600,000	Fresno -----	16,900,000
San Diego -----	24,300,000	San Bernardino -----	14,500,000
Santa Clara -----	23,300,000	Orange -----	10,900,000
San Joaquin -----	19,700,000	Santa Barbara -----	10,700,000

A complete list of all the National and State banks in California, classified by counties, and giving the date of incorporation of each bank, with the totals of the commercial, savings, and trust departments, and total resources of each and every bank is given in the report for 1912, pages 276-305.

TABLE XLVII.

Total Resources of California Banks by Counties in 1912.

(Compiled from the reports of the State Banking Department and the Comptroller of the Currency.)

Counties	State banks				National banks			Grand total National and State banks, 1912
	Number of banks	Commercial department	Savings department	Trust department	Total June 14, 1912	Number of banks	Total September 4, 1912	
Alameda	33	\$10,115,535 05	\$49,732,335 33	\$568,604 52	\$60,416,474 90	12	\$21,187,351 00	\$81,603,825 90
Alpine	---	---	---	---	---	---	---	---
Amador	1	998,325 36	---	---	998,325 36	---	---	998,325 36
Butte	7	2,349,929 43	846,897 11	---	3,196,826 54	3	3,009,129 00	6,205,955 54
Calaveras	1	331,854 86	372,017 23	---	703,872 09	---	---	703,872 09
Colusa	4	3,281,866 40	191,570 30	---	3,473,436 70	1	293,814 00	3,767,250 70
Contra Costa	12	2,498,667 40	2,758,791 96	---	5,257,459 36	5	2,116,734 00	7,374,193 36
Del Norte	2	315,144 58	34,769 22	---	349,913 80	---	---	349,913 80
El Dorado	1	551,126 06	---	---	551,126 06	---	---	551,126 06
Fresno	9	1,972,700 26	2,694,853 26	---	4,667,553 52	17	12,252,587 00	16,920,140 52
Glenn	4	1,878,527 40	169,481 68	---	2,048,009 08	1	417,699 00	2,465,708 08
Humboldt	10	3,533,265 33	3,070,493 33	---	6,603,758 66	2	1,947,174 00	8,550,932 66
Imperial	3	363,530 55	37,056 82	---	400,587 37	7	1,950,691 00	2,351,278 37
Inyo	2	863,083 13	35,275 73	---	898,358 86	---	---	898,358 86
Kern	7	4,414,138 20	702,356 88	---	5,116,515 08	4	2,857,824 00	7,974,339 08
Kings	5	1,129,018 31	495,766 35	---	1,624,784 66	5	3,134,319 00	4,759,103 66
Lake	2	512,197 08	---	---	512,197 08	---	---	512,197 08
Lassen	1	466,023 16	---	---	466,023 16	---	---	466,023 16
Los Angeles	68	29,406,670 91	104,954,977 05	4,129,801 07	138,491,449 03	56	108,618,807 00	247,110,256 03
Madera	1	---	129,417 91	---	129,417 91	---	837,391 00	966,808 91
Marin	6	783,307 96	1,658,016 33	---	2,441,324 29	1	503,152 00	2,944,476 29
Mariposa	---	---	---	---	---	---	---	---
Mendocino	8	1,754,870 29	382,649 53	---	2,137,519 82	1	534,664 00	2,672,183 82
Merced	5	1,394,346 40	2,758,023 21	---	4,152,369 61	2	1,017,009 00	5,169,378 61
Modoc	3	525,263 19	---	---	525,263 19	1	474,629 00	999,892 19
Mono	---	---	---	---	---	---	---	---
Monterey	8	2,621,673 84	2,210,333 25	---	4,832,007 09	2	1,362,886 00	6,194,893 09
Napa	5	1,807,600 70	1,404,827 17	---	3,212,427 87	3	1,437,783 00	4,650,210 87
Nevada	2	914,842 62	1,419,698 97	---	2,334,541 59	---	---	2,334,541 59
Orange	12	770,588 15	2,178,120 92	201,570 13	3,150,279 20	12	7,840,683 00	10,990,962 20
Placer	7	1,176,085 27	507,568 92	---	1,683,654 19	1	137,084 00	1,820,738 19
Plumas	2	169,652 06	231,366 20	---	401,018 26	---	---	401,018 26
Riverside	12	1,152,448 75	2,480,583 88	---	3,633,032 63	7	6,123,629 00	9,756,661 63
Sacramento	12	1,820,783 09	14,266,515 67	206,228 97	16,293,527 73	4	21,393,466 00	37,686,993 73

San Benito	3	1,239,394 55	1,315,738 18	-----	2,555,132 73	1	497,053 00	3,052,185 73
San Bernardino	11	1,442,872 83	3,702,497 14	-----	5,145,369 97	12	9,398,483 00	14,543,852 97
San Diego	15	4,729,397 16	8,284,585 79	-----	13,013,982 95	8	11,358,410 00	24,372,422 95
San Francisco	32	63,037,459 89	193,892,502 30	6,907,339 20	263,837,301 39	9	240,847,983 00	504,685,284 39
San Joaquin	12	7,799,430 66	10,202,355 32	-----	18,001,785 98	2	1,797,765 00	19,799,550 98
San Luis Obispo	5	2,933,898 37	996,927 44	-----	3,980,825 81	2	749,138 00	4,739,963 81
San Mateo	7	700,279 35	1,846,502 01	-----	2,546,781 36	2	1,106,527 00	3,653,308 36
Santa Barbara	10	3,964,923 35	4,051,846 29	-----	8,016,769 64	3	2,684,002 00	10,700,771 64
Santa Clara	18	7,451,356 26	10,875,259 62	-----	18,326,615 88	4	5,055,840 00	23,382,456 88
Santa Cruz	7	998,925 99	5,129,699 45	-----	6,128,625 44	3	2,544,193 00	8,672,818 44
Shasta	3	125,799 15	722,716 28	-----	848,515 43	2	1,215,879 00	2,064,394 43
Sierra	1	70,194 13	-----	-----	70,194 13	-----	-----	70,194 13
Siskiyou	7	1,726,288 87	197,402 56	-----	1,923,690 93	2	816,908 00	2,740,638 93
Solano	8	2,998,247 79	1,215,651 95	-----	4,213,902 74	4	1,637,745 00	5,851,647 74
Sonoma	17	5,360,119 82	5,558,854 19	-----	10,916,974 01	6	6,560,292 00	17,477,196 01
Stanislaus	12	3,176,401 05	2,429,082 68	-----	5,605,483 73	4	2,259,887 00	7,865,370 73
Sutter	2	280,955 83	201,056 55	-----	482,012 48	-----	-----	482,012 48
Tehama	2	2,300,052 58	-----	-----	2,300,052 58	1	359,710 00	2,659,762 58
Trinity	1	151,716 32	42,415 69	-----	194,132 01	-----	-----	194,132 01
Tulare	7	756,163 38	1,249,814 05	-----	2,005,977 43	11	6,823,704 00	8,829,681 43
Tuolumne	1	-----	517,608 26	-----	517,608 26	1	976,417 00	1,494,025 26
Ventura	9	1,999,142 69	1,589,191 54	-----	3,588,334 23	4	4,219,399 00	7,807,733 23
Yolo	6	3,151,837 92	2,918,359 61	-----	6,070,197 53	-----	-----	6,996,392 53
Yuba	4	3,087,990 56	1,846,108 99	-----	4,934,099 55	2	856,135 00	4,934,099 55
Totals	*519	\$199,228,081 33	\$455,756,885 08	\$12,013,543 89	\$666,998,510 30	231	\$501,213,995 00	\$1,168,212,505 30

## Postal Savings Banks, \$464,241.66.

\*455 banks and 64 branches.

NOTE.—Three counties, Alpine, Mariposa, and Mono, had no banks.



## CALIFORNIA STATE BOARD OF AGRICULTURE.

## Bank Clearings of Eight Cities, 1905-1913.

SAN FRANCISCO.		SACRAMENTO.	
Year	Clearings	Year	Clearings
1905	\$1,834,549,788 51	1905	
1906	1,998,400,779 46	1906	
1907	2,133,883,625 80	1907	
1908	1,757,141,850 08	1908	\$44,628,760 60
1909	1,979,872,570 06	1909	54,562,493 31
1910	2,323,772,870 99	1910	69,447,281 94
1911	2,427,075,543 46	1911	78,376,700 21
1912	2,677,561,952 27	1912	92,747,060 69
1913	2,624,428,824 74	1913	108,268,688 89

LOS ANGELES.		FRESNO.	
Year	Clearings	Year	Clearings
1905	\$478,985,298 40	1905	
1906	578,635,516 82	1906	
1907	581,803,982 00	1907*	
1908	505,588,756 02	1908	
1909	673,165,728 81	1909	\$29,324,258 30
1910	811,387,487 47	1910	37,930,473 07
1911	922,914,526 09	1911	39,782,776 05
1912	1,168,941,700 02	1912	51,400,594 73
1913	1,211,168,989 00	1913	57,384,801 12

OAKLAND.		STOCKTON.	
Year	Clearings	Year	Clearings
1905		1905	
1906*		1906	
1907	\$140,416,038 98	1907*	
1908	76,847,792 99	1908	\$24,415,671 88
1909	96,527,088 09	1909	28,301,936 22
1910	157,380,388 13	1910	32,277,582 57
1911	172,484,561 60	1911	40,350,889 35
1912	192,570,346 29	1912	44,891,763 06
1913	188,730,096 95	1913	45,925,831 09

SAN DIEGO.		SAN JOSE.	
Year	Clearings	Year	Clearings
1905*		1905*	
1906	\$36,218,236 32	1906	\$10,969,524 94
1907	49,194,870 02	1907	15,504,767 53
1908	37,771,349 22	1908	23,246,315 12
1909	52,094,521 82	1909	25,320,894 50
1910	67,173,976 93	1910	27,828,978 64
1911	86,724,333 47	1911	29,877,754 37
1912	131,894,087 37	1912	35,882,473 55
1913	134,155,368 77	1913	35,730,898 59

\*Clearing house only organized in 1912, so the figures for the twelve months are not available.

## PUBLIC UTILITIES.

The total assets of utilities during the year ending June 30, 1912, exclusive of steam railroads, amounted to \$1,674,431,051.44. This amount is composed of the following items:

30 street railroad companies	\$454,892,593 43
238 water companies	237,021,577 40
113 gas and electric companies	652,815,527 73
81 telegraph and telephone companies	313,885,259 15
37 wharfinger and warehouse companies	15,816,093 73

The above figures show the enormous amount of capital invested in the public utilities in the State of California.

## RAILROADS IN CALIFORNIA.

June 30, 1912.

(Compiled from the Reports of the State Railroad Commission.)

Name of company	General office	Average track mileage operated	Total railway capital	Amount per mile of line
Amador Central .....	Martell .....	13.66	\$700,000 00	\$58,333 00
Arcata and Mad River .....	Arcata .....	28.00	187,740 00	8,834 82
Atchison, Topeka and Santa Fe .....	Los Angeles .....	2,096.44	630,306,575 00	59,152 00
Bay Point and Clayton .....	San Francisco ..	9.52	150,000 00	17,008 00
Boca and Loyalton .....	San Francisco ..	63.53	1,633,000 00	31,253 00
Bucksport and Elk River .....	Eureka .....	9.64	500,000 00	57,870 00
Butte County .....	Chico .....	33.24	41,800 00	1,327 00
California Western Railroad and Navigation Company ..	San Francisco ..	52.15	1,530,000 00	34,607 00
Camino, Placerville and Lake Tahoe .....	Camino .....	8.94	200,000 00	24,844 00
Cement, Tolenas and Tide-water Railway .....	San Francisco ..	5.5	256,000 00	85,333 00
Colusa and Lake .....	Colusa .....	26.00	150,500 00	6,841 00
Diamond and Caldor .....	Oakland .....	34.69	472,000 00	14,010 00
Eureka and Freshwater .....	San Francisco ..	.95	25,000 00	26,316 00
Hanford and Summit Lake .....	San Francisco ..	43.62	50,000 00	1,179 00
Holton Interurban .....	Redlands .....	29.87	300,000 00	28,653 00
Iron Mountain .....	San Francisco ..	14.00	100,000 00	9,090 00
Klamath Lake .....	Tacoma, Wash. ...	17.97	1,169,590 00	48,190 00
Lake Tahoe Railroad and Transportation Company ..	Tahoe .....	17.33	1,000,000 00	60,314 00
Los Angeles and San Diego Beach Railroad .....	San Diego .....	20.31	711,000 00	40,283 00
McCloud River .....	San Francisco ..	94.89	2,400,000 00	30,288 00
Mill Valley and Mt. Tamalpais Scenic Railway .....	Mill Valley .....	11.62	330,500 00	31,120 00
Nevada-California-Oregon ..	Reno, Nev. ....	245.36	3,615,000 00	15,152 00
Nevada County Narrow Gauge Railway .....	Grass Valley .....	27.85	421,200 00	20,547 00
Northwestern Pacific .....	San Francisco ..	523.63	57,693,000 00	125,896 00
Ocean Shore .....	San Francisco ..	65.88	4,796,300 00	85,770 00
Pacific Coast Railroad Co. ....	Seattle, Wash. ....	121.22	2,740,400 00	26,593 00
Pajaro Valley Consolidated ..	San Francisco ..	50.33	1,100,000 00	26,474 00
Porterville Northeastern .....	San Francisco ..	18.94	600,000 00	37,832 00
Quincy Western .....	Quincy .....	6.00	63,831,000 00	10,633 00
Richmond Belt .....	San Francisco ..	8.27	500,000 00	83,333 00
Sacramento Valley and Eastern .....	Winthrop .....	15.00	500,000 00	33,333 00
San Diego and Arizona .....	San Diego .....	28.74	2,000,000 00	42,753 00
San Diego and Cuyamaca .....	San Diego .....	30.04	1,500,000 00	59,241 00
San Diego and Southeastern ..	San Diego .....	93.57	1,650,000 00	22,437 00
San Diego Southern .....	San Diego .....	63.53	1,212,000 00	25,135 00
San Pedro Los Angeles and Salt Lake .....	Los Angeles .....	507.13	†80,155,000 00	79,187 00
Santa Maria Valley .....	Santa Maria .....	22.91	500,000 00	28,137 00
Sierra Railway Company of California .....	Jamestown .....	84.24	5,346,000 00	70,676 00
Sierra and Mohawk .....	Reno, Nev. ....	38.55	250,000 00	6,853 00
Southern Pacific Company .....	San Francisco ..	6,240.33	413,263,140 00	8,046,400 00
South San Francisco Belt .....	San Francisco ..	3.00	50,000 00	16,667 00
Stockton Terminal and Eastern .....	Stockton .....	17.04	413,900 00	23,787 00
Sugar Pine .....	Sonora .....	24.73	1,180,000 00	79,514 00
Sunset .....	Los Angeles .....	93.70	1,606,000 00	32,210 00
Tonopah and Tidewater .....	Oakland .....	153.13	4,285,344 00	24,762 00
Ventura County Railway* .....	Oxnard .....	27.15	245,000 00	11,578 00
Western Pacific .....	San Francisco ..	493.50	150,000,000 00	160,078 00
Yosemite Valley .....	Merced .....	89.70	10,000,000 00	126,310 00
Yreka Railroad .....	San Francisco ..	7.90	100,000 00	13,333 00

\*Name changed from Bakersfield and Ventura Railway.

## RAILROADS LEASED OR OPERATED BY OTHER COMPANIES.

Name of company	Miles	Capital	Amount per mile of line
Alameda and San Joaquin.....	42.10	\$500,000 00	\$13,850 41
Arizona and California.....	190.31	7,647,035 00	40,182 00
California, Arizona and Santa Fe.....	458.08	73,466,695 00	88,083 00
California Eastern.....	29.94	1,404,935 00	31,075 00
California North Eastern.....	24.84	5,400,000 00	62,718 00
California North Western.....	51.74	2,551,000 00	63,679 00
Central California.....	16.24	3,000,000 00	184,730 00
Central Pacific.....	1,139.04	285,539,397 00	132,785 00
Chico and Northern.....	30.57	1,000,000 00	32,712 00
Coast Line Railroad Company.....	11.91	1,700,000 00	142,737 00
Eel River.....	30.60	942,000 00	37,680 00
Eureka and Klamath River.....	39.29	500,000 00	12,726 00
Fort Bragg and Southeastern.....	23.85	100,000 00	4,193 00
Fresno County.....	6.24	85,000 00	13,622 00
Fullerton and Richfield.....	5.1	5,000 00	980 00
Inter-California.....	44.41	3,350,000 00	34,871 00
Kings River.....	10.70	11,000 00	1,028 00
Layton and Western.....	17.57	449,000 00	25,554 00
Los Angeles Terminal.....	60.35	4,500,000 00	87,720 00
Modesto and Empire Traction Company.....	5.00	50,000 00	10,000 00
Nevada-California.....	360.69	8,500,000 00	17,945 00
National City and Otay River.....	32.76	1,151,000 00	42,788 00
North Pacific Coast.....	113.90	2,998,000 00	33,127 00
North Shore.....	103.25	9,498,000 00	104,950 00
Oakdale Western.....	6.30	87,500 00	13,889 00
Oregon Eastern.....	67.45	5,000,000 00	33,926 00
Oregon and Eureka.....	16.68	125,000 00	11,574 00
Pacific Lumber and Wood Company.....	10.00	100,000 00	10,000 00
Perris and Lakeview.....	8.02	16,000 00	1,995 00
Placerville and Lake Tahoe.....	8.3	1,050,000 00	126,505 00
Randsburg Railroad Company.....	29.66	840,000 00	29,330 00
Sacramento Southern.....	7.91	2,500,000 00	289,687 00
San Diego, Pacific Beach and La Jolla.....	15.03	275,000 00	20,310 00
San Francisco and North Western.....	61.78	762,000 00	14,211 00
San Francisco and North Pacific.....	165.52	9,880,000 00	59,690 00
San Francisco and San Joaquin Valley.....	463.57	8,465,200 00	22,581 00
San Francisco and Napa.....	8.76	55,000 00	5,131 00
San Juan Pacific.....	7.5	1,820,000 00	242,667 00
San Joaquin and Eastern.....	55.3	2,000,000 00	36,166 00
Sierra Valley Railroad.....	38.55	1,344,959 00	36,868 00
Southern California.....	478.07	25,108,740 00	52,521 00
Southern Pacific Railroad.....	3,109.31	310,805,500 00	99,959 00
Southern Pacific Coast Company.....	96.72	11,500,000 00	118,900 00

## ELECTRIC RAILWAYS OF CALIFORNIA.

Name of company	Average track mileage operated	Total railway capital	Amount per mile of line
Bakersfield and Kern Electric Railway----	10.44	\$360,000 00	\$34,482 00
California Street Cable-----	11.00	2,000,000 00	181,818 00
Central California Traction Company----	78.00	5,500,000 00	70,056 00
Fresno Traction -----	18.24	5,750,000 00	315,241 00
Humboldt Transit -----	13.00	703,000 00	54,076 00
Los Angeles Railway Corporation-----	354.84	40,000,000 00	112,726 00
Monterey and Del Monte Heights-----	3.00	50,300 00	16,767 00
Monterey and Pacific Grove-----	5.05	588,000 00	106,909 00
Nevada County Traction Company-----	5.07	188,000 00	32,982 00
Northern Electric -----	133.68	34,505,500 00	258,120 00
Oakland and Antioch-----	20.23	4,858,625 00	240,169 00
Ontario and San Antonio Heights-----	15.00	1,300,000 00	84,120 00
Pacific Electric Railway Company-----	912.00	152,640,000 00	167,352 00
Pacific Gas and Electric Railway Company (street railway department)-----	38.32	2	2
Peninsular Railway Company-----	191.33	12,500,000 00	136,866 00
Petaluma and Santa Rosa-----	37.33	1,972,000 00	52,826 00
Point Loma -----	8.45	196,000 00	23,931 00
Presidio and Ferris-----	9.00	1,085,000 00	119,902 00
Sacramento Terminal Company-----	36.91	400,000 00	57,887 00
San Diego -----	60.51	3,025,000 00	79,479 00
San Francisco, Napa and Calistoga-----	35.00	3,210,000 00	90,384 00
San Francisco-Oakland Terminal-----	245.16	48,307,000 00	334,188 00
San Jose -----	41.89	8,000,000 00	190,976 00
San Jose and Santa Clara County-----	4		
Santa Barbara Consolidated-----	5.96	185,500 00	33,007 00
South San Francisco Railroad and Power Company-----	4.02	13,500 00	3,358 00
Stockton Electric -----	12.82	800,000 00	62,402 00
Tidewater Southern -----	6		
Union Traction -----	14.67	1,389,000 00	94,683 00
United Railroads of San Francisco-----	250.00	85,839,000 00	388,963 00
Visalia Electric Railroad-----	28.19	24,000 00	851 00
Watsonville Railway and Navigation Co.	5.3	203,000 00	40,600 00

<sup>1</sup>Also 26.19 miles leased to Southern Pacific Company.

<sup>2</sup>Capital not segregated to railroad.

<sup>3</sup>Road operated by the Northern Electric Company.

<sup>4</sup>Sold to San Jose Railroads, March 15, 1912.

<sup>5</sup>In course of construction.

## SUMMARY.

Total miles of single track-----	1,648
Total miles of second track-----	589
Miles of sidings and turnouts-----	186
Total -----	2,423



## ELECTRIC RAILWAYS LEASED, ABSORBED, OR OPERATED BY OTHER COMPANIES.

Name of company	Miles	Capital	Amount per mile of line
California Railway .....	8.03	\$475,000 00	\$77,361 00
East Shore and Suburban .....	18.79	1,464,000 00	85,363 00
Fresno City .....	8.58	628,000 00	73,193 00
Los Angeles Interurban .....	357.64	20,000,000 00	55,922 00
Los Angeles Pacific .....	190.00	35,201,000 00	185,083 00
Los Angeles and Redondo .....	80.40	9,447,000 00	105,671 00
Oakland Traction Company .....	174.93	28,980,000 00	285,591 00
Sacramento Terminal .....	6.91	400,000 00	57,887 00
Sacramento Short Line .....	7.30		*
Redlands Central .....	3.10	355,000 00	108,064 00
Riverside and Arlington .....	12.73	281,200 00	22,089 00
San Bernardino Valley Traction Co. ....	40.46	2,035,500 00	50,308 00
San Bernardino Interurban .....	3.64	48,000 00	13,186 00
San Francisco, Oakland and San Jose Consolidated .....	26.68	14,250,000 00	1,199,494 00
San Francisco, Vallejo and Napa .....	35.44	2,761,266 00	81,597 00
San Francisco Railway and Power Co. ....	4.02	13,500 00	3,358 00

\*Operated and included in San Francisco-Oakland Terminal Railways.

## INSURANCE.

The total number of insurance companies and associations, except fraternal insurance societies, authorized to transact business in the State of California during the year ending December 31, 1912, was 306, classified as follows:

## California Companies.

Stock, Fire and Marine .....	5
County Mutual Fire .....	21
Legal Reserve Life .....	7
Assessment Life, Health and Accident .....	2
Miscellaneous Stock .....	13
Interinsurance Associations .....	5
Total (California companies) .....	53

## Companies of Other States.

Stock, Fire and Marine .....	99
Mutual Fire and Marine .....	7
Legal Reserve Life .....	38
Assessment Life, Health and Accident .....	5
Stock miscellaneous .....	52
Interinsurance Associations .....	5
Total (other states) .....	206

## Companies of Foreign Countries.

Stock, Fire and Marine .....	42
Stock miscellaneous .....	5
Total (foreign) .....	47
Grand total .....	306

The above shows an increase of 48 in the total number of insurance companies authorized to transact business in California during 1912, as compared with the preceding year.

## COMPARATIVE SUMMARY FOR THE YEARS 1911-1912.

## California Companies.

	1911	1912
Capital stock (paid up)-----	\$9,051,000 00	\$11,228,665 00
Admitted assets -----	44,749,673 06	51,427,084 76
Liabilities (except capital)-----	29,340,061 19	33,144,613 91
Net surplus (except capital)-----	6,358,611 87	7,053,805 85

## Companies of Other States.

	1911	1912
Capital stock (paid up)-----	\$102,032,354 00	\$116,435,355 16
Admitted assets -----	4,261,844,110 25	4,534,295,303 20
Liabilities (except capital)-----	3,798,840,190 71	4,127,897,782 40
Net surplus (except capital)-----	360,063,809 09	289,962,165 64

## Companies of Foreign Countries.

	1911	1912
Capital deposit -----	\$12,561,900 00	\$13,608,000 00
Admitted assets -----	111,585,916 91	123,901,364 54
Liabilities (except capital)-----	69,618,970 98	78,069,214 84
Net surplus (except capital)-----	29,405,045 93	32,224,149 70

## Fire Insurance.

The following summary shows the premiums received and the losses paid in California during the past twelve years:

Year	Premiums received	Losses paid
1901 -----	\$7,522,401 88	\$2,344,581 05
1902 -----	7,339,984 39	2,655,301 58
1903 -----	8,288,354 90	4,342,785 60
1904 -----	10,104,033 49	3,830,252 77
1905 -----	10,353,808 04	3,883,540 20
1906 -----	13,368,350 87	*146,306,376 92
1907 -----	16,242,105 95	7,008,035 97
1908 -----	14,442,623 40	5,345,988 35
1909 -----	15,094,210 60	5,795,279 57
1910 -----	15,900,524 11	6,013,426 48
1911 -----	16,154,903 01	4,604,219 19
1912 -----	16,258,040 76	5,569,008 97

\*Losses owing to the great San Francisco fire.

## Marine Insurance.

There were 34 companies transacting marine insurance business during 1912. There was an increase in the amount written in 1912 over that written in 1911 of \$60,383,909; an increased amount of premiums was received of \$346,583, and a decrease of \$595,987 in the losses paid.

## MARINE INSURANCE.

Year	Premiums received	Losses paid
1905 -----	\$1,581,196 83	\$1,463,939 42
1906 -----	1,628,982 01	1,394,987 73
1907 -----	1,885,535 22	1,276,704 91
1908 -----	1,864,861 07	994,487 39
1909 -----	1,952,269 99	1,368,892 35
1910 -----	2,180,135 74	1,689,065 81
1911 -----	2,321,318 35	1,375,225 59
1912 -----	2,667,902 00	779,238 00

## Life Insurance.

The number of companies transacting business in the State in 1912 was 45. Of these 7 were organized under the laws of California and 38 under the laws of other states. The amount written in 1912 was \$85,162,790, as compared with \$62,960,670 in 1911, or an increase of \$22,202,120. The number of policies taken out was 27,298 in 1911 and 36,016 in 1912, being an increase of 8,718 policies.

Year	Premiums received	Losses and endorsements paid
1901 -----	\$6,242,443 41	\$2,975,847 01
1902 -----	7,480,488 89	2,887,479 63
1903 -----	8,866,405 31	2,881,932 78
1904 -----	10,166,656 76	3,121,817 19
1905 -----	10,550,503 86	3,400,490 37
1906 -----	10,643,952 00	4,081,162 73
1907 -----	11,017,207 20	4,995,417 25
1908 -----	11,658,903 26	4,343,935 04
1909 -----	12,557,869 31	4,404,398 96
1910 -----	13,501,003 98	4,771,862 70
1911 -----	14,811,167 84	5,719,644 03
1912 -----	16,718,297 79	6,449,765 86

## Industrial Life Insurance.

The amount written in 1912 was \$15,500,964, as compared with \$13,816,386 in 1911, or an increase of \$1,684,578.

Year	Premiums received	Losses paid
1905 -----	\$725,705 69	\$175,854 95
1906 -----	810,355 30	213,436 29
1907 -----	845,188 77	212,701 78
1908 -----	920,464 73	225,829 95
1909 -----	1,058,790 00	275,574 95
1910 -----	1,285,416 24	305,356 64
1911 -----	1,466,604 96	354,320 28
1912 -----	1,724,786 67	420,678 02

## Fraternal Societies.

A total of 53 fraternal societies is now licensed to transact business in this State.

	Number	Amount
Certificates in force December 31, 1912-----	163,053	\$231,930,723 00
Received from members in California, 1912-----	-----	3,035,240 00
Losses or claims paid in California, 1912-----	-----	2,086,902 00

## APPENDIX A.

## CALIFORNIA STATE BOARD OF AGRICULTURE

State Board of Agriculture and Agricultural Experiment  
Stations in the United States.

## STALLION REGISTRATION BOARDS.

## State Boards of Agriculture and Experiment Stations.

There are 43 official bodies or organizations in the United States charged with the promotion of agriculture. Of these 20 are "State Boards of Agriculture"; 19 are governed by a "Commissioner of Agriculture"; 3, Georgia, Minnesota and California, have a "State Agricultural Society," and Pennsylvania a "Secretary of Agriculture." Of the above, California is the only one with a dual title, that of the "State Agricultural Society" and "State Board of Agriculture." The former title is misleading, as there are no longer any members, membership being discontinued in 1905. There are also 60 Agricultural Experiment Stations, conducted, in most cases, under the authority of the state universities.

The first Agricultural Experiment Stations, now sixty in number, were formed some forty years ago, one of the pioneers being that of the State University at Berkeley in 1873. They were subsequently reorganized under the Hatch Act of 1887, which largely extended the number of these most valuable institutions.

## Stallion Registration Boards.

The first law regulating the registration of stallions was passed by the state of Wisconsin in 1906, since which time seventeen other states have taken this important step to improve the breed of their horses.

## California State Agricultural Society.

(Incorporated May 13, 1854. State Board of Agriculture appointed March 12, 1863.)

The California State Agricultural Society was one of the first to be organized, and ranks as fifth in the United States.

The first State Fair was held in the Music Hall at San Francisco from the 4th to about the 12th of October, 1854, and the stock show was held on the Pioneer race course. A fair has been held annually ever since—in 1855 at Sacramento, 1856 at San Jose, 1857 at Stockton, 1858 at Marysville, and since then at Sacramento.

The amount distributed in premiums and purses for the promotion of agriculture, the encouragement of live stock breeding and of other California industries during this period is upward of \$1,580,000.



## REPORTS OF THE CALIFORNIA STATE AGRICULTURAL SOCIETY.

(State Board of Agriculture.)

Year	Year
1854 not printed	1886
1855 not printed	1887
1856 pamphlet form	1888
1857	1889
1858	1890
*1859	*1891
1860	1892
1861	1893
1862 not printed	1894
1863	1895
1864-65	1896
1866-67 pamphlet, 16 pages	1897 not printed
1868-69	1898 not printed
1870-71	1899
1872	*1900
1873	*1901
1874	1902 not printed
1875	1903 not printed
1876	1904
*1877	*1905
1878	*1906
*1879	*1907
*1880	*1908
*1881	1909
1882	*1910
1883	*1911
1884	1912
1885	*1913

Down to 1904, inclusive, the volumes were entitled "Transactions of the California State Agricultural Society"; from 1905 to 1910, "Reports of the California State Agricultural Society"; in 1911 a new statistical series was commenced as the "Reports of the California State Board of Agriculture."

\*A few copies of these volumes can still be obtained on application to the Secretary, the remainder being out of print.

NOTE.—From 1864-65 to 1870-71, inclusive, the reports were biennial.

## CALIFORNIA STATE FAIRS, 1854-1914.

Year	Place	Date	Pre- miums	Races	Total	Presidents
1854	San Fran.	Oct. 4	\$4,660	\$	\$4,660	F. W. Macondry, San Fran.
1855	Sacramento	Sept. 25-Oct. 1	6,550		6,550	C. T. Hutchison, Sac'to.
1856	San Jose	Oct. 7-10	6,746		6,746	E. L. Beard, Alameda.
1857	Stockton	Sept. 29-Oct. 2	7,991		7,991	C. M. Weber,* Stockton.
1858	Marysville	Aug. 23-28	7,435		7,435	John C. Fall, Marysville.
1859	Sacramento	Sept. 13-23	8,139		8,139	C. T. Hutchinson, Sac'to.
1860	Sacramento	Sept. 19-26	8,827		8,827	T. G. Phelps, San Mateo.
1861	Sacramento	Sept. 16-21	7,231		7,231	Jerome C. Davis, Yolo Co.
1862	Sacramento	Aug. 31-Sept. 4			5,000	A. Haraszthy, Sonoma.
1863	Sacramento	Sept. 25-Oct. 3	4,894		4,894	Judge Isaac Davis, Yolo Co.
1864	Sacramento	Oct. 17-22	6,105		6,105	C. F. Reed, Grafton, Yolo Co.
1865	Sacramento	Sept. 18-23	10,658		10,658	C. F. Reed, Grafton, Yolo Co.
1866	Sacramento	Sept. 10-15	9,742		9,742	C. F. Reed, Grafton, Yolo Co.
1867	Sacramento	Sept. 9-14	9,954		9,954	C. F. Reed, Grafton, Yolo Co.
1868	Sacramento	Sept. 15-25			10,000	C. F. Reed, Grafton, Yolo Co.
1869	Sacramento	Sept. 6-11				C. F. Reed, Grafton, Yolo Co.
1870	Sacramento	Sept. 12-17			30,000	C. F. Reed, Grafton, Yolo Co.
1871	Sacramento	Sept. 18-23			40,000	C. F. Reed, Grafton, Yolo Co.
1872	Sacramento	Sept. 19-28			20,000	C. F. Reed, Grafton, Yolo Co.
1873	Sacramento	Sept. 15-20	8,925	14,200	23,125	R. S. Carey, Yolo.
1874	Sacramento	Sept. 21-28	9,619	15,950	25,569	R. S. Carey, Yolo.
1875	Sacramento	Sept. 15-26	9,214	13,330	22,544	R. S. Carey, Yolo.
1876	Sacramento	Sept. 18-23				R. S. Carey, Yolo.
1877	Sacramento	Sept. 17-22				Marion Biggs, Butte.
1878	Sacramento	Sept. 16-21	10,965	13,775	24,740	Marcus D. Boruck, San Fran.
1879	Sacramento	Sept. 8-13		12,260	12,260	Hugh M. Larue, Sacramento.
1880	Sacramento	Sept. 20-25	6,502	14,885	21,387	Hugh M. Larue, Sacramento.
1881	Sacramento	Sept. 19-24	6,603	12,525	19,128	J. M. McShafter, San Fran.
1882	Sacramento	Sept. 11-16	8,651	14,262	22,913	Hugh M. Larue, Sacramento.
1883	Sacramento	Sept. 10-15	8,915	14,005	22,920	P. A. Fingan, Alameda.
1884	Sacramento	Sept. 8-20	11,467	23,165	34,632	P. A. Fingan, Alameda.
1885	Sacramento	Sept. 10-19	13,612	25,145	38,757	Jesse D. Carr, Salinas.
1886	Sacramento	Sept. 9-18	13,370	22,900	36,270	Jesse D. Carr, Salinas.
1887	Sacramento	Sept. 15-24	14,538	23,470	38,008	L. U. Shippee, Stockton.
1888	Sacramento	Sept. 6-15	14,256	25,560	38,816	L. U. Shippee, Stockton.
1889	Sacramento	Sept. 12-21	17,056	30,860	47,916	Christopher Green, Sac'to.
1890	Sacramento	Sept. 11-20	15,761	27,016	42,777	Christopher Green, Sac'to.
1891	Sacramento	Sept. 8-19	17,628	30,081	47,709	Frederick Cox, Sacramento.
1892	Sacramento	Sept. 5-17	17,106	29,950	47,056	Frederick Cox, Sacramento.
1893	Sacramento	Sept. 4-16	13,244	32,715	45,959	John Boggs, Princeton, Colusa Co.
1894	Sacramento	Sept. 3-15	13,447	29,220	42,667	John Boggs, Princeton, Colusa Co.
1895	Sacramento	Sept. 2-14	11,416	32,880	44,296	C. M. Chase, San Francisco.
1896	Sacramento	Sept. 1-19	12,971	47,222	60,193	C. M. Chase, San Francisco.
1897	Sacramento	Sept. 6-18	20,252	35,247	55,499	C. M. Chase, San Francisco.
1898	Sacramento	Sept. 5-17	20,163	28,170	48,333	A. B. Spreckels, San Fran.
1899	Sacramento	Sept. 4-16	10,529	38,745	49,274	A. B. Spreckels, San Fran.
1900	Sacramento	Sept. 3-15	9,768	38,745	48,513	A. B. Spreckels, San Fran.
1901	Sacramento	Sept. 2-14	8,974	30,355	39,329	A. B. Spreckels, San Fran.
1902	Sacramento	Sept. 8-20	15,000	40,280	55,280	A. B. Spreckels, San Fran.
1903	Sacramento	Aug. 31-Sept. 12	15,000	31,435	46,435	Benjamin F. Rush, Suisun.
1904	Sacramento	Aug. 22-Sept. 3	15,000	28,597	43,597	Benjamin F. Rush, Suisun.
1905	Sacramento	Sept. 2-9	6,656	24,419	31,075	Benjamin F. Rush, Suisun.
1906	Sacramento	Aug. 25-Sept. 1	7,598	10,640	18,640	Benjamin F. Rush, Suisun.
1907	Sacramento	Sept. 2-14	11,153	14,914	26,067	Benjamin F. Rush, Suisun.
1908	Sacramento	Aug. 29-Sept. 5	11,277	13,410	24,687	H. A. Jastro, Bakersfield.
1909	Sacramento	Aug. 28-Sept. 4	14,183	14,665	28,848	H. A. Jastro, Bakersfield.
1910	Sacramento	Sept. 3-10	14,465	6,930	21,395	H. A. Jastro, Bakersfield.
1911	Sacramento	Aug. 26-Sept. 2	14,790	26,300	41,090	A. L. Scott, San Francisco.
1912	Sacramento	Sept. 14-21	20,600	17,000	37,000	A. L. Scott, San Francisco.
1913	Sacramento	Sept. 13-20	25,000	37,000	62,000	A. L. Scott, San Francisco.
1914	Sacramento	Sept. 12-19	18,609	37,000	55,609	A. L. Scott, San Francisco.

\*Resigned March 10th. Wm. Garrard appointed.

Many of the books and records of the Society were destroyed by a disastrous flood on the 9th of December, 1861, and 9th of January, 1862, caused by a break in the levee on the north side of Sacramento.

STATE BOARDS OF AGRICULTURE AND DEPARTMENTS OF AGRICULTURE  
IN THE UNITED STATES (43).

State	Description and location	Organized
Alabama -----	Commissioner of Agriculture, Montgomery-----	1888
Arkansas -----	Commissioner of Agriculture, Little Rock (Society)-----	1898
California -----	State Board of Agriculture-----	1854
Colorado -----	State Board of Agriculture, Fort Collins-----	1877
Connecticut -----	Commissioner of Agriculture, Hartford-----	1866
Delaware -----	State Board of Agriculture, Dover-----	1901
Florida -----	Commissioner of Agriculture, Tallahassee-----	1889
Georgia -----	Georgia State Agriculture Society, Experiment-----	1846
Georgia -----	Commissioner of Agriculture, Atlanta-----	1874
Idaho -----	Commissioner of Immigration, Labor and Sta- tistics, Boise-----	1900
Illinois -----	State Board of Agriculture, Springfield-----	1853
Indiana -----	State Board of Agriculture, Indianapolis-----	1851
Iowa -----	State Board of Agriculture, Des Moines-----	1900
Kansas -----	State Board of Agriculture, Topeka-----	1862
Kentucky -----	Commissioner of Agriculture, Frankfort-----	1892
Louisiana -----	Commissioner of Agriculture, Baton Rouge-----	1880
Maine -----	Commissioner of Agriculture, Augusta-----	1855
Massachusetts --	State Board of Agriculture, Boston-----	1852
Michigan -----	State Board of Agriculture, East Lansing-----	1881
Minnesota -----	State Agricultural Society, Hamline-----	1854
Mississippi -----	Commissioner of Agriculture, Jackson-----	1907
Missouri -----	State Board of Agriculture, Columbia-----	1865
Montana -----	Commissioner of Agriculture (Bureau of Agricul- ture, Labor, Industry and Publicity), Helena-----	1889
Nebraska -----	State Board of Agriculture, Lincoln-----	1858
Nevada -----	State Board of Agriculture, Carson City-----	-----
New Hampshire --	State Board of Agriculture, Concord-----	1870
New Jersey -----	State Board of Agriculture, Trenton-----	1873
New York -----	Commissioner of Agriculture, Albany-----	1893
North Carolina --	Commissioner of Agriculture, Raleigh-----	1877
North Dakota ---	Commissioner of Agriculture, Bismarck-----	1889
Ohio -----	State Board of Agriculture, Columbia-----	1846
Oklahoma -----	State Board of Agriculture, Stillwater-----	1907
Oregon -----	State Board of Agriculture, Salem-----	1861
Pennsylvania ---	Secretary of Agriculture, Harrisburg-----	1895
Rhode Island ---	State Board of Agriculture, Providence-----	1892
South Carolina --	Commissioner of Agriculture, Columbia-----	1904
South Dakota ---	State Board of Agriculture, Huron-----	1884
Tennessee -----	Commissioner of Agriculture, Nashville-----	1875
Texas -----	Commissioner of Agriculture, Austin-----	1906
Vermont -----	Commissioner of Agriculture, Plainfield-----	1872
Virginia -----	Commissioner of Agriculture, Richmond-----	1888
West Virginia ---	Commissioner of Agriculture, Charleston-----	1891
Wisconsin -----	State Board of Agriculture, Madison-----	1897

## AGRICULTURAL EXPERIMENT STATIONS (60\*).

State	Description and location	Date of original organization	Organized under Hatch Act of March 2, 1887
Alabama	(College) Auburn	1872	Feb. 24, 1888
Alabama	(Canebrake) Uniontown	1885	Apr. 1, 1888
Alabama	(Tuskegee Institute) Tuskegee	Feb. 15, 1897	
Arizona	(State University of Tucson)	1885	1890
Arkansas	Fayetteville		Mar. 7, 1889
California	(State University) Berkeley	1873	Mar., 1888
Colorado	Fort Collins		Feb., 1888
Connecticut	(State) New Haven	Mar. 21, 1877	May 18, 1887
Connecticut	(Storrs) Storrs		May 18, 1887
Delaware	Newark		Feb. 21, 1888
Florida	Gainesville		1888
Georgia	Experiment	1888	July 1, 1889
Idaho	Moscow		Feb. 26, 1892
Illinois	Urbana		Mar. 21, 1888
Indiana	Lafayette		Jan. 1, 1888
Iowa	Ames		Feb. 17, 1888
Kansas	Manhattan		Feb. 8, 1888
Kentucky	Lexington	Sept. 25, 1885	Apr., 1888
Louisiana	(Sugar) New Orleans	Sept., 1886	1888
Louisiana	(State) Baton Rouge	Apr., 1887	
Louisiana	(North) Calhoun	May, 1887	
Louisiana	(Rice) Crowley		July 1, 1909
Maine	Orono	Mar., 1885	Oct. 1, 1887
Maryland	College Park		Mar. 9, 1888
Massachusetts	Amherst	1882	Mar. 2, 1888
Michigan	East Lansing		Feb. 26, 1888
Minnesota	(University Farm) St. Paul	Mar. 7, 1885	1888
Mississippi	(Agricultural College)		Jan. 27, 1888
Missouri	(College) Columbia		Jan., 1888
Missouri	(Fruit) Mountain Grove	Feb. 1, 1900	
Montana	Bozeman		Feb. 16, 1893
Nebraska	Lincoln	Dec. 16, 1884	June 14, 1887
Nevada	Reno		Dec., 1887
New Hampshire	Durham		Aug. 4, 1887
New Jersey	(State) New Brunswick	Mar. 10, 1880	
New Jersey	(College) New Brunswick		Apr. 26, 1888
New Mexico	(College of Agriculture) State College		Dec. 14, 1889
New York	(State) Geneva	Mar. 1, 1882	
New York	(Cornell University) Ithaca	1879	Apr. 1, 1888
North Carolina	(College) West Raleigh	Mar. 12, 1877	Mar. 7, 1887
North Carolina	(State) Raleigh	July 1, 1907	
North Dakota	(Agricultural College)		Mar., 1890
Ohio	Wooster	Apr. 25, 1882	Apr. 2, 1888
Oklahoma	Stillwater		1891
Oregon	Corvallis		July, 1888
Pennsylvania	(State College)		June 30, 1887
Pennsylvania	Institute of Animal Nutrition		July 1, 1907
Rhode Island	Kingston		July 30, 1888
South Carolina	(Clemson College)		Jan., 1888
South Dakota	Brookings		Mar. 13, 1887
Tennessee	Knoxville	June 8, 1882	Aug. 4, 1887
Texas	(College Station)		Jan. 25, 1888
Utah	Logan		Apr., 1890
Vermont	Burlington		Feb. 28, 1888
Virginia	(College) Blackburg		Oct. 16, 1888
Virginia	(Truck) Norfolk	Feb., 1907	
Washington	Pullman		1892
West Virginia	Morgantown		1887
Wisconsin	Madison	1883	1887
Wyoming	(State University) Laramie		Mar. 1, 1891

\*Not including Alaska, Hawaii, Philippine Islands, Porto Rico, Arizona, Maryland, New Mexico, Utah, Washington, and Wyoming; maintain experiment stations only.



## States Having Stallion Registration Laws.

State	Name and location	Date of organization
California -----	Stallion Registration Board, Sacramento----	Aug. 1, 1911
Colorado -----	State Board of Stock Inspection Commissioners, Denver -----	Aug. 5, 1911
Idaho -----	Stallion Registration Board, Moscow-----	Mar. 15, 1909
Illinois -----	Stallion Registration Board, Springfield-----	Jan. 1, 1910
Iowa -----	Stallion Registration Board, Des Moines-----	Mar. 30, 1907
Kansas -----	State Livestock Registry Board, Manhattan----	Apr. 3, 1910
Michigan -----	Agricultural College, East Lansing-----	Aug. 1, 1911
Minnesota -----	Stallion Registration Board, St. Paul-----	Apr. 25, 1907
Montana -----	Bureau of Agriculture, Labor, Industry, and Publicity, Helena -----	Mar. 8, 1909
Nebraska -----	Stallion Registration Board, Lincoln-----	July 7, 1911
New Jersey -----	Stallion Registration Board, New Brunswick-----	Sept. 1, 1908
North Dakota ---	Stallion Registration Board, Fargo-----	Jan. 1, 1910
Oregon -----	Stallion Registration Board, Corvallis-----	May 20, 1911
Pennsylvania ---	Stallion Registration Board, Harrisburg-----	Jan. 1, 1908
South Dakota ---	Stallion Registration Board, Brooklings-----	Mar. 9, 1909
Utah -----	Stallion Registration Board, Logan-----	May 13, 1907
Washington -----	Stallion and Jack Registration Office, State College, Pullman -----	June 8, 1910
Wisconsin -----	Stallion Registration Board, Madison-----	Jan. 1, 1906

## APPENDIX B.

AGRICULTURAL AND OTHER ASSOCIATIONS AND CO-OPERATIVE  
ORGANIZATIONS IN CALIFORNIA.*Horses.*

American Saddle Horse Breeders' Association.....	Lexington, Ky.
Pacific Coast Trotting Horse Breeders' Association.....	Pacific Bldg., San Francisco, Cal.
Pacific Coast Saddle Horse Breeders' Association.....	Oakland, Cal.

*Cattle and Sheep, Poultry.*

Pacific Coast Trotting Horse Breeders' Association.....	Pacific Bldg., San Francisco, Cal.
California Live Stock Breeders' Association.....	No. 628 Montgomery street, San Francisco, Cal.
California Jersey Breeders' Association, J. E. Thorp, Secretary.....	Rural Route No. 6, Stockton, Cal.
California Holstein-Friesian Association, Jas. W. McAllister, Secretary.....	Chino, San Bernardino County, Cal.
American Hereford Cattle Breeders' Association.....	1012 Battery ave., Kansas City, Mo.
Pasadena Poultry, Pigeon and Pet Stock Association.....	Pasadena, Cal.
San Joaquin Poultry Association.....	Stockton, Cal.
Poultry Keepers' Association.....	Petaluma, Cal.
Southern California Poultrymen's Association, Jos. Davis, Secretary.....	Los Angeles, Cal.
California Woolgrowers' Association, A. Ellenwood, Secretary.....	Red Bluff, Cal.
California Creamery Operative Association, F. H. Daniels, Secretary.....	No. 1223 Park street, Alameda, Cal.
Humboldt County Dairymen's Association.....	Ferndale, Cal.
Stanislaus Poultry and Pet Stock Association.....	Modesto, Cal.
American Hampshire Sheep Association.....	Coldwater, Mich.

*Association of Breeders of Purebred Dairy Animals in the United States.*

The interests of the different breeders of dairy cattle are in charge of organizations of breeders, which determine purity of breeding, verify pedigrees, register eligible animals, and publish herdbooks. They also establish standards of excellence. The names of the various associations and the addresses of the secretaries are as follows:

Ayrshire Breeders' Association, C. M. Winslow, Secretary.....	Brandon, Vt.
Brown Swiss Cattle Breeders' Association, Ira Inman, Secretary.....	Beloit, Wis.
Dutch Belted Cattle Association of America, G. G. Gibbs, Secretary.....	Marksboro, N. J.
American Guernsey Cattle Club, William H. Caldwell, Secretary.....	Peterboro, N. H.
Holstein-Friesian Association of America, F. L. Houghton, Secretary.....	Brattleboro, Vt.
American Jersey Cattle Club, R. M. Gow, Secretary.....	324 W. Twenty-third street, New York, N. Y.
American Kerry and Dexter Cattle Club, Prof. C. S. Plumb, Secretary.....	Ohio State University, Columbus, Ohio

In addition to the strictly dairy cattle named above, some breeds, primarily developed for beef production, are occasionally bred and used as dairy cattle. Their associations are as follows:

American Devon Cattle Club, L. P. Sisson, Secretary.....	Charlottesville, Va.
American Polled Durham Breeders' Association, J. H. Martz, Secretary.....	Greenville, Ohio
Red Polled Cattle Club of America, H. A. Martin, Secretary.....	Gotham, Wis.
American Shorthorn Breeders' Association, John W. Groves, Secretary.....	13 Dexter Park Avenue, Union Stockyards, Chicago, Ill.

The following breeds are of practical dairy value, although not yet officially certified as purebred:

The American Polled Jersey Cattle Club, Charles S. Hatfield, Secretary.....	R. F. D. 4, Springfield, Ohio
American Milk Goat Record Association, J. C. Darst, Secretary.....	Dayton, Ohio
American Angora Goat Breeders' Association.....	Lawrence, Kansas
American Aberdeen-Angus Breeders' Association.....	817 Exchange ave., Chicago, Ill.
American Shire Horse Association.....	Bushnell, Ill.
American Hackney Horse Society.....	Hempstead, N. Y.
Percheron Society of America.....	Stockyards, Chicago, Ill.

*Swine.*

American Hampshire Swine Record Association	Peoria, Ill.
American Yorkshire Club	White Bear Lake, Mich.
American Berkshire Association	Springfield, Ill.
American Poland China Record Association	Union Stockyards, Chicago, Ill.
California Swine Breeders' Association	University Farm, Davis, Cal.
National Poland China Record Association	Winchester, Ind.
National Duroc Jersey Record Association	Peoria, Ill.
National O. T. C. Chester White Record Association	Hastings, Nebraska

*Citrus Fruit Associations.*

California Fruit Growers' Exchange	Los Angeles, Cal.
Citrus Protective League of California	Los Angeles, Cal.
Co-operative Fruit Growers' Association	Riverside, Cal.
Anaheim Fruit Association	Anaheim, Cal.
California Citrus Union	Lindsay, Cal.
Citrus Association	Covina, Los Angeles County, Cal.
Citrus Association	Porterville, Cal.
Los Angeles Olive Growers' Association	Los Angeles, Cal.
Fresno Citrus Association, H. V. Rudy, President	Fresno, Cal.
Hemet Orange Growers' Association	Hemet, Riverside County, Cal.
Lindsay Citrus Association	Lindsay, Tulare County, Cal.
Mutual Orange Distributors	Redlands, Cal.
Placentia Orange Growers' Association	Placentia, Orange County, Cal.
Porterville Citrus Association	Porterville, Tulare County, Cal.
Redlands Orange Growers' Association	Redlands, San Bernardino County, Cal.
Santa Paula Citrus Association	Santa Paula, Ventura County, Cal.
Tulare County Citrus Fruit Exchange	Porterville, Tulare County, Cal.

*Other Fruit Associations.*

California Fruit Exchange	Sacramento, Cal.
California Fruit Distributors	Sacramento, Cal.
California Cured Fruit Exchange	Sacramento, Cal.
California Associated Raisin Company	Fresno, Cal.
California Raisin Exchange	Fresno, Cal.
Deciduous Protective League	Sacramento, Cal.
Humboldt Apple Growers' Association	Eureka, Cal.
Watsonville Apple Annual Association	Watsonville, Cal.
Bloomington Fruit Association	Bloomington, Cal.
Los Angeles Olive Growers' Association	Los Angeles, Cal.
Corning Olive Growers' and Producers' Exchange	Corning, Cal.
Deciduous Fruit Growers' Protective League	Sacramento, Cal.
Dried Fruit Association	Ventura, Cal.
Fruit Growers' Association	Kerman, Fresno County, Cal.
Grape Growers' Association of California	45 Kearny st., San Francisco, Cal.
Highgrove Fruit Exchange	Highgrove, Riverside County, Cal.
Imperial Valley Melon Growers' Association	El Centro, Cal.
Lima Bean Growers' Association	Oxnard, Cal.
Newcastle Fruit Growers' Association	Newcastle, Placer County, Cal.
Orange County Dried Fruit Association	Santa Ana, Orange County, Cal.
Pajaro Valley Orchardists' Association	Watsonville, Santa Cruz County, Cal.
San Antonio Fruit Exchange	Pomona, Los Angeles County, Cal.
San Joaquin County Grape Growers' Protective League	Lodi, Cal.
Sebastopol Apple Growers' Union	Sebastopol, Sonoma County, Cal.
Sebastopol Berry Growers' Association	Sebastopol, Sonoma County, Cal.
Vacaville Fruit Growers' Association	Vacaville, Solano County, Cal.
Ventura County Dried Fruit Association	Ventura, Cal.
West Side Fruit Growers' Association of Santa Clara Valley	Cupertino, Santa Clara County, Cal.
Winters Dried Fruit Company	Winters, Yolo County, Cal.
Winters Fruit Growers' Association	Winters, Yolo County, Cal.

*Nut Growers' Associations.*

California Almond Growers' Exchange	Sacramento, Cal.
Banning Almond Growers' Association	Banning, Riverside County, Cal.
California Walnut Growers' Association	No. 313 Fay Bldg., Los Angeles, Cal.
Santa Ana Valley Walnut Growers' Association	Santa Ana, Orange County, Cal.
Santa Barbara County Walnut Growers' Association	Santa Barbara, Cal.
Santa Paula Walnut Growers' Association	Santa Paula, Ventura County, Cal.

*Bees and Honey.*

California State Beekeepers' Association	4232 W. First st., Los Angeles, Cal.
Northern California Beekeepers' Association	Fairoaks, Sacramento County, Cal.
California National Honey Producers' Association	Los Angeles, Cal.
Central California Beekeepers' Association	Hanford, Cal.
Tulare County Beekeepers' Association	Tulare, Cal.
Consolidated Honey Producers of California	A. B. Shaffner, Los Angeles, Cal.

*Miscellaneous.*

California Development Board	Ferry Bldg., San Francisco, Cal.
Fish and Game Commission	Mills Bldg., San Francisco, Cal.
Delta Association of California	Col. John P. Irish, Oakland, Cal.
California State Grange, Joseph Holmes, Master	Cupertino, Cal.
California Association of Nurserymen	No. 237 Franklin st., Los Angeles, Cal.
California Farmers' Institutes	University of California, Berkeley, Cal.
California Farmers' Union	Fresno, Cal.
San Joaquin Water Problems Association, John Fairweather, President	Fresno, Cal.
Sacramento Valley Development Association	Sacramento, Cal.
Sacramento Poultry Association	Sacramento, Cal.
California Vegetable Union	San Francisco, Los Angeles and Sacramento, Cal.
Celery Growers' Association	Santa Ana, Orange County, Cal.
Imperial Valley Cotton Growers' Exchange	El Centro, Cal.
Lompoc Seed Growers' Association	Lompoc, Santa Barbara County, Cal.

*Agricultural Newspapers.\**

Pacific Rural Press (W.)	San Francisco, Cal.
California Fruit Grower (W.)	San Francisco, Cal.
Orchard and Farm (M.)	San Francisco, Cal.
California Cultivation (W.)	Los Angeles, Cal.
Rural Californian (M.)	Los Angeles, Cal.
California Fruit World (W.)	Los Angeles, Cal.
Western Empire (M.)	Los Angeles, Cal.
The Business Farmer and Irrigationist (W.)	Stockton, Cal.
California Farmer	San Jose, Cal.
Pacific Dairy Review (W.)	San Francisco, Cal.
Live Stock and Dairy Journal (M.)	Sacramento, Cal.
California Oil World (W.)	Bakersfield, Cal.
California Derrick (M.)	San Francisco, Cal.
California Oil and Mining Digest (S.M.)	Los Angeles, Cal.
Oil Record (W.)	Coalinga, Cal.
Oil Age (W.)	Los Angeles, Cal.

\*(W.), published weekly; (M.), monthly; (S.M.), semi-monthly.

NOTE.—Applications are often received for the names and addresses of agricultural and similar organizations, but it is a difficult matter to obtain this information. Any additions or corrections to the above list will be appreciated.



## APPENDIX C.

## CALIFORNIA STATE, COUNTY, AND DISTRICT FAIRS AND SHOWS.

Name of fair, exhibition, or association	Place where held	Time when usually held	Description of exhibit
California State Agricultural Society, State Fair	Sacramento	Sept. 12th to 19th, 1914	General agriculture, live stock, general products, machinery, etc.
California Apple Show	Watsonville	October	Apples.
California Land Show	San Francisco	October	Soil and agriculture.
Agricultural Association No. 34	Alturas	September	General agriculture.
District Fair No. 16	Arroyo Grande	September	General agriculture.
Kern County Agricultural Association	Bakersfield		General agriculture.
West Side Live Stock and Agricultural Show Ass'n	Berkeley		General agriculture.
Cloverdale Citrus Fair Association	Cloverdale	February	Citrus fruits, etc.
Del Monte Kennel Club	Del Monte		Dogs.
District Agricultural Association No. 45	El Centro	November	Cotton and general agr.
Escondido Valley Poultry Association	Escondido	December or January	Poultry.
San Diego County Fair Association	Escondido	September or October	General agriculture.
El Dorado County Bartlett Pear Show	Placerville	August	Fruit.
Eureka Fair Association	Eureka		General agriculture.
Fresno County Agricultural Association	Fresno	Sept. 29th to Oct. 3d	General agriculture.
Fresno Poultry Pigeon and Pet Stock Association	Fresno	December	Poultry, etc.
Ferndale Agricultural Fair Association	Ferndale	September	General agriculture.
Healdsburg Harvest Festival Association	Healdsburg	September or October	General agriculture.
Kings County Fair Association	Hanford	October 5-10, 1914	General agriculture.
Los Angeles District Fair	Los Angeles	Oct. 12-17, 1914	General agriculture.
Long Beach Poultry and Pet Stock Association	Long Beach	December or January	Poultry, etc.
Poultry Breeders' Association of Southern California	Los Angeles	January	Poultry.
Pacific Land and Products Exposition	Los Angeles	March	General agriculture.
Napa County Poultry Association	Napa	December	Poultry.
Oroville, Orange and Olive Exposition	Oroville	December	Citrus fruits and olives.
Pleasanton District Fair	Pleasanton	September 23-26, 1914	Agriculture.
Pasadena Kennel Club	Pasadena	March	Dogs.
Riverside District Fair	Riverside	Oct. 9-23, 1914	District fair.
Rose Carnival	Pasadena	January 1st	Agriculture.
Northern California Kennel Club	Sacramento	Fall	Dogs.
National Orange Show Association	San Bernardino	February	Citrus fruits.
San Diego County Fair	San Diego	October	General agriculture

San Diego Poultry Association	San Diego County	September	Poultry.
Santa Clara County Fair	San Jose	October	General agriculture.
Santa Clara Valley Poultry Association	San Jose	September	Poultry.
St. Helena Vintage Fair	St. Helena		Wine and agriculture.
Orange County Poultry Show Association	Santa Ana		Poultry.
Santa Barbara Poultry Association	Santa Barbara	January	Poultry.
Santa Rosa District Fair	Santa Rosa	Aug. 31st to Sept. 5th	Floriculture.
Gravenstein Apple Show Association	Sebastopol	August	Apples.
San Joaquin County Fair	Stockton	September	General agriculture.
San Joaquin County Poultry Association	Stockton		Poultry.
Tulare County Agricultural Fair Association	Visalia		General agriculture.
Walnut Creek Fair Association	Walnut Creek		General agriculture.
Woodland District Fair	Woodland	Sept. 8-10	Agriculture.

## APPENDIX D.

## SUMMARY OF WEATHER CONDITIONS, TEMPERATURE, RAINFALL AND SNOW IN EACH COUNTY IN 1913.

(Compiled from the Reports of the United States Weather Bureau, San Francisco.)

Counties	County seat or observation station	Elevation, feet	Temperature		Rainfall, inches	Snowfall, inches
			Highest	Lowest		
Alameda	Oakland*	36	97	30	17.81	Trace
Alpine	Tamarack <sup>1 2</sup>	8,000	80	-20	50.73	407.0
Amador	Ione <sup>2</sup>	287	110	14	16.27	0
Butte	Oroville* (near)	250	110	15	31.78	6.0
Calaveras	Mokelumne Hill <sup>2</sup>	1,550	105	18	25.00	6.0
Colusa	Colusa*	60	107	23	17.72	2.4
Contra Costa	Antioch	46	105	23	11.37	Trace
Del Norte	Crescent City*	50				
El Dorado	Placerville*	1,875	100	10	28.32	4.0
Fresno	Fresno*	293	109	17	8.69	Trace
Glenn	Willows*	136	112	24	21.20	3.0
Humboldt	Eureka*	64	78	28	33.80	0.5
Imperial	Brawley <sup>2</sup>	-105	113	21	2.21	0
Inyo	Independence*	3,907	103	4	7.36	0.8
Kern	Bakersfield*	404	116	14	No record	
Kings	Hanford*	249	104	14	No record	
Lake	Upper Lake <sup>2</sup>	1,350	107	13	32.05	Trace
Lassen	Susanville* <sup>3</sup>	4,175				
Los Angeles	Los Angeles*	293	108	28	17.17	Trace
Madera	Storey <sup>2</sup>	296	107	14	7.36	0
Marin	Point Reyes	490	91	33	16.74	0
Mariposa	Yosemite <sup>2</sup>	3,945	103	-2	32.00	123.7
Mendocino	Ukiah*	620	111	15	38.32	Trace
Merced	Merced*	173	110	18	10.31	0
Modoc	Alturas*	4,400	97	-21	16.77	79.0
Mono	Bodie <sup>3</sup>					
Monterey	Salinas*	40	102	19	10.14	0
Napa	Napa*	20	106	34	21.79	0
Nevada	Nevada City*	2,580	102	4	46.22	59.0
Orange	Yorba Linda	405	100	26	No record	
Placer	Auburn*	1,360	106	20	18.77	4.0
Plumas	Quincy*	3,400	97	0	33.14	112.0
Riverside	Riverside*	851	111	21	9.00	Trace
Sacramento	Sacramento*	71	109	26	14.29	0.1
San Benito	Hollister*	284	106	18	12.41	0
San Bernardino	San Bernardino*	1,054	108	18	12.87	0
San Diego	San Diego*	93	110	25	7.30	0
San Francisco	San Francisco*	207	101	33	19.05	Trace
San Joaquin	Stockton*	23	108	21	11.22	Trace
San Luis Obispo	San Luis Obispo*	201	109	20	18.19	0
San Mateo	San Mateo <sup>2</sup>	22	100	32	18.43	0
Santa Barbara	Santa Barbara*	130	108	27	18.56	0
Santa Clara	San Jose*	95	103	25	12.00	0
Santa Cruz	Santa Cruz*	20	106	24	25.04	0
Shasta	Redding*	552	112	18	36.96	25.5
Sierra	Sierraville <sup>2</sup>	5,000	94	-7	31.91	84.0
Siskiyou	Dunsmuir <sup>2</sup>	2,285	103	17	50.53	120.0
Solano	Vacaville <sup>3</sup>	175				
Sonoma	Santa Rosa*	181	112	25	31.38	0

## SUMMARY OF WEATHER CONDITIONS—Continued.

Counties	County seat or observation station	Elevation, feet	Temperature		Rainfall, inches	Snowfall, inches
			Highest	Lowest		
Stanislaus -----	Modesto* -----	90	111	22	9.86	Trace
Sutter -----	Yuba City* -----	57				
Tehama -----	Red Bluff* -----	307	110	25	25.77	8.0
Trinity -----	Weaverville* <sup>4</sup> -----	2,162	100	7	36.26	79.8
Tulare -----	Visalia* -----	334	109	13	9.81	0
Tuolumne -----	Sonora* -----	1,825	101	14	23.01	10.0
Ventura -----	Mono Ranch <sup>2</sup> -----	3,210	97	1	31.68	14.0
Yolo -----	Davis <sup>2</sup> -----	51	111	20	17.93	Trace
Yuba -----	Marysville* -----	67	110	21	22.48	3.0

\*County seat.

<sup>1</sup>The snowfall at this station was the heaviest in the State, both in 1910 and 1911; in the former year it amounted to 302 inches, and in the latter year no less than 786 inches, or 65½ feet. In 1913 there were 421 inches at Fordyce dam in Nevada County, 407 inches at Tamarack, Alpine County, 295 inches at Blue Canyon, Placer County, and 245 inches at Summit in Placer County.

<sup>2</sup>Observation station.

<sup>3</sup>Details not available.

NOTE.—The snowfall in the mountains is more or less heavy; it rarely falls in the Sacramento and San Joaquin valleys. In a few cases there is no observation station at the county seat, the name of the place where the observations were taken is given.

In 1911 the rainfall was below the average, and the snowfall unusually heavy. In 1912 the deficient rainfall did not exceed 70 per cent of the normal, and the snowfall was light.

There are no observation stations in Nel Norte, Mono, and Sutter counties.

## Summary.

The year of 1913 was one of light and untimely rainfall. The precipitation during the first half of the year was less than 50 per cent of the normal for that period, and had it not been for the exceptionally heavy rains in November and December, the yearly amount would probably have been less than that of 1912, which was generally considered a drought year. The only heavy rain during the winter occurred in February and was confined to southern California. The snowfall was light, but more than in 1912. During the summer and early autumn the streams approximated the lowest stages known, and many wells and springs ceased to flow. Heavy rain fell in November and December, especially in the northern part of the State. The abnormally heavy rainfall on December 31st caused considerable damage by floods. The twenty-four-hour rainfall at several stations on this date exceeded 10 inches. During the first ten days of January one of the most severe cold waves ever known in California damaged the citrus orchards to the extent of millions of dollars, the temperature falling to 15 degrees and lower. In the late summer and early autumn the weather was ideal for fruit and raisin drying.





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# STATISTICAL REPORT

OF THE

California

## State Board of Agriculture

For the Year 1914



CALIFORNIA  
STATE PRINTING OFFICE  
1915



# STATISTICAL REPORT

OF THE

California

## State Board of Agriculture

For the Year 1914



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1915



## STATE BOARD OF AGRICULTURE, 1914.

### DIRECTORS.

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HAROLD E. SMITH	Assistant Secretary
GEORGE ROBERTSON	Statistician

# REPORT

OF THE

## STATE BOARD OF AGRICULTURE.

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### LETTER OF TRANSMITTAL.

July 1, 1915.

*To Honorable* HIRAM W. JOHNSON,  
*Governor of California.*

DEAR SIR: We have the honor to submit herewith the Sixty-first Annual Report of the State Board of Agriculture pertaining to the California State Fair of 1914, together with the financial statement of the fiscal year ending June 30, 1915, and the statistical report of the production of California for the calendar year of 1914.

The State Fair is steadily gaining in prestige and usefulness and is now classed with the big fairs of the United States, as shown by a few letters appended from prominent authorities of some of the large fair centers.

The value of the State Fair is a value that can not be measured in dollars and cents. It is an educational and practical demonstration of the results of experiments and ingenuity. The show windows of a large mercantile establishment is the keynote of what can be found in the building, and the exhibits at a State Fair are an indication of the resources and productions of the State. Naturally the exhibitor places on exhibition the best he has, and in this way the result of the best thought and labor is put before the people. The advancement made in each state is an advancement that can be traced to the result of the labor done by the several State Fairs, and the better the State Fair the greater has been the progress in the state in which it is held. Exhibits made under the auspices of any fair, are exhibits that are not theoretical but practical.

It is results that we have to deal with, and the results from the State Fair of 1914 have proved to be greater, far more reaching and more profitable to the exhibitors and the State than any fair so far held. We have on file scores of letters from those who have exhibited telling of the benefits that they have derived, showing the benefits to the whole community and speaking in the very highest terms of the results of their exhibits. This is not only gratifying to the management, but must be to the taxpayers, through whose generosity we have been enabled to make the showing we did last year.

Take, as an instance, the exhibit of livestock. We have the assurance of some of the best judges in the country, that at no time, and in no

place, has a better exhibit of horses, sheep, cattle and hogs been made than was made at our last State Fair. Here were assembled some of the finest specimens to be found in any part of the world, and in this way, those who had the opportunity of seeing them were enabled to note the advancement that has been made in the breeding of live stock, and could learn the advantages that are possessed by the different grades and breeds. A person would have to travel thousands of miles in order to have the opportunity of inspecting the different animals that were placed on exhibition, and the opportunity that was offered in the assemblage at the State Fair was a saving of time, expense, and an education for those who are interested in the animal industry of California.

The same opportunity was presented in the poultry department. Birds and fowls from all parts of the country were on exhibition. Profitable and unprofitable breeds were shown. All the different breeds of poultry were brought together and gave the fanciers a favorable opportunity of judging the advantages of each breed and enabled him to decide which would be the best variety for him to raise in his section of the country.

The demonstration that was given in the Horse Show conclusively proved that notwithstanding the fact that machinery to a great extent was taking the place of animal efforts, vast improvement has been made in the education of the horse and it still retains its place with those who use it for pleasure and profit. Some of the finest specimens of horse flesh were shown in the tent and the training that they had received was a convincing proof that no matter what inventions may be made for the purpose of transportation the horse will still continue to hold its place.

The exhibits of horticultural, viticultural and agricultural products far surpassed those of other years and it must have been a pleasure to the visitors to note the wonderful progress that has been made in these industries in the State of California. No finer peaches, pears, plums or grapes have ever been shown, and the effort of each county to vie with each other resulted in bringing before the public the best in the land, and the best that has been produced up to this time.

The space that is at present at the service of the State Fair proved to be entirely too small for the number of exhibits that were offered and it is much to be regretted that the grounds and buildings can not at this time be put in a condition that will permit a proper display of the wonderful productions, and make proper demonstration of the magnificent resources of this great State. Those who take an interest in the future of the California State Fair recognize the great necessity of adding to the grounds and making improvements in the buildings.

The value of the State Fair is not only the value it has from exhibiting features, but the value it offers in making a market for the goods of those who exhibit. The sales that were brought about by the exhibitors run up into the hundreds of thousands of dollars. People who came to enjoy the fair went home as purchasers of some of the products exhibited. An opportunity was given to the breeders of live stock, to the exhibitors of the smallest article and to the manufacturer of the largest traction engine to show the advantage of their productions, and of making customers of the visitors assembled from all parts of the State.

That these results have accrued can be seen from a few of the letters we append, from exhibitors of the live stock department, out of the many that we have received.

During the past fiscal year there has been very little change in the number of farm animals in the State, but the average price has increased in several cases.

In the imports and exports there are several changes both in numbers and prices, the most remarkable being the great increase in the number of cattle and sheep imported for breeding purposes and food consumption, as shown by the custom returns recently issued.

Horses for breeding purposes fell off from 5,713 in 1913 to 4,406 in 1914, while the number of other horses shows a remarkable increase. In 1913 the number being 4,295, which was the largest number in the last ten years, but last year the number increased to 28,613, mostly from Mexico, the owners preferring to sell them rather than have them confiscated by one or other of the rival armies. The number of mules imported was 4,883, a slight increase over the previous year, but cattle for breeding and market purposes, of which the number is generally only two or three thousand, went up from 1,388 in 1913 to 718,352 last year, and the value from \$234,589 to \$16,328,819.

Sheep for the same purposes also show a large gain from 388 in 1913 to 221,836 in 1914, and the value from \$8,903 to \$516,912. These figures show that the breeders of this State are improving their stock, but the great increase in numbers no doubt is on account of moving from Mexico into California during their troublesome times.

In exports the number of horses fell from 28,707 in 1913 to 22,776 last year. The number of mules exported shows a small increase from 4,744 to 4,833. The number of cattle exported fell from 24,714 to 18,376; and the number of sheep from 187,132 to 152,600, while the number of swine fell from 15,332 to 10,122.

In farm crops there was a general increase in the acreage. The acreage in wheat increased from 300,000 acres in 1913 to 400,000 in 1914; the acreage in oats increased from 210,000 acres to 220,000 acres; barley



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In farm crops there was a general increase in the acreage. The acreage in wheat increased from 300,000 acres in 1913 to 400,000 in 1914; the acreage in oats increased from 210,000 acres to 220,000 acres; barley

from 1,275,000 acres to 1,402,000 acres; potatoes from 68,000 acres to 75,000 acres; hay from 2,400,000 acres to 2,700,000 acres; rice from 6,200 acres to 16,000 acres and the acreage the coming year will be much larger. In cotton the acreage was 35,000 acres compared with 14,000 the previous year. In sugar beets the acreage was 104,000 compared with 127,610 acres in 1913. In hops 110,000 bales were produced compared with 118,500 bales in 1913, which was a record year, but the prices were very unsatisfactory; the average in 1913 being from 26 cents to 13 cents per pound, and in 1914 only 18 cents to 5 cents.

Dried fruits in 1914 show a large increase in every variety compared with the year 1913. Apples increased from 2,500 tons to 5,000 tons; apricots from 9,000 to 20,000 tons; figs from 3,500 to 5,000 tons; peaches from 20,000 to 35,000 tons; pears from 2,000 to 4,000 tons; prunes from 45,000 to 60,000 tons; raisins from 65,000 to 90,000 tons and miscellaneous fruits from 2,000 to 5,000 tons, or a total of 224,000 tons compared with 149,000 tons in the year 1913.

The shipments of fresh deciduous fruits varied, but they show an increase on the whole compared with 1913. Apricots increased from 158 carloads to 382 carloads; grapes from 6,363 carloads to 8,773 carloads; pears from 2,496 carloads to 2,725 carloads; plums from 1,706 carloads to 1,907 carloads; cherries declined from 231 carloads in 1913 to 166 carloads; peaches from 2,359 to 2,144 carloads. The total shipment amounted to 16,146 carloads compared with 13,332 in 1913.

The citrus crop was a record one, amounting to 48,338 carloads compared with 18,331 in 1913, when a heavy frost caused great losses. Of the above carloads, 45,306 were oranges and 3,032 lemons.

The raisin crop was also a record one, amounting to 182,000,000 pounds compared with 130,000,000 pounds in 1913.

Just before going to press we have received the following figures from the customs returns for the ten months, from July 1, 1914, to April 30, 1915, that owing to the war in Europe all records have been broken in the exports of agricultural products from this country, at prices that must have enabled farmers to reap an unusual profit. The returns show that for the period between these dates, 215,759 horses valued at \$47,783,848 were exported, compared with 20,239 valued at \$2,918,166 during the same period last year. The number of mules increased from 4,366 valued at \$614,935 to 38,229 valued at \$7,478,014. The total value of farm animals, including cattle, sheep and hogs, amounts to \$55,933,308 compared with \$4,997,145.

Breadstuffs also show an enormous increase, the total value being \$496,649,898, compared with \$138,891,712 for the above ten months. Of this sum the two principal articles were wheat, \$297,593,069, and wheat flour, \$79,058,695. Oats were exported to the value of

\$43,603,962, and corn to the value of \$32,918,469. Even fruits and nuts show an increase in exports, the total value being \$32,243,325, compared with \$29,093,563.

These figures are for the whole United States, but California has received her share from this enormous patronage as proved by the exports from California ports for this period which amount to \$71,873,371, compared with \$58,422,261, or an increase of \$13,451,110.

Respectfully submitted.

JOHN M. PERRY,  
President.

CHAS. W. PAINE,  
Secretary.



## FINANCIAL STATEMENT.

July 1, 1914, to June 30, 1915.

## SUMMARY.

## RECEIPTS.

Balance on hand, State Treasurer.....	\$8 720 53
Appropriation for statistics.....	5,382 32
Appropriation for directors' traveling expenses.....	1,000 00
Appropriation for salaries.....	7,200 00
Appropriation for aid.....	30,000 00
Race program sales.....	487 45
Poultry entry fees.....	514 75
Live stock entry fees.....	1,838 00
Gate receipts, 1914.....	43,387 33
Concessions .....	8,061 97
Stall rent .....	885 55
Sale of electric power.....	1,332 20
Park and pavilion.....	1,269 81
Advertising official programs.....	939 75
Received on account of races.....	17,438 98
<b>Total .....</b>	<b>\$128,458 64</b>

## DISBURSEMENTS.

Electric light account.....	\$4,129 85
Traveling expenses .....	136 25
Directors' traveling expenses.....	2,077 75
Bills payable .....	500 48
Grooms' prizes .....	195 00
Salaries .....	8,591 09
Payroll .....	19,106 04
Expenses .....	13,895 96
Publicity .....	8,742 45
Freight, drayage and express.....	191 65
Stable expense .....	364 02
Postage .....	1,211 02
Premiums .....	21,338 06
Races .....	24,006 04
Judges' fees .....	984 35
Attractions .....	13,826 67
Revolving fund .....	500 00
Balance on hand, State Treasurer.....	8,661 96
<b>Total .....</b>	<b>\$128,458 64</b>

## APPENDIX.

### PANAMA-PACIFIC INTERNATIONAL EXPOSITION

1915

EXPOSITION BUILDING.

Division of Exhibits

Office of the Chief

SAN FRANCISCO, California.

Department of Live Stock.

September 19, 1914.

MR. CHAS. W. PAINE, Secretary,

State Agricultural Society,

Sacramento, California.

DEAR SIR: I have just returned from my visit to your splendid State Fair, and desire to express my appreciation of the courtesies extended to me, and of the size and quality of the fair, especially in the Live Stock Department.

It has been my business to attend all of the larger state fairs in the so-called corn belt states, during the past fifteen years, and it is a real pleasure to be able to state that I do not now remember to have seen a finer parade of high quality animals, than that which was held at Sacramento this week.

This speaks volumes for the future of California, which is evidently a live stock state, but which has been neglected in this respect heretofore. I am now satisfied that California will become one of the great live stock states of the union, and sincerely feel that the enthusiasm, shown by both breeders and visitors at Sacramento this week, gives assurance that the best days of California are in the immediate future.

Yours truly,

I. D. GRAHAM,

Assistant Chief Department of Live Stock.

I. D. Graham

YL.

UNIVERSITY OF PENNSYLVANIA

PHILADELPHIA.

The School of Veterinary Medicine.

March 10, 1915.

MR. CHAS. W. PAINE, Secretary,

California State Ag. Society,

Sacramento, Cal.

DEAR MR. PAINE: I would commend your association most highly as to both quantity and quality of the exhibits which I saw.

I would like to express again my appreciation of your state fair and of the many courtesies extended to me during my week in Sacramento

Yours very truly,

PAUL W. GAY,

Professor of Animal Industry.

PWG:MG.

IOWA STATE COLLEGE  
Agricultural and Mechanic Arts  
Division of Agriculture  
Agricultural Experiment Station  
Department of Animal Husbandry.

AMES, IOWA, January 27, 1915.

MR. CHAS. W. PAINE, Secretary,  
California State Agricultural Society,  
Sacramento, Cal.

DEAR SIR: In reply to your letter of recent date I wish to say I was very agreeably surprised to note the number and quality of live stock exhibited at your recent State Fair. Of course, I expected to see a wonderful display of fruit and was not disappointed, but the live stock, and especially the dairy cattle, put up a great show.

I found the Ayrshires, Dutch Belted, Guernsey, Holstein and Jersey breeds represented by excellent individuals, and in each breed there were animals that would have ranked high at the National Dairy Show. The Holstein exhibit was especially impressive and I may say that considering both numbers and individual excellence, it was the best showing of Holsteins I have ever seen at a state fair.

I wish to commend the management upon the very successful manner in which the show was conducted, especially the dairy cattle department. Then too, I wish to say that nowhere have I found among the dairy cattle exhibitors more courtesy than at your fair.

Yours very truly,

H. H. KILDEE,  
Professor Dairy Husbandry.

---

No. 517 53d st., Oakland, Cal.,

Jan. 26, 1915.

MR. CHAS. W. PAINE, Secretary,  
State Agricultural Society,  
Sacramento, Cal.

MY DEAR MR. PAINE: Replying to your favor of the 23d beg to state that I was more than pleased at the marked improvement in the "quality" of the exhibits in the Poultry Department last September. It was just what I have been after for years and I know that it is also the desire of Chairman Mitchell and his fellow directors. We want to make the California State Fair Poultry Department a quality show and one that will attract fanciers from all over the country. The exhibitors were certainly well pleased with their treatment at the hands of the Agricultural Society. One and all were loud in their praises, especially on the liberality of the cash prizes.

It is hard to suggest, but I would like to urge the board to enlarge the Poultry Building as soon as they can. At present it cramps the birds, especially when pigeons are cooped in the same place and I feel sure that if the building was enlarged just that much could we enlarge the exhibit. At that season of the year, it is, as a rule, hot, and birds must have plenty of ventilation. Otherwise I can not see how you can improve upon the last fair. The cash prizes will continue to draw and swell the entries and by keeping the judging along safe and sane lines

with a view to keeping up quality our reward will follow in the Poultry Department of the California State Fair being recognized all over the United States as the "Quality Fair of the Country."

With kindest personal regards, I am,

Sincerely yours,

C. G. HINDS.

---

UTAH AGRICULTURAL COLLEGE

The Extension Division—Animal Husbandry  
Extension Specialist.

LOGAN, UTAH, Feb. 23d, 1915.

MR. CHAS. W. PAINE, Secretary,  
California State Fair,  
Sacramento, Cal.

DEAR SIR: From nearly every standpoint I have considered the California State Fair to stand among the very first of the institutions of its kind in the West.

Your classification is on the whole a good one, and in the horse line the State Stallion Board Special is a great step in advance and is sure to result in good. The plan of having open and state classes is a debatable one, but I am not sure but what the effect is a good one.

One of the noticeable things that stands out in the handling of the California State Fair is the efficient work of the officers and directors. The help given to the judges is a great benefit and is noted by all who act in this capacity at your annual exhibits.

The biggest needs in live stock way of your fair at present are a stock judging coliseum and more barn room, which should be handy to the judging ring.

The exhibits at your fair are as a rule excellent, and, in a number of classes, especially the Percheron, Jack and Jennettes, stand well above any of the western exhibits.

Wishing you every success in the future, I remain,

Yours very truly,

JOHN T. CAINE III.

JTC:EG.

---

ED. A. BAXTER,

Proprietor of Pawnee Herd of Duroc-Jersey Swine.

Pawnee, Ill., Jan. 26, 1915.

MR. CHAS. W. PAINE, Secretary,  
State Agricultural Society,  
Sacramento, Cal.

MY DEAR SIR: As I had the pleasure and honor of judging the swine at your state fair last fall—1914, and coming from one of the best stock and agricultural states of the union, I think I should at least make a report to your Honorable Board as to my opinion of the exhibits as to quantity and quality, and as my time was mostly taken up around the swine pens I wish to say I have attended state fairs for the last thirty years and some good ones too, and I must say I was agreeably surprised when I came to look over your swine show. The quality was very good, and



when I say good, I do not want it understood all of them were good. neither have I found it so elsewhere.

I found your breeders to be enthusiastic, pushing fellows and they know how to treat a stranger within their walls. I also found them good losers as well as winners. Give your breeders a chance to display their goods that visitors may see what the great State of California can do in the swine industry. There is no good reason why California should not be classed up among the swine growing states of the union. Give your breeders all the encouragement you can every year and they will soon show you no one class of stock will attract to your show more than the swine. The quantity was good, in fact better by far than I had expected.

Your grounds I think are very good and soon can be made very attractive. The horse and cattle show was excellent and some day soon, by good judgment and work, will make some of our middle west shows hump. I do not know that I could make any change in your classifications. The only thing it seems to me that will hold your swine show back is lack of a big barn. Give the breeders a swine barn and a show ring and I believe from what I have seen and know of your breeders that they will do the rest. I know I am a crank on the hog question, but in my opinion they are the mortgage lifters of all stock.

Thanking you for past favors and wishing your fair what it so richly deserves, success, I am,

Yours respectfully,  
ED. A. BAXTER.

Shortly after the last State Fair letters were received from the following exhibitors giving an approximate number of sales and their values that were traced to exhibiting at the California State Fairs of the last two years. From these letters it can readily be seen that the Fair is of an unestimable value as a market.

In order to give a comprehensive idea of these sales, a portion of them are tabulated below:

W. J. O'Brien.....	Cattle, 9 head.....	\$850
Dunham-McLaughlin Co. ....	Horses, 25 head.....	47,250
Ruby & Bowers.....	Horses.....	30,000
N. H. Locke Co.....	Cattle, 5 head, young bulls.....	675
A. M. Henry.....	Swine, 100 head.....	
Geo. V. Beckman.....	Swine (large and small) 400 head.....	8,000
G. A. Murphy.....	Swine.....	1,350
F. W. White.....	Swine, 67 head, young pigs.....	1,995
A. W. Morris & Sons.....	Cattle, 16 head, young bulls.....	7,200
H. S. Moddison.....	Horses, 2 head, young stock.....	600
Thos. D. McLaughlin Imp. Co.....	Horses.....	8,600
E. A. Bridgford.....	Horses, 3 head, saddle horses.....	1,000
Howard Cattle Co.....	Bulls, 13 head.....	5,750
	Bucks, 120 head.....	
	Heifers, 6 head.....	
	Swine.....	
A. B. Humphrey.....	Shetland ponies.....	390
Maurice Rucker.....	Horses, 8 head.....	2,250
C. A. Penninger.....	Swine.....	250
Traver W. Goethe.....	Horses, 4 head.....	7,000
Henry Wheatley.....	Swine, 9 head.....	385
Pure Gold Stock Farm.....	Cattle, 1 bull.....	250
Pure Gold Stock Farm.....	Swine, 25 head.....	1,250
W. Bernstein.....	Jacks, 14 head, and jennet colts.....	3,800
W. J. Greer.....	Cattle, 67 head.....	*10,000
E. J. Weldon.....	Cattle, 31 head Dutch Belted.....	2,325
U. G. Strader.....	Cattle, young stock, 14 head.....	†3,000
J. W. Henderson.....	Swine, young stock, 20 head.....	5,000
J. W. Henderson.....	Horses, 12 head.....	3,600
McCormick Bros.....	26 Caterpillar engines and 7 plows.....	
Holt Manufacturing Co.....		

\*Over. †Approximately.

*Total Number of Exhibitors and Entries, 1914 Fair.*

Department	Number exhibitors	Number entries
Horses.....	87	552
Cattle.....	58	726
Sheep.....	14	115
Goats.....	2	18
Swine.....	39	453
Dairy products.....	74	105
Poultry.....	131	560
Pigeons.....	34	146
Rabbits.....	18	33

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STATISTICAL SUMMARY  
OF THE  
Production and Resources  
OF  
CALIFORNIA

BY  
GEORGE ROBERTSON  
State Statistician

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## PREFACE.

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The value of statistics is universally recognized, and most states, and all foreign countries spend large sums annually in collecting and publishing such information. Their importance has always been appreciated by the legislature of California, and a law passed many years ago provides that the State Board of Agriculture shall "create and maintain a statistical department for the annual collection, compilation, and distribution of statistics relating to the production and resources of the State."

In 1911 an act was passed making a special appropriation of \$5,000 per annum for this purpose. Since that year a Statistical Report has been issued, covering the whole State, and by counties, giving as much detail, regarding the production and resources of the State, as the limited appropriation for this purpose will admit.

The reports for the years 1911 and 1912, contain statistics on most subjects since the State was organized in 1850; and those who require information earlier than 1890, will find it in those volumes, it being necessary to omit these earlier years in the report for 1914, in order to make room for later data.

The source of the statistics contained in these reports is the most trustworthy that can be obtained, and has been brought down to the latest possible date. Much has been obtained from hundreds of reports issued by the Federal and State governments, and from a large number of correspondents in every industry in all parts of the State.

There is such a great and growing demand for county statistics, that a supplement has been added this year, giving a brief description of each county, and a classified summary of its farm and orchard production; the extent and cost of irrigation, and the value of its minerals. This information, however, has had to be greatly condensed owing to the limited space available. By comparing these figures the leading products of each county can be readily ascertained, and thus enable any homeseeker to decide which part of the State will best meet his requirements.

Acknowledgment and an expression of high appreciation are due to the United States Department of Agriculture, Bureau of the Census, Department of Commerce, United States Geological Survey, Commissioner of Fisheries, Commissioner of Indian Affairs, General Land Office, National Conservation Commission, the Reclamation Service Department, the Commissioner of Internal Revenue and the Comptroller of the Currency, and the Bureau of Corporations.

The writer also desires to express his special obligations to Frank Adams, Irrigation Manager; George H. Willson, local forecaster of the



Weather Bureau at San Francisco; Henry S. Graves, United States Forester; and Frank J. Snow, deputy collector, Internal Revenue Department of San Francisco. For the description of varieties of wine grapes and wine-making, acknowledgments are due Professor F. T. Bioletti, the viticulturist of the University of California; and to the large number of correspondents who have supplied him with so much valuable information not obtainable elsewhere.

Among the State departments, valuable assistance has been received from the State Controller's Department, the State Water Commission, State Mining Bureau, State Dairy Bureau, and the splendid State Library at the Capitol.

GEORGE ROBERTSON,  
State Statistician.

Sacramento, California, July 1, 1915.

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For index see page 361.

## ERRATUM.

The total assessed value for San Francisco for 1912-1914, page 309, should read as follows:

1912 .....	\$605,141,664
1913 .....	624,182,130
1914 .....	647,456,025

## NOTES REGARDING CHANGES IN BOUNDARIES OF COUNTIES AND INCORPORATED PLACES.

*Colusa*—Part taken to form Glenn in 1891.

*Del Norte*—Part annexed to Siskiyou between 1880 and 1890.

*Fresno*—Part taken to form Madera in 1893, and part annexed to Kings in 1909.

*Glenn*—Organized from part of Colusa in 1891.

*Humboldt*—Part of Klamath annexed in 1874.

*Imperial*—Organized from part of San Diego in 1907.

*Kings*—Organized from part of Tulare in 1893, and part of Fresno annexed in 1909.

*Lake*—Part annexed to Napa in 1872.

*Los Angeles*—Part taken to form Orange in 1889.

*Madera*—Organized from part of Fresno in 1893.

*Modoc*—Organized from part of Siskiyou in 1874.

*Monterey*—Part taken to form San Benito in 1874.

*Napa*—Part of Lake annexed in 1872.

*Orange*—Organized from part of Los Angeles in 1889.

*Riverside*—Organized from parts of San Bernardino and San Diego in 1893.

*San Benito*—Organized from part of Monterey in 1874.

*San Bernardino*—Part taken to form part of Riverside in 1893.

*San Diego*—Part taken to form part of Riverside in 1893, part taken to form Imperial in 1907.

*Santa Barbara*—Part taken to form Ventura in 1871.

*Siskiyou*—Part taken to form Modoc in 1874; part of Klamath annexed in 1874, and part of Del Norte annexed between 1880 and 1890.

*Tulare*—Part taken to form Kings in 1893.

*Ventura*—Organized from part of Santa Barbara in 1871.

---

## INCORPORATED PLACES.

*Bakersfield*—Part of township 3 (Kern City) annexed in 1909.

*Berkeley*—Part of Oakland township annexed in 1906 and 1908.

*Fresno*—Part of township 3 annexed in 1910.

*Los Angeles*—Parts of Ballona, Burbank, Cahuenga, and San Antonio townships annexed between 1890 and 1900; part of Ballona township annexed in 1906; part of Willington township (including San Pedro City) annexed in 1909, and parts of Burbank and Cahuenga townships annexed in 1910.

*Oakland*—Parts of Brooklyn and Oakland townships annexed in 1909.

*Ontario*—Part of Ontario township annexed in 1901.

*Pasadena*—Parts of Pasadena township annexed in 1904 and 1906.

*San Leandro*—Part of Brooklyn township annexed in 1909.

## Counties and County Seats. Acreage and Population.

County	County seat	Elevation county seats	Approximate acreage	County population
Alameda	Oakland	36	468,480	246,131
Alpine	Markleeville	*	496,640	309
Amador	Jackson	1,975	384,640	9,086
Butte	Oroville	250	1,102,080	27,301
Calaveras	San Andreas	*	657,280	9,171
Colusa	Colusa	60	729,600	7,732
Contra Costa	Martinez	125	456,960	31,674
Del Norte	Crescent City	50	655,360	2,417
El Dorado	Placerville	1,875	1,121,920	7,492
Fresno	Fresno	293	3,808,000	75,657
Glenn	Willows	136	805,760	7,172
Humboldt	Eureka	64	2,325,760	33,857
Imperial	El Centro	—2	2,616,960	13,591
Inyo	Independence	3,907	6,412,160	6,974
Kern	Bakersfield	404	5,121,920	37,715
Kings	Hanford	249	741,760	16,230
Lake	Lakeport	*	817,920	5,526
Lassen	Susanville	4,175	2,899,840	4,802
Los Angeles	Los Angeles	293	2,602,880	504,131
Madera	Madera	272	1,351,680	8,368
Marin	San Rafael	*	398,560	25,114
Mariposa	Mariposa	*	956,320	3,953
Mendocino	Ukiah	620	2,299,920	23,929
Merced	Merced	173	1,276,800	15,148
Modoc	Alturas	4,460	2,446,720	6,191
Mono	Bridgeport	6,500	1,539,200	2,042
Monterey	Salinas	40	2,131,200	24,146
Napa	Napa	20	501,120	19,800
Nevada	Nevada City	2,580	623,360	14,955
Orange	Santa Ana	137	508,800	34,436
Placer	Auburn	1,360	392,800	18,237
Plumas	Quincy	3,400	1,660,160	5,259
Riverside	Riverside	851	4,633,600	34,696
Sacramento	Sacramento	71	629,120	67,806
San Benito	Hollister	284	890,880	8,041
San Bernardino	San Bernardino	1,054	12,900,480	56,706
San Diego	San Diego	93	2,701,440	61,685
San Francisco	San Francisco	207	27,520	416,912
San Joaquin	Stockton	24	926,720	50,731
San Luis Obispo	San Luis Obispo	201	2,133,760	19,383
San Mateo	Redwood City	8	286,080	26,585
Santa Barbara	Santa Barbara	130	1,753,600	27,738
Santa Clara	San Jose	95	849,920	83,539
Santa Cruz	Santa Cruz	20	278,400	26,140
Shasta	Redding	552	2,469,120	18,920
Sierra	Downieville	3,150	590,720	4,098
Siskiyou	Yreka	2,635	4,003,840	18,801
Solano	Fairfield	12	526,080	27,559
Sonoma	Santa Rosa	181	1,009,280	48,394
Stanislaus	Modesto	90	928,000	22,522
Sutter	Yuba City	57	389,120	6,328
Tehama	Red Bluff	307	1,851,520	11,401
Trinity	Weaverville	2,046	2,026,240	3,301
Tulare	Visalia	334	3,107,840	35,440
Tuolumne	Sonora	1,825	1,401,600	9,979
Ventura	Ventura	43	1,201,920	18,347
Yolo	Woodland	58	648,960	13,926
Yuba	Marysville	67	408,960	10,042
Totals			99,617,280	2,377,549
Estimated July 1, 1914				2,757,895

\*Not ascertained.

# THE STATE OF CALIFORNIA.

(Date of organization as a State, September 9, 1850.)

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## PART I.

### AREA AND POPULATION.

---

**Vacant Public Lands; Homesteads; Indian Reservations; Population by Counties; White and Colored Population; Incorporated Cities and Towns; Foreign-Born Population; Japanese Statistics; Population by Counties, 1850-1910; Color and Nativity of Farmers.**

The State of California is about 780 miles in length; its breadth varies from 150 to 350 miles and its total area is 158,297 square miles, of which 2,645 are water surface. In size it ranks second among the states of the Union, Texas being the only one to exceed it, and it is larger than the nine states of New York, New Jersey, Rhode Island, Massachusetts, Maine, Vermont, New Hampshire, Connecticut and Ohio, combined. The coast line is more than 1,000 miles long.

California has the highest and lowest land of the United States, the greatest variety of temperature and rainfall, and of products of the soil. The spread of irrigation and of intensive cultivation, and the increase of small farms during the last twenty years, have made California what it is today.

Agriculture had its beginning in wheat raising on great ranches, from fifty to several hundred thousand acres in extent; then deciduous orchard fruits and semi-tropical citrus fruits, successively.

Both the Spanish and Mexican governments made large grants of land to encourage settlement. These were used as cattle ranches exclusively, up to the time of the American occupation, and the exports consisted entirely of hides and tallow. These grants covered the valleys of the State to a large extent, and later were recognized and patented by the United States Government. About 500 of these claims, covering nearly nine million acres, were found to be valid.

Of the fifty-eight counties into which the State is now divided, the first twenty-seven were organized on the 18th of February, 1850; ten years later the number had increased to forty-two. In 1872, Ventura became the fiftieth county, and Imperial, the latest addition, was formed in 1907.

The land area of the State is about 99,898,880 acres, a great part of which is rough, mountainous country and desert, roughly classified as follows:

Land-surface		Water surface		Total	
Square miles	Acres	Square miles	Acres	Square miles	Acres
155,652	99,898,880	2,645	1,692,800	158,297	101,310,080

Approximately one half of the land surface of the State is under the control of the Federal Government, including 25,000,000 acres in forest reserves, and about an equal amount in public domain. In 1908 the amount of swamp and overflow land was 1,850,000 acres.

#### Indian Reservations—1900-1914.

##### Area—Unallotted.

1900		1912		1913		1914	
Acres	Square miles	Acres	Square miles	Acres	Square miles	Acres	Square miles
406,396	635	364,743	569	364,743	569	430,102	672

#### Indian Population—1890-1914.

1890	1900	1912	1914
12,108	11,431	17,517	15,226

#### Public and Indian Lands Entered for Cash—1902-1914.

(In acres.)

1902.....	655,966	1909.....	1,290,579
1903.....	957,507	1910.....	1,214,348
1904.....	986,253	1911.....	1,064,644
1905.....	1,032,758	1912.....	872,301
1906.....	809,811	1913.....	937,230
1907.....	579,294	1914.....	878,874
1908.....	766,932		

#### Original Homestead Entries—1902-1914.

(In acres.)

1902.....	315,784	1909.....	216,699
1903.....	300,968	1910.....	278,700
1904.....	266,317	1911.....	1,062,005
1905.....	262,973	1912.....	871,381
1906.....	211,567	1913.....	381,129
1907.....	173,438	1914.....	393,702
1908.....	235,816		



**Lands Certified or Patented on Account of Railroad Grants, 1902-1914.**  
(In acres.)

1902.....	9,587	1909.....	589,000
1903.....	76,089	1910.....	364,084
1904.....	347,258	1911.....	442,879
1905.....	426,951	1912.....	23,995
1906.....	318,986	1913.....	
1907.....	100,971	1914.....	1,040
1908.....	3,897		

**Vacant Public Lands—Areas Unappropriated and Unreserved—1890-1914.**  
(In acres.)

Year	Surveyed	Unsurveyed	Total
1890.....	38,750,564	15,172,154	53,922,718
1900.....	34,423,923	8,043,589	42,467,512
1912.....	17,671,839	5,343,499	23,015,338
1913.....	15,633,304	5,220,333	20,853,637
1914.....	16,183,344	4,719,408	20,902,752

**Total Public Lands Unappropriated and Unreserved, Surveyed and Unsurveyed—1914.**  
(In acres.)

Surveyed	Unsurveyed	Total land area
16,183,344	4,719,408	20,902,752

**REGULATIONS FOR OBTAINING VACANT PUBLIC LANDS.**

Practically all the vacant public land which is easily accessible has been already taken up, the areas now remaining being situated at a considerable distance from towns or villages, or in remote mountain valleys.

Before entry personal inspection of the lands should be made to ascertain if they are suitable, and when the applicant is satisfied on this point, entry can be made at the local land office. Information regarding vacant land in any district can be obtained on application to the register and receiver of the proper local land office, who will give full information regarding vacant land and the steps necessary to be taken in making entry. All vacant unappropriated public lands, non-mineral and non-saline in character, are subject to entry under the homestead laws. School lands have been withdrawn from sale until September 1, 1915.

**Homesteads.**

Any person who desires to obtain a homestead must be a citizen of the United States or have declared his intention to become such, over the age of twenty-one years, and not the proprietor of more than 160 acres of land in the United States; having selected his land, must file his application to enter in the United States land office for the district in which the land is situated. The application must be sworn to before the register or receiver of the land office, or before the county clerk of the county in which the land is situated, or before a United States commissioner for the district in which the land is situated.

Six months from the date of filing is allowed him to establish his bona fide residence on the homestead, which from that time to the date of his final proof must be his home to the exclusion of a home elsewhere.

The period of residence was reduced in June, 1912, from five to three years, from the time of establishing actual permanent residence upon the land.

He must show that he has cultivated one sixteenth of the area of the land, beginning with the second year from date of entry, and one eighth of the area the following year and until proof is submitted. A mere breaking of the soil will not meet the terms of the law, but such breaking and stirring of the soil must be accompanied by planting or the sowing of seed and tillage for crops other than native grasses. If his proof is satisfactory, and the Government, after investigation, finds that he has complied with the law in good faith, his entry will be clear-listed, and in due time he will receive a patent for the land.

He may, before three years, by paying the purchase price of the land, at the rate of \$1.25 per acre if it is situate outside the limits of a railroad grant, and at the rate of \$2.50 per acre if it is within the granted limits of a railroad, offer what is known as commutation proof, which must show at least fourteen months of actual and substantially continuous residence, with bona fide cultivation and improvement of the land, immediately prior to his application to make such proof.

The United States Land Office fees and commissions for filing on 160 acres are \$16.00 if the land is outside of the limits of a railroad grant; if inside the granted limits of a railroad they would amount to \$22.00. The fees and commissions are computed upon the acreage of the tract entered.

The final proof commissions on 160 acres would be \$6.00, if the land is outside a railroad grant, and \$12.00 if inside the limits of a grant. Added to this are fees ranging from \$2.00 to \$4.00, based upon the number of words of testimony in the proof. There are no other fees or commissions required of a homesteader by the Government.

Those who commute their homesteads must pay the purchase price of the land in addition to the above fees, except the final proof commission, which are not required on commuted homesteads.

The following tables, based on reports furnished by the district land offices, show, by states, territories, land districts, and counties, the area of unappropriated and unreserved public lands, surveyed and unsurveyed, and a brief description of the character of the vacant lands. The General Land Office can furnish no more definite information as to the location and character of the vacant lands than is found in said tables. Inquiries regarding the climate and soil in any given vicinity may be addressed to the Department of Agriculture.

A township diagram, showing only entered lands in any township, can be procured by sending \$1.00 to the register and receiver of the land office of that district. The diagram required should be specified by township and range number.

While the figures in the tables may not be absolutely correct, owing to liability to error in a work of such magnitude and to the necessity of making estimates of unsurveyed lands, it is believed that they afford a close approximation to the actual areas. The statement is intended to inform correspondents and the general public as to whether there is much or little public land in the several land states and territories and the land districts therein and in particular counties and localities.

In many counties only a few acres are reported as vacant. Neither the General Land Office nor the local land officers can furnish information as to the location of such tracts, but such information may be obtained from the records of the local land offices, which, when not in official use, are open to inspection by prospective home seekers or their agents.

## Dry Farming.

A regulation has recently been issued increasing the area of a homestead from 160 to 320 acres on land having no water supply, in Los Angeles, Imperial, San Diego, and Riverside counties.

Vacant Public Lands in California, by Counties, Unappropriated and Unreserved, July 1, 1914.

Counties	Land district	Surveyed acres	Unsurveyed acres	Total acres	Brief description of character of land
Alameda	San Francisco	1,760	1,510	3,288	Mountainous.
Alpine	Independence	10,581		10,581	Mountainous, grazing, mineral.
Alpine	Sacramento	18,760		18,760	Mountainous.
Amador	Sacramento	13,644		13,644	Hilly, grazing, mineral.
Butte	Sacramento	53,936		53,936	Hilly, grazing, mineral.
Calaveras	Sacramento	68,295		68,295	Hilly, grazing, timber, mineral.
Colusa	Sacramento	23,415	1,280	24,695	Hilly, grazing, timber, mineral.
Colusa	San Francisco	13,920		13,920	Mountainous.
Contra Costa	San Francisco	1,522		1,522	Mountainous.
Del Norte	Eureka	831		831	Sea beach, mountainous.
El Dorado	Sacramento	40,326		40,326	Hilly, grazing, timber, mineral, waste.
Fresno	Visalia	126,455	11,480	137,935	Mountainous, grazing.
Fresno	Sacramento	22,338	2,560	24,898	Hilly, grazing, timber, mineral.
Fresno	San Francisco	61,237	3,862	65,099	Mountainous.
Glenn	Sacramento	15,444		15,444	Hilly, grazing, timber, mineral.
Glenn	San Francisco	1,920		1,920	Mountainous.
Humboldt	Eureka	78,131	18,623	96,754	Mountainous, grazing, timber, farming, mineral.
Imperial	Los Angeles	748,899	212,560	961,459	Level desert.
Inyo	Independence	2,581,675	1,205,823	3,787,498	Agricultural, mountainous, arid.
Kern	Visalia	120,261	24,128	144,389	Mountainous, grazing.
Kern	San Francisco	34,039		34,039	Mountainous.
Kern	Independence	364,577	98,041	462,618	Grazing, mineral.
Kern	Los Angeles	51,455	14,347	65,802	Arid, level desert, mountainous.
Kings	San Francisco	2,431		2,431	Mountainous.
Kings	Visalia	30,894		30,894	Mountainous, grazing.
Lake	Sacramento	9,720		9,720	Mountainous.
Lake	San Francisco	146,877	12,185	159,062	Mountainous.
Lassen	Susanville	1,292,292	81,852	1,374,144	Desert, grazing, mineral.
Los Angeles	Los Angeles	565,496	139,632	705,128	Arid, level desert, mountainous.
Madera	Sacramento	17,278		17,278	Hilly, grazing.
Marin					None.
Mariposa	Sacramento	91,394		91,394	Hilly, grazing, mineral.
Mendocino*	Eureka	13,318		13,318	Mountainous, grazing, timber.
Mendocino	San Francisco	213,514	23,789	237,303	Mountainous.
Merced	Visalia	8,361		8,361	Mountainous, grazing.
Merced	Sacramento	14,612		14,612	Hilly, grazing, mineral.
Merced	San Francisco	25,475		25,475	Mountainous.
Modoc	Sacramento	30,212	6,080	36,292	Mountainous, grazing, timber.
Modoc	Susanville	309,350	15,824	325,174	Desert, grazing, mineral.
Mono	Independence	289,613	40,573	330,186	Grazing, mineral, agricultural.
Monterey	San Francisco	266,751	14,760	281,511	Mountainous.
Monterey	Visalia	1,920		1,920	Mountainous, grazing.
Napa	Sacramento	26,941		26,941	Mountainous, grazing.
Napa	San Francisco	48,379		48,379	Mountainous.
Nevada	Sacramento	45,563		45,563	Hilly, grazing, mineral.
Orange	Los Angeles	29,187	1,906	22,093	Mountainous, hilly.
Placer	Sacramento	25,102		25,102	Hilly, grazing, mineral.
Plumas	Susanville	14,207	2,386	16,573	Mountainous, grazing, mineral.
Riverside	Los Angeles	1,259,899	588,361	1,848,170	Mountainous, rolling and level desert.



**Vacant Public Lands in California, by Counties, Unappropriated and Unreserved  
July 1, 1914—Continued.**

Counties	Land district	Surveyed acres	Unsur- veyed acres	Total acres	Brief description of character of land
Sacramento	San Francisco	184,591	4,035	188,626	None.
San Benito	Visalia	8,586		8,586	Mountainous.
San Bernardino	Independence	2,204,899	1,198,237	3,403,136	Mountainous, grazing.
San Bernardino	Los Angeles	3,161,700	486,514	3,648,214	Mountainous, mineral, arid.
San Diego	Los Angeles	187,391	334,599	521,990	Mountainous, rolling and level desert.
San Francisco					Mountainous, rolling and level desert.
San Joaquin	San Francisco	2,941		2,941	None.
San Luis Obispo	San Francisco	193,052	5,332	198,384	Mountainous.
San Mateo					Mountainous.
Santa Barbara	Los Angeles	42,660	6,336	48,996	None.
Santa Barbara	San Francisco	17,651		17,651	Mountainous, rolling.
Santa Clara	San Francisco	64,294	4,924	69,218	Mountainous.
Santa Cruz					Mountainous.
Shasta	Sacramento	208,300	2,160	210,460	None.
Sierra	Susanville	39,500		39,500	Farming, grazing, timber, mineral.
Siskiyou	Eureka	574		574	Mountainous, grazing, min- eral.
Siskiyou	Sacramento	179,429	47,232	226,631	Agricultural.
Solano	San Francisco	2,007		2,007	Farming, grazing, timber, mineral.
Sonoma	San Francisco	47,928	4,361	52,289	Mountainous.
Stanislaus	Sacramento	20,996		20,996	Mountainous.
Stanislaus	San Francisco	26,479	2,926	29,405	Hilly, grazing.
Sutter					Mountainous.
Tehama	Sacramento	144,640	720	145,360	None.
Trinity	Eureka	30,016	2,560	32,576	Hilly, grazing, mineral.
Trinity	Sacramento	24,420	4,960	29,380	Mountainous, grazing, tim- ber, mineral.
Tulare	Visalia	4,463	50,868	55,331	Mountainous, grazing.
Tuolumne	Sacramento	33,919	1,600	35,519	Grazing, timber, mineral.
Ventura	Los Angeles	51,466	53,498	104,964	Mountainous, rolling.
Yolo	Sacramento	39,914		39,914	Hilly, grazing, timber.
Yolo	San Francisco	7,160		7,160	
Yuba	Sacramento	26,242		26,242	Hilly, grazing.
Totals		16,183,344	4,719,408	20,902,752	

**Counties With Vacant Public Lands in More Than One Land District.**

County	Surveyed, acres	Unsurveyed, acres	Total, acres
Alpine	29,341		29,341
Colusa	37,335	1,280	38,615
Fresno	210,030	17,902	227,932
Glenn	17,364		17,364
Kern	570,332	136,516	706,848
Kings	33,325		33,325
Lake	156,597	12,185	168,782
Mendocino	226,832	23,789	250,621
Merced	48,448		48,448
Modoc	339,562	21,904	361,466
Monterey	268,671	14,760	283,431
Napa	75,320		75,320
San Benito	193,177	4,035	197,212
San Bernardino	5,366,599	1,684,751	7,051,350
Santa Barbara	60,311	6,336	66,647
Siskiyou	180,003	47,232	227,235
Stanislaus	47,475	2,926	50,401
Trinity	54,436	7,520	61,956
Yolo	47,074		47,074

The following six counties have no unappropriated or unreserved public land:

Marin,	San Francisco,	Santa Cruz,
Sacramento,	San Mateo,	Sutter.

#### Indian Reservations.

The Indians were prominent in early California history, but their progress towards their present insignificance began far back in the Spanish period. It proceeded much more rapidly after the restraining influence of the Missions was removed, leaving them free to revert to savagery; and the downward progress of the race was fearfully accelerated during the mining period, when they were ambushed, depraved, and in large numbers killed. There have been no Indian wars in California's annals, but many butcheries.

The natives have declined exceedingly in number since 1834. They have always been mild-tempered, low, and unintelligent, and are today a poor and miserable race. They are called "Digger Indians," indiscriminately, although divided by a multiplicity of tongues.

The Indians of California are of at least fourteen different linguistic stocks. The Government, in dealing with the California tribes, did not follow the policy pursued with the wild Indians of the plains, and no treaties were made with them and no remuneration paid for lands acquired by white settlers. Large numbers are located on twenty-six reservations, namely: Hoopa Valley, Round Valley, Tule River, Yuma, and twenty-two Mission reservations.

Most of the Mission Indians are located on small reservations scattered over Riverside and San Diego counties. Among them are found representatives of a number of different tribes.

Round Valley reservation, embracing an area of 59 square miles, is situated in Mendocino County, and the remnants of nine small tribes are located here, who might well be classed as civilized. Tule River reservation in Tulare County contains 76 square miles, and contains the remainder of the once powerful Tule tribe. The Yuma reservation contains an area of 71 $\frac{1}{4}$  square miles, the Indians living on this section being the most primitive of the California tribes in manners and customs.

#### POPULATION OF CALIFORNIA.

The first settlement in California was made by the Spaniards in 1769, when the Franciscan Fathers founded a mission at San Diego. In 1776 the Mission Dolores was established where San Francisco now stands. California was under Spanish rule until 1822, when, at the termination of the Mexican revolution, it declared its allegiance to Mexico. For several years prior to 1846 large numbers of immigrants from the United States had been arriving in California, and in June of that year a revolt against Mexico was begun by the American settlers. In July and August the American flag was raised at Monterey, San Francisco, Sonoma, Sacramento, San Jose, San Diego, Santa Barbara, and Los Angeles, and other places.

The end of the war in Mexico took place January, 1847, and in February, 1848, California was ceded to the United States. From 1846 to



1849 California was under military and provisional rule by the United States. In October, 1849, a state constitution was adopted at Monterey, and on September 9, 1850, California became a state of the Union.

Population of California, 1850-1914.

Year	Population	Increase over preceding census	
		Number	Per cent
1850	92,597		
1860	379,994	287,397	310.4
1870	560,247	180,253	47.4
1880	864,694	304,447	54.3
1890	*1,213,398	348,704	40.3
1900	1,485,053	271,655	22.4
1910	2,377,549	892,496	60.1
1914	2,757,895		

\*Includes population of Indian reservations (5,268).

During each decade since 1850, the population of California has increased more rapidly than that of continental United States. The population of the State in 1910 was more than twenty-five times as large as in 1850, while the population of the continental United States was a little less than four times that in 1850.

#### Rank in Population of the Fifty States and Territories.

California ranked twenty-ninth in 1850, twenty-sixth in 1860, twenty-fourth in 1870 and 1880, twenty-second in 1890, twenty-first in 1900, and twelfth in 1910.

The Density of Population per Square Mile.

1850	1860	1870	1880	1890	1900	1910
.6	2.4	3.6	5.5	7.8	9.5	15.3

The density of population in California is low, the average number of persons to the square mile in 1910 being 15.3; in 1900, 9.5, and in 1890, 7.8. The average number per square mile for continental United States in 1910 was 30.9. This compares with 508.8 in Rhode Island, 418.8 in Massachusetts, 337.7 in New Jersey, 191.2 in New York, 342.4 in the United Kingdom, and 213.3 in India. The Australian Commonwealth has only 1.39 to the square mile, New Zealand 7.8, and Canada 1.4; 589 in Belgium, 436 in Holland, 188 in France, and 270 in Germany.

## Population of Cities and Places of 2,500 to 25,000 in 1910.

Population of cities of 25,000 and upward (8).		Cities of 2,500 to 6,000 (24).	
San Francisco .....	416,912	Richmond .....	6,802
Los Angeles .....	319,198	Petaluma .....	5,880
Oakland .....	150,174	San Luis Obispo .....	5,157
Sacramento .....	44,696	Alhambra .....	5,021
Berkeley .....	40,434	Hanford .....	4,829
San Diego .....	39,578	Grass Valley .....	4,520
Pasadena .....	30,291	Palo Alto .....	4,486
San Jose .....	28,946	Coalinga .....	4,199
Cities of 10,000 to 25,000 (13).		Colton .....	3,980
Fresno .....	24,892	Oroville .....	3,859
Alameda .....	23,383	Chico .....	3,750
Stockton .....	23,253	Salinas .....	3,736
Long Beach .....	17,809	Redding .....	3,572
Riverside .....	15,212	Corona .....	3,540
San Bernardino .....	12,779	Red Bluff .....	3,530
Bakersfield .....	12,727	San Leandro .....	3,471
Eureka .....	11,845	Redondo Beach .....	2,935
Santa Barbara .....	11,659	Glendale .....	2,746
Vallejo .....	11,340	Hayward .....	2,746
Santa Cruz .....	11,146	Porterville .....	2,696
Redlands .....	10,449	Anaheim .....	2,628
Pomona .....	10,207	Emeryville .....	2,613
		Roseville .....	2,608
		Oxnard .....	2,555

San Francisco, the largest city, has a population of 416,912, and Los Angeles, the second city, a population of 319,198. Oakland, with 150,174 inhabitants, is the only other city in the State having over 100,000 inhabitants. The following eight cities had over 25,000 inhabitants in 1910:

City	Population	Increase over preceding census	Per cent
Berkeley .....	40,434	27,220	206.0
Los Angeles .....	319,198	216,719	211.5
Oakland .....	150,174	83,214	124.3
Pasadena .....	30,291	21,174	232.2
Sacramento .....	44,696	15,414	52.6
San Diego .....	39,578	21,878	123.6
San Francisco .....	416,912	74,130	21.6
San Jose .....	28,946	7,446	34.6

The following summary gives twenty-two cities having a population of 8,000 and upwards on July 1, 1914, as compared with the years 1900 and 1910:

Cities	Population census June 1, 1900	Population census April 15, 1910	Estimated population July 1, 1914
Alameda -----	16,464	23,383	26,330
Bakersfield -----	*6,127	12,727	15,538
Berkeley -----	13,214	40,434	52,105
Eureka -----	7,327	11,845	13,768
Fresno -----	12,470	24,892	29,809
Long Beach -----	2,252	17,809	24,437
Los Angeles -----	†104,266	319,198	438,914
Oakland -----	66,960	150,174	183,002
Pasadena -----	9,117	30,291	40,880
Pomona -----	5,526	10,207	12,202
Redlands -----	4,797	10,449	12,856
Riverside -----	7,973	15,212	18,297
Sacramento -----	29,282	44,696	62,717
San Bernardino -----	6,150	12,779	15,603
San Diego -----	17,700	39,578	48,900
San Francisco -----	342,782	416,912	448,502
San Jose -----	21,500	28,946	37,086
Santa Ana -----	4,933	8,429	9,919
Santa Barbara -----	6,587	11,659	13,818
Santa Cruz -----	5,659	11,146	13,482
Stockton -----	17,506	23,253	25,702
Vallejo -----	7,965	11,340	12,777

\*Includes population of Kern City, annexed in 1909.

†Includes population of San Pedro City, annexed in 1909.

California has 58 counties, the population ranging from 309 in Alpine to 504,131 in Los Angeles County.

Two territorial changes have taken place since 1900: The eastern portion of San Diego County was taken into Imperial County in 1907, and part of Fresno County was annexed to Kings County in 1909.

Ten counties have decreased in population during the last decade, the rates of decrease ranging from 5.8 per cent in Mono County, to 39.3 in Alpine County, and a decrease from 125 in Mono County to 2,834 in Nevada County.

San Bernardino County, with 20,157 square miles, has the largest area; San Francisco County, co-extensive with San Francisco city, with 43 square miles and 9,695.6 persons per square mile, has the smallest area and the highest density. Alpine, Inyo, and Mono counties each average less than 1 person per square mile. In 1910 the urban territory of the State, or the cities and incorporated towns of 2,500 or more, contained 61.8 per cent of the total population, while 38.2 per cent lived in rural territory.

TABLE I.  
Population in California by Counties, 1850-1910.

Counties	1850	1860	1870	1880	1890	1900	1910
Alameda		8,927	24,237	62,976	93,864	130,197	246,131
Alpine			685	539	667	509	309
Amador		10,930	9,582	11,384	10,320	11,116	9,086
Butte	3,574	12,106	11,403	18,721	17,939	17,117	27,301
Calaveras	16,884	16,299	8,895	9,094	8,882	11,200	9,171
Colusa <sup>1</sup>	115	2,274	6,165	13,118	14,640	7,364	7,732
Contra Costa <sup>2</sup>		5,328	8,461	12,525	13,515	18,046	31,671
Del Norte <sup>3</sup>		1,993	2,022	2,584	2,592	2,408	2,417
El Dorado	20,057	20,562	10,309	10,683	9,232	8,986	7,492
Fresno <sup>4</sup>		4,605	6,336	9,478	32,036	37,862	75,657
Glenn <sup>1</sup>						5,150	7,172
Humboldt <sup>5</sup>		2,694	6,140	15,512	23,469	27,104	33,857
Imperial <sup>11</sup>							13,591
Inyo			1,956	2,928	3,544	4,377	6,974
Kern			2,925	5,601	9,808	16,480	37,715
Kings <sup>6</sup>						9,871	16,230
Klamath <sup>7</sup>		1,803	1,686				
Lake			2,969	6,596	7,101	6,017	5,526
Lassen			1,327	3,340	4,239	4,511	4,802
Los Angeles <sup>8</sup>	3,530	11,333	15,309	33,381	101,454	170,298	504,131
Madera <sup>4</sup>						6,364	8,368
Marin	323	3,334	6,903	11,324	13,072	15,702	25,114
Mariposa	4,379	6,243	4,572	4,339	3,787	4,720	3,956
Mendocino	55	3,967	7,545	12,800	17,612	20,465	23,929
Merced		1,141	2,807	5,656	8,085	9,215	15,148
Modoc				4,399	4,986	5,076	6,191
Mono			430	7,499	2,002	2,167	2,042
Monterey	1,872	4,739	9,876	11,302	18,637	19,380	24,146
Napa	405	5,521	7,163	13,235	16,411	16,451	19,800
Nevada		16,446	19,134	20,823	17,369	17,789	14,955
Orange <sup>9</sup>					13,589	19,696	34,436
Placer		13,270	11,357	14,232	15,101	15,786	18,237
Plumas		4,363	4,489	6,180	4,933	4,657	5,259
Riverside <sup>9</sup>						17,897	34,696
Sacramento	9,087	24,142	26,830	34,390	40,339	45,915	67,806
San Benito				5,584	6,412	6,633	8,041
San Bernardino <sup>9</sup>		5,551	3,988	7,786	25,497	27,929	56,706
San Diego <sup>9</sup>	798	4,324	4,951	8,618	34,987	35,090	61,665
San Francisco <sup>2</sup>		56,892	149,473	233,959	298,997	342,782	416,912
San Joaquin	3,647	9,435	21,050	24,349	28,629	35,452	50,731
San Luis Obispo	336	1,782	4,772	9,142	16,072	16,637	19,383
San Mateo		3,214	6,635	8,669	10,087	12,094	26,585
Santa Barbara	1,185	3,543	7,784	9,513	15,754	18,934	27,738
Santa Clara <sup>2</sup>		11,912	26,246	35,039	48,005	60,216	83,539
Santa Cruz	643	4,944	8,743	12,802	19,270	21,512	26,140
Shasta	378	4,360	4,173	9,492	12,133	17,318	18,920
Sierra		11,387	5,619	6,623	5,051	4,017	4,098
Siskiyou <sup>10</sup>		7,629	6,848	8,610	12,163	16,962	18,801
Solano	580	7,169	16,871	18,475	20,946	24,143	27,599
Sonoma	560	11,867	19,819	25,926	32,721	38,480	48,394
Stanislaus		2,245	6,499	8,751	10,040	9,550	22,522
Sutter	3,444	3,390	5,030	5,159	5,469	5,886	6,328
Tehama		4,044	3,587	9,301	9,916	10,996	11,401
Trinity	1,635	5,125	3,213	4,999	3,719	4,383	3,301
Tulare <sup>6</sup>		4,638	4,533	11,281	24,574	18,375	35,440
Tuolumne	8,351	16,229	8,150	7,848	6,082	11,166	9,979
Ventura				5,073	10,071	14,367	18,347
Yolo	1,086	4,716	9,899	11,772	12,684	13,618	13,926
Yuba	9,673	13,668	10,851	11,284	9,636	8,620	10,042
Totals	92,597	379,994	560,247	864,694	1,208,130	1,485,053	2,377,549

<sup>1</sup>Glenn organized from part of Colusa in 1892. <sup>2</sup>The returns for 1850 for Contra Costa and Santa Clara were lost, and those for San Francisco were destroyed by fire. <sup>3</sup>Part annexed to Siskiyou between 1880 and 1890. <sup>4</sup>Madera organized from part of Fresno in 1893, and another part of Fresno County annexed to Kings in 1909. <sup>5</sup>Part of Klamath annexed in 1874. <sup>6</sup>Kings organized from part of Tulare in 1893, enlarged by annexation of part of Fresno County in 1909. <sup>7</sup>Annexed to Humboldt and Siskiyou in 1874. <sup>8</sup>Orange organized from part of Los Angeles in 1889. <sup>9</sup>Riverside organized from part of San Bernardino and San Diego in 1893. <sup>10</sup>Part of Klamath annexed in 1874, and part of Del Norte annexed between 1880 and 1890. <sup>11</sup>Organized from part of San Diego County in 1907.



TABLE II.

## White and Colored Population by Counties, 1900.

Counties	Population, 1900				
	White	Negro	Indian	Chinese	Japanese
Alameda	125,432	1,334	71	2,211	1,149
Alpine	359	3	142	5	-----
Amador	10,805	28	130	153	-----
Butte	15,733	106	201	712	365
Calaveras	10,879	69	100	148	4
Colusa	6,840	76	121	274	53
Contra Costa	17,088	47	8	627	276
Del Norte	2,138	1	269	-----	-----
El Dorado	8,513	99	138	206	30
Fresno	34,570	399	520	1,775	598
Glenn	4,867	18	24	227	14
Humboldt	25,359	12	1,728	5	-----
Imperial	-----	-----	-----	-----	-----
Inyo	3,355	15	940	67	-----
Kern	14,974	203	344	906	48
Kings	9,171	76	51	417	156
Lake	5,492	12	428	82	3
Lassen	4,099	1	381	28	2
Los Angeles	163,975	2,841	69	3,209	204
Madera	5,664	51	401	229	19
Marin	14,999	137	25	489	52
Mariposa	4,410	35	173	102	-----
Mendocino	18,833	38	1,353	218	23
Merced	8,780	31	4	357	43
Modoc	4,560	7	503	6	-----
Mono	1,656	1	389	120	1
Monterey	17,707	80	26	857	710
Napa	15,857	29	18	541	6
Nevada	17,024	70	48	632	15
Orange	19,459	98	-----	136	3
Placer	14,494	35	74	1,050	133
Plumas	4,018	3	444	192	-----
Riverside	16,421	254	809	316	97
Sacramento	40,917	511	24	3,254	1,209
San Benito	6,456	57	36	69	15
San Bernardino	26,605	216	572	388	148
San Diego	32,048	406	2,197	414	25
San Francisco	325,378	1,654	15	13,954	1,781
San Joaquin	32,941	322	1	1,875	313
San Luis Obispo	16,389	77	1	154	16
San Mateo	11,652	89	1	306	46
Santa Barbara	18,256	33	72	459	114
Santa Clara	57,934	251	9	1,738	284
Santa Cruz	20,515	81	67	614	235
Shasta	16,131	203	862	102	20
Sierra	3,669	7	31	309	1
Siskiyou	15,646	38	480	790	8
Solano	22,267	101	2	903	870
Sonoma	37,385	32	316	599	148
Stanislaus	9,223	61	25	236	5
Sutter	5,451	34	20	226	155
Tehama	9,878	147	99	729	143
Trinity	3,803	9	234	336	1
Tulare	17,709	73	175	370	48
Tuolumne	10,804	53	149	158	2
Ventura	13,826	34	5	408	94
Yolo	12,662	172	28	346	410
Yuba	7,651	170	24	719	56
Totals	1,402,727	11,045	15,377	45,753	10,151



TABLE III.

## White and Colored Population by Counties, 1910.

Counties	White	Negro	Indian	Chinese	Japanese	Total*
Alameda	234,520	3,634	41	4,588	3,266	246,131
Alpine	213		94	1	1	309
Amador	8,838	2	143	101	2	9,086
Butte	25,684	122	298	572	295	27,301
Calaveras	8,941	17	161	49	3	9,171
Colusa	7,155	50	169	218	140	7,732
Contra Costa	29,911	67	3	550	1,009	31,674
Del Norte	2,078	1	337	1		2,417
El Dorado	7,198	28	177	58	31	7,492
Fresno	71,215	474	313	1,377	2,233	75,657
Glenn	6,915	15	32	129	33	7,127
Humboldt	32,153	40	1,652	6	6	33,857
Imperial	12,582	65	682	32	217	13,591
Inyo	6,020	21	792	100	41	6,974
Kern	36,007	369	220	841	273	37,715
Kings	15,366	172	32	358	293	16,230
Lake	5,055	11	433	24	3	5,526
Lassen	4,372	1	410	13	6	4,862
Los Angeles	483,478	9,424	97	2,602	8,461	504,131
Madera	7,650	56	419	211	32	8,368
Marin	24,186	145	26	555	199	25,114
Mariposa	3,674	18	192	69	3	3,956
Mendocino	22,310	31	1,170	263	77	23,929
Merced	14,697	75		278	98	15,148
Modoc	5,629	4	546	11	1	6,191
Mono	1,621		386	21	14	2,042
Monterey	22,135	107	29	575	1,121	24,146
Napa	19,437	48	6	205	103	19,800
Nevada	14,558	14	52	309	22	14,955
Orange	33,589	97	21	83	641	34,436
Placer	16,572	55	102	612	862	18,237
Plumas	4,629	5	380	105	20	5,259
Riverside	31,613	518	1,590	187	765	34,696
Sacramento	61,040	631	62	2,143	3,874	67,806
San Benito	7,643	26		66	286	8,041
San Bernardino	54,153	642	573	284	946	56,706
San Diego	58,514	684	1,516	430	520	61,665
San Francisco	400,014	1,642	46	10,582	4,518	416,912
San Joaquin	46,339	307	8	1,968	1,804	50,731
San Luis Obispo	18,693	77	14	165	434	19,383
San Mateo	25,821	67	1	309	358	26,585
Santa Barbara	26,282	108	45	440	863	27,738
Santa Clara	79,849	262	16	1,064	2,299	83,539
Santa Cruz	25,159	83	15	194	689	26,140
Shasta	17,873	159	756	88	42	18,920
Sierra	3,910		54	117	17	4,098
Siskiyou	17,413	29	1,109	226	24	18,801
Solano	25,432	250	1	811	894	27,559
Sonoma	47,167	43	340	287	554	48,394
Stanislaus	22,129	89	30	161	113	22,522
Sutter	6,012	10	18	79	134	6,328
Tehama	10,809	91	94	309	98	11,401
Trinity	2,903	8	227	163		3,301
Tulare	34,159	190	204	257	615	35,440
Tuolumne	9,698	14	186	75	6	9,979
Ventura	17,132	64	3	235	872	18,347
Yolo	12,618	280	32	198	789	13,926
Yuba	8,909	203	16	493	336	10,042
Totals	2,259,672	21,645	16,371	36,248	41,356	2,377,549

\*Not including 1,948 Hindus, 304 Koreans, and 5 Filipinos.

TABLE IV.

## Foreign-born Population in California, 1860-1900.

Country of birth	1860	1870	1880	1890	1900
Africa -----	12	48	86	139	163
Asia <sup>1</sup> -----	346	56	16	164	235
Atlantic islands -----	121	943	3,356	2,587	3,515
Australia -----	896	1,593	2,350	1,905	2,269
Austria -----	727	1,078	1,948	3,687	5,356
Belgium -----	299	291	1,092	663	785
Bohemia -----		90	239	243	504
Canada -----	5,437	10,660	18,889	26,028	29,818
Central America -----	100	124	188	309	481
China -----	34,935	48,790	73,548	71,066	40,262
Cuba -----		45	182		93
Denmark -----	1,328	1,837	3,748	7,764	9,040
England -----	12,227	17,774	24,722	35,503	35,746
Europe <sup>2</sup> -----	33	56	109	194	59
Finland -----					2,763
France -----	8,462	8,068	9,550	11,855	12,256
Germany -----	20,919	29,701	42,532	61,472	72,449
Greece -----	93	97	170	259	372
Holland -----	439	452	694	760	1,015
Hungary -----		102	216	369	799
India -----		63	155	202	263
Ireland -----	33,147	54,421	62,962	63,138	44,476
Italy -----	2,987	4,660	7,537	15,495	22,777
Japan -----		32	133	1,224	10,264
Luxemburg -----		11	97	24	42
Mexico -----	9,150	9,339	8,648	7,164	8,086
Norway -----	715	1,000	1,765	3,702	5,060
Pacific islands <sup>3</sup> -----	334	93	173	1,296	1,089
Poland -----	730	804	1,026	914	1,320
Portugal -----	1,459	2,508	4,705	9,859	12,068
Roumania -----					73
Russia -----	260	540	1,013	3,140	3,421
Scotland -----	3,670	4,949	6,465	9,299	9,467
South America -----	2,250	1,940	1,797	1,366	1,137
Spain -----	470	405	572	836	896
Sweden -----	1,405	1,944	4,209	10,923	14,549
Switzerland -----	1,714	2,927	5,308	9,743	10,974
Turkey -----	13	17	36	202	649
Wales -----	1,262	1,517	1,920	1,860	1,949
West Indies <sup>4</sup> -----	304	349	528	670	372
Other countries -----	181	289	20	8	260
Born at sea -----		142	170	277	358
Totals -----	146,528	209,831	292,874	366,309	<sup>5</sup> 367,240

<sup>1</sup>Except China, Japan, and India. <sup>2</sup>Not otherwise specified. <sup>3</sup>Except Philippine Islands. <sup>4</sup>Except Cuba and Porto Rico. <sup>5</sup>Of this number (367,240) 123,725 were English speaking from United Kingdom, Australia, and Canada.

TABLE V.  
Foreign-born White Population in California in 1910.

Country*	White population of foreign birth or foreign parentage			
	Foreign born	Native, both parents foreign born	Native, one parent foreign born	Total
Atlantic islands -----	2,860	2,830	973	6,663
Austria -----	17,163	5,576	2,839	25,578
British:				
England -----	48,667	26,096	40,725	115,488
Ireland -----	52,475	69,988	37,216	159,679
Scotland -----	13,694	7,443	11,021	32,158
Wales -----	2,415	1,961	2,559	6,935
Australia -----	3,296	207	2,064	5,567
Canada—French -----	3,109	1,755	3,202	8,066
Canada—other -----	41,445	11,921	35,553	88,919
Total British -----	165,101	119,371	132,340	416,812
Denmark -----	14,208	8,244	4,043	26,495
Finland -----	6,156	2,535	301	8,992
France -----	17,390	8,836	6,387	32,613
Germany -----	76,305	85,362	44,715	206,382
Greece -----	7,918	269	211	8,398
Holland -----	2,304	1,078	1,035	4,417
Hungary -----	3,301	985	366	4,652
Italy -----	63,601	32,651	6,366	102,618
Mexico -----	33,444	10,787	6,806	51,037
Norway -----	9,952	4,666	2,528	17,146
Portugal -----	22,427	21,794	7,398	51,619
Russia -----	16,607	8,946	1,633	27,186
Spain -----	4,218	1,180	1,045	6,443
Sweden -----	26,210	14,797	5,464	46,471
Switzerland -----	14,520	8,861	4,632	28,018
Turkey -----	4,521	1,679	132	6,332
All other -----	9,044	†62,917	3,306	†75,267
Totals -----	517,250	403,364	232,525	1,153,139

\*Foreign country in which born; or if native, in which parents were born.

†Exclusive of 161 whites and 5,107 Indians not distributed by state of birth.

NOTE.—The number of British born have increased in ten years from 123,725 to 416,812, an increase of 293,087.

## COMPARATIVE SUMMARY.

## Color, Nativity, and Parentage, 1890-1910.

The State	1890	1900	1910
White -----	1,111,833	1,402,727	2,259,672
Negro -----	11,322	11,045	21,645
Indian -----	16,624	15,377	16,371
Chinese -----	72,472	45,753	36,248
Japanese -----	1,147	10,151	41,356
All other* -----			2,257
Totals -----	1,213,398	1,485,053	2,377,549
Total native -----	847,089	1,117,813	1,791,117
Total foreign born -----	366,309	367,240	586,432
Total native white -----	818,280	1,086,222	1,742,422
Native parentage -----	497,890	644,428	1,106,533
Foreign parentage -----	217,979	282,830	403,364
Mixed parentage -----	102,411	158,964	232,525
Foreign-born white -----	293,553	316,505	517,250

\*Includes 1,948 Hindus, 304 Koreans, and 5 Filipinos.

## JAPANESE STATISTICS.

In March, 1912, the Japanese owned 331 farms, containing 12,726 acres, the assessed value of the land being \$178,990, the improvements \$130,615, or a total of \$609,605.

The number of town lots held by Japanese was 218, the assessed value, \$136,955, and the improvements \$98,720, or a total of \$235,675.

The information gathered in accordance with an act of the legislature (chapter 134, of 1909) shows that there were 2,548 business establishments, the capital invested in most cases being very small, 68.7 per cent of the total having a capital of less than \$1,000. The total aggregate capital invested, exclusive of that represented by banks, was \$4,075,226. The total annual business transacted by these establishments amounted to \$16,114,407, of which about 37 per cent was carried on with white persons. The total annual rent paid by these Japanese business houses was over \$900,000.

TABLE VI.

## Japanese Farmers in 1912.

(Compiled from the Report of the Bureau of Labor Statistics.)

Counties	Owners		Total assessed value	Number of town lots	Total assessed value	Farm land leases	
	Number of farms	Acres				Number	Acreage*
Alameda	6	47	\$63,200	36	\$49,300	4	96
Alpine							
Amador							
Butte							
Calaveras							
Colusa							
Contra Costa	2	31	12,380	3	21,050	1	284
Del Norte							
El Dorado							
Fresno	31	4,776	229,020	61	75,695	11	45
Glenn				3	1,750		
Humboldt							
Imperial						7	848
Inyo							
Kern	5	100	1,170	4	2,565		
Kings	13	577	16,320	4	2,175		
Lake							
Lassen							
Los Angeles	27	459	33,800	23	3,560	60	2,418
Madera	4	100	3,600				
Marin							
Mariposa							
Mendocino							
Merced	14	1,049	42,095	2	1,785		
Modoc							
Mono							
Monterey	2	8	1,280	1	150		
Napa	1	160	2,300	18	1,050	15	1,741
Nevada	1	320	820			1	
Orange	5	41	4,190	1	1,200		
Placer	26	732	20,335			7	292
Plumas				4	1,825	23	1,007
Riverside	2	18	1,375	2	600		
Sacramento	17	444	23,290	19	44,200	1	40
San Benito	3	60	2,050			87	4,682
San Bernardino	12	150	11,810			5	280
San Diego				2	285		
San Francisco						1	10
San Joaquin	12	652	24,845	5	5,470		
San Luis Obispo				3	1,000	18	1,787
San Mateo	1	5	1,000				
Santa Barbara				7	3,500	1	3
Santa Clara	4	90	15,365			7	327
Santa Cruz	3	330	9,065	1	4,750	35	904
Shasta	1	82	555	4	3,635	6	220
Sierra							
Siskiyou				1	300		
Solano	11	814	23,230				
Sonoma	2	66	5,900	2	550	5	565
Stanislaus	2	40	1,625	3	3,600	1	
Sutter	1	16	680			1	180
Tehama						2	452
Trinity							
Tulare	15	1,053	47,525				
Tuolumne				2	2,150	2	60
Ventura	2	24	670				
Yolo	5	320	8,830	6	2,830	2	77
Yuba	1	162	1,280			11	1,278
Totals	331	12,726	\$609,605	218	\$235,675	282	17,596

\*In 32 instances the acreage was not reported. Leases recorded from November 1, 1909, to December 1, 1912.

NOTE.—These figures show only the leases recorded in the offices of the various recorders, and do not represent all the land leased to Japanese, as most of the share leases are not recorded.



Comparative Summary.

	1909	1912
Owners:		
Acreage -----	10,791	12,726 + 1,935
Total assessed value-----	\$397,298	\$609,605 + \$212,307
Number of town lots-----		218
Total assessed value-----	\$174,694	\$235,675 + \$60,981
Leases:		
Number -----	319	282
Acreage -----	20,294	17,596

TABLE VII.

## Color and Nativity of Farmers in 1910.

Counties	Native white	Foreign-born white	Negro and other non-white	Total number of farmers
Alameda	866	1,490	66	2,422
Alpine	24	16	2	42
Amador	387	145	5	537
Butte	1,204	274	22	1,500
Calaveras	420	207	5	632
Colusa	547	112	8	667
Contra Costa	712	715	38	1,465
Del Norte	62	46	6	114
El Dorado	551	150	15	716
Fresno	3,968	2,033	244	6,245
Glenn	502	160	1	663
Humboldt	856	614	64	1,534
Imperial	1,077	143	102	1,322
Inyo	313	98	27	438
Kern	818	298	51	1,167
Kings	1,312	475	50	1,837
Lake	478	122	3	603
Lassen	412	77	13	502
Los Angeles	5,682	1,613	624	7,919
Madera	419	131	23	573
Marin	138	360		498
Mariposa	253	63	14	330
Mendocino	966	363	27	1,356
Merced	1,054	780	22	1,856
Modoc	639	80	17	736
Mono	44	42	5	91
Monterey	933	676	49	1,658
Napa	1,006	527	4	1,537
Nevada	349	184	11	544
Orange	2,362	718	85	3,165
Placer	619	263	180	1,062
Plumas	155	63	3	221
Riverside	2,044	517	127	2,688
Sacramento	885	485	231	1,601
San Benito	616	289	16	921
San Bernardino	2,365	567	17	2,949
San Diego	1,591	586	121	2,298
San Francisco	30	118	9	157
San Joaquin	2,179	977	130	3,286
San Luis Obispo	929	767	18	1,714
San Mateo	258	390	17	665
Santa Barbara	874	448	33	1,355
Santa Clara	2,725	1,860	146	4,731
Santa Cruz	851	588	27	1,466
Shasta	825	151	34	1,010
Sierra	77	32	1	110
Siskiyou	852	218	44	1,114
Solano	620	449	74	1,143
Sonoma	2,737	2,012	23	4,772
Stanislaus	1,879	801	7	2,687
Sutter	696	154	23	873
Tehama	799	188	19	1,006
Trinity	235	55	18	308
Tulare	3,253	707	61	4,021
Tuolumne	241	143	2	386
Ventura	965	307	21	1,293
Yolo	934	255	66	1,255
Yuba	338	91	7	436
Totals	58,926	26,193	3,078	88,197

## PART II.

# AGRICULTURE.

### FARMS AND FARMERS.

#### Number and Value of Farms, Size of Farms, Mortgage Debt on Farms, Improved and Unimproved Farm Land. Irrigation.

#### DOMESTIC ANIMALS.

Horses, Cattle, Sheep, Swine, 1874-1914; Domestic Animals by Counties; Poultry, Dairy Products; Bees, Honey and Wax; Wool and Mohair.

California ranks second in land area and twelfth in population among the states of continental United States. The soils vary from heavy clay like "adobe" soils to sandy and gravelly loams.

Over one-fourth (28 per cent) of the land area of the State is in farms. The average value of farm land per acre for the State as a whole is \$47.16. Between 1900 and 1910 there was an increase of 21.6 per cent in the number of farms as compared with an increase of 60.1 per cent in the population.

During the same period farm property, which includes land, buildings, implements and machinery, and live stock (domestic animals, poultry and bees), increased in value \$818,167,000, or 102.7 per cent.

The average value of a fully equipped farm is \$18,308, an increase of \$7,328 as compared with the average in 1900. The average value per acre of land alone rose from \$21.87 in 1900 to \$47.16 in 1910.

There are 58,926 native white farmers in the State; 26,193 foreign born, white, and 3,078 negro and other non-whites, or a total of 88,197.

In addition to 11,389,894 acres of improved land in farms, there is 4,541,767 acres of woodland, and 11,999,783 acres of other unimproved lands in farms, or a total of 27,931,444 acres.

Number, Area, and Value of Farms in 1900 and 1910.

	1900	1910	Increased per cent
Population .....	1,485,053	2,377,549	60.1
Number of farms .....	72,542	88,197	21.6
Land area of State, acres .....	99,898,880	*99,617,280	-----
Land in farms, acres .....	28,828,951	27,931,444	†3.1
Improved land in farms, acres .....	11,958,837	11,389,894	†4.8
Average acre per farm .....	397.4	316.7	†20.3
Total value of farm property .....	\$796,527,955	\$1,614,694,584	102.7
Land .....	630,444,960	1,317,195,448	108.9
Buildings .....	77,468,000	133,406,040	72.2
Implements and machinery .....	21,311,670	36,493,158	71.2
Domestic animals, poultry and bees .....	67,303,325	127,599,938	89.6
Average value of all property per farm .....	\$10,980.00	\$18,308.00	66.7
Average value of land per acre .....	21.87	47.16	115.6

\*Due to the formation of the Salton Sea.

†Decreased. This apparent falling off is due in part to errors in the tabulation in the census of 1900, when certain tracts included in forest reserves in 1910 were included in farm land in 1900.

## Summary of Populations and Farms, 1850-1910.

Year	Population	Number of farms	Land on farms		Per cent of land area in farms
			All land	Improved	
1850	92,597	872	3,893,985	32,454	3.9
1860	379,994	18,716	8,730,034	2,468,034	8.8
1870	560,247	23,724	11,427,105	6,218,133	11.5
1880	864,694	35,934	16,593,742	10,669,698	16.7
1890	1,213,398	52,894	21,427,293	12,222,839	21.5
1900	1,485,053	72,542	28,828,951	11,958,837	28.9
1910	2,377,549	88,197	27,931,444	11,389,894	28.0

## Value of Farm Property.

The total wealth in the form of farm property is \$1,614,695,000, of which 89.8 per cent is contributed by land and buildings, 7.9 per cent by live stock, and 2.3 per cent by implements and machinery. The value of land and buildings is \$1,450,601,000, being a little more than double that for 1900. In 1850 the value was only \$3,874,000.

The value of the different classes of farm property in 1910 was as follows:

Farm property	Value
Land	\$1,317,195,448
Buildings	133,406,040
Implements and machinery	36,493,158
Domestic animals	123,024,652
Poultry	3,844,526
Bees	729,793
Total	\$1,614,694,584

## Summary of Values, 1850-1910.

Year	Total value	Land and buildings	Implements and machinery	Domestic animals, poultry, and bees
1850	\$7,328,582	\$3,874,041	\$103,483	\$3,351,058
1860	86,870,327	48,726,804	2,558,506	35,585,017
1870	184,521,470	141,240,028	5,316,690	37,964,752
1880	*311,997,443	262,051,282	8,447,744	*41,498,417
1890	*777,381,767	697,116,630	14,689,710	*65,575,427
1900	796,527,955	707,912,960	21,311,670	67,303,325
1910	1,614,694,584	1,450,601,488	36,493,158	127,599,938

\*Includes estimated value of range animals.



## Size of Farms.

In California there is a great area of semiarid land utilized for grazing purposes only or left unutilized. Upon such lands are located many very large farms or ranches, and these explain the high average acreage per farm. Farms other than those used almost exclusively for grazing are not on the average unusually large, as compared with the average in other states. The average size of the California farm is 316.7 acres, compared with 4,465.6 in 1850; 466.4 acres in 1860; 481.7 in 1870, since which time it has decreased continually.

Summary of Farms by Acreage in California, 1850-1910.

Acreage	1850	1860	1870	1880
Under 3 acres.....				143
3 acres and under 10.....		829	2,187	1,064
10 acres and under 20.....		1,102	1,086	1,430
20 acres and under 50.....		2,344	3,064	3,475
50 acres and under 100.....		2,428	3,224	3,969
100 acres and under 500.....		6,541	12,248	20,214
500 acres and under 1,000.....		538	1,202	3,108
1,000 acres and over.....		262	713	2,531
Total number of farms.....	872	18,716	23,724	35,934
Average acres per farm.....	4,465.6	466.4	481.7	461.8

Acreage	1890	1900	1910
Under 3 acres.....	401	1,492	1,269
3 acres and under 10.....	2,827	5,354	9,344
10 acres and under 20.....	4,010	8,236	11,932
20 acres and under 50.....	7,691	13,110	20,614
50 acres and under 100.....	5,796	8,067	10,801
100 acres and under 500.....	24,531	26,201	24,566
500 acres and under 1,000.....	4,367	5,329	5,119
1,000 acres and over.....	3,672	4,753	4,693
Total number of farms.....	53,295	72,542	88,197
Average acres per farm.....	405.0	397.4	316.7

## Size of Farms, Improved and Unimproved, and Value, 1850-1910.

Acreage	1850	1860	1870	1880
Total number of acres in farms----	3,893,985	8,730,034	11,427,105	16,593,742
Acres of improved land-----	32,454	2,468,034	6,218,133	10,669,698
Acres of unimproved land-----	3,861,531	6,262,000	5,208,972	5,924,044
Per cent of farm land improved----	0.8	28.3	54.4	64.3

Acreage	1890	1900	1910
Total number of acres in farms-----	21,427,293	28,828,951	27,931,444
Acres of improved land-----	12,222,839	11,958,837	11,389,894
Acres of unimproved land-----	9,204,454	16,870,114	16,541,550
Per cent of farm land improved-----	57.6	41.5	40.8

TABLE  
Number and Size of Farms

Counties	Under 3 acres	3 to 10 acres	10 to 20 acres	20 to 50 acres	50 to 100 acres
Alameda	148	589	405	424	204
Alpine				1	3
Amador	2	13	19	41	52
Butte	2	116	186	321	143
Calaveras		25	14	48	45
Colusa	1	31	35	85	42
Contra Costa	18	118	127	221	158
Del Norte		2	6	9	13
El Dorado		26	21	60	88
Fresno	6	267	598	3,240	951
Glenn		40	33	106	65
Humboldt	10	78	107	280	245
Imperial	51	46	56	182	227
Inyo	2	28	28	55	75
Kern	11	46	57	320	173
Kings	7	69	159	643	377
Lake	1	10	38	85	80
Lassen		9	4	12	32
Los Angeles	438	2,125	1,820	1,709	698
Madera		13	21	76	23
Marin	6	35	54	36	30
Mariposa		1	4	4	21
Mendocino		42	61	166	151
Merced	1	86	213	694	295
Modoc	5	18	13	21	44
Mono		3	1	1	4
Monterey	11	69	71	182	185
Napa	14	136	223	355	226
Nevada	7	61	36	77	69
Orange	28	531	802	1,043	351
Placer	2	52	109	289	206
Plumas		6	5	9	12
Riverside	42	462	596	614	262
Sacramento	12	167	237	321	170
San Benito	7	87	83	118	93
San Bernardino	76	567	918	703	278
San Diego	20	236	345	414	269
San Francisco	69	50	11	15	7
San Joaquin	9	204	531	797	397
San Luis Obispo	7	65	80	179	187
San Mateo	46	81	55	112	61
Santa Barbara	17	130	140	212	164
Santa Clara	68	773	1,186	1,317	562
Santa Cruz	18	226	198	384	293
Shasta	6	16	29	103	111
Sierra	1	6	3	4	5
Siskiyou	1	21	36	88	98
Solano	6	45	60	198	170
Sonoma	40	916	890	1,040	522
Stanislaus	13	153	319	1,046	439
Sutter		57	101	142	91
Tehama	7	34	119	198	102
Trinity	6	9	9	24	23
Tulare	9	171	390	1,247	647
Tuolumne	1	4	15	28	27
Ventura	13	87	120	199	214
Yolo	4	53	115	283	166
Yuba		13	20	33	34
Totals	1,269	9,324	11,932	20,614	10,680

## VIII.

in 1910, by Counties.

100 to 175 acres	175 to 260 acres	260 to 500 acres	500 to 1,000 acres	1,000 acres and over	Total number of farms	Cost of fertilizers	
						1900	1910
238	116	163	91	44	2,422	\$15,180	\$17,723
4	9	14	3	8	42		
145	64	105	58	38	537	2,140	208
220	127	171	116	98	1,500	21,150	24,935
171	60	127	80	62	632	840	694
90	30	129	104	120	667	8,640	266
256	147	206	140	74	1,465	10,990	1,879
31	11	23	10	9	114		77
212	100	122	52	35	716	2,010	467
609	142	202	119	111	6,245	39,870	34,491
79	31	101	89	119	663	60	906
334	118	147	84	131	1,534	8,750	1,680
400	98	201	51	10	1,322		681
113	41	54	22	20	438	90	221
292	55	116	82	85	1,167	4,420	1,430
287	77	133	42	43	1,837	920	790
144	60	84	53	48	603	170	40
117	51	130	84	63	502	8,700	63
531	192	207	114	85	7,919	200,310	669,152
151	27	66	59	137	573	300	608
35	40	72	111	79	498	4,000	35
97	15	101	51	36	330	420	60
334	131	193	124	154	1,356	5,330	866
165	46	89	100	167	1,856	4,730	3,609
229	68	171	92	75	736	4,280	5
27	12	16	10	17	91	500	
263	127	282	225	243	1,658	2,920	1,252
223	92	112	84	72	1,537	12,690	1,290
88	53	84	41	28	544	5,430	932
175	60	86	52	37	3,165	16,520	71,118
174	69	75	50	36	1,062	13,680	7,786
45	19	37	46	42	221	70	260
262	99	166	104	81	2,688	203,010	323,568
223	96	173	111	91	1,601	2,190	15,274
107	56	144	109	117	921	3,620	191
209	70	75	35	18	2,949	151,320	708,516
337	146	246	156	129	2,298	22,980	42,429
4	1				157	5,600	6,031
395	217	371	221	144	3,286	20,750	10,657
267	123	304	288	214	1,714	2,200	1,027
90	52	67	60	41	665	2,070	13,450
185	105	138	93	171	1,355	8,870	8,133
376	141	147	75	86	4,731	25,490	16,703
188	60	52	25	22	1,466	1,450	3,537
300	96	190	93	66	1,010	990	1,086
25	4	19	18	25	110	1,310	140
388	84	199	124	75	1,114	3,890	571
167	89	156	144	108	1,143	17,700	4,142
508	233	299	202	122	4,772	12,030	12,585
192	83	125	142	175	2,687	1,570	23,189
123	84	123	78	74	873	1,000	80
151	51	119	86	139	1,006	15,720	685
148	23	41	15	10	308	170	170
597	198	364	197	201	4,021	8,900	41,765
105	35	88	43	40	386	2,220	1,347
207	142	155	90	66	1,293	8,780	57,432
170	83	189	107	85	1,255	16,110	5,050
82	30	93	64	67	436	1,700	2,765
12,015	4,689	7,862	5,119	4,693	88,197	\$937,050	\$2,143,993



Of all the farms in California 23.4 per cent are from 20 to 49 acres in size, 13.6 per cent from 100 to 174 acres, 13.5 per cent from 10 to 19 acres, and 12.1 per cent from 50 to 99 acres. Thus over three-fifths of all the farms are from 10 to 174 acres in size. About one fourth are 175 acres or more. The increase in the relative number of the smaller farms in conjunction with the decline in aggregate farm acreage during the last ten years indicates a tendency to subdivide the large farms into smaller ones.

The following table shows the increase or decrease in the size of farms in 1910, as compared with 1900:

Size	Number of farms		Increase or decrease	
	1900	1910	Number	Per cent
Under 3 acres.....	1,492	1,269	-223	-14.9
3 to 9 acres.....	5,354	9,324	+3,970	+74.2
10 to 19 acres.....	8,236	11,932	+3,696	+44.9
20 to 49 acres.....	13,110	20,614	+7,504	+57.2
50 to 99 acres.....	8,067	10,680	+2,613	+32.4
100 to 174 acres.....	13,196	12,015	-1,181	-8.9
175 to 259 acres.....	4,635	4,689	+54	+1.2
260 to 499 acres.....	8,370	7,862	-508	-6.1
500 to 999 acres.....	5,329	5,119	-210	-3.9
1,000 acres and over.....	4,753	4,693	-60	-1.3
Totals.....	72,542	88,197	+15,655	+21.6

#### Farm Tenure.

The number of all farmers is 88,197. Of these 66,632 are classed as owners, 3,417 as managers, and 18,148 as tenants.

Of the 66,632 owners, 56,500 operate land owned exclusively by them, while 10,132 operate land which they rent in addition to that which they own. The owners hold 75.5 per cent of all farms, tenants 20.6 per cent, and 3.9 per cent is operated by managers. The percentage of tenants for the State (20.6) is above the average for the Pacific States (17.2) but low in comparison with the percentage for the United States as a whole (37).

#### Farm Mortgages.

The number of mortgaged farms in 1910 amounted to 40.5 per cent of the total number of 66,632 owned by farmers who own all their land, exclusive of those for which no mortgage report was obtained. The percentage is considerably higher than it was in 1890 and 1900:

Owned farms	Number
Free from mortgage.....	39,368
Mortgaged.....	26,749
Unknown.....	515
Total.....	66,632

TABLE IX.

## Mortgage Debt on Farms Operated by Owners in 1910.\*

Counties	Number free from mortgage	Number with mortgage	Number with no mortgage	Farms consisting of owned land only			
				Number reporting debt	Value of their land and buildings	Amount of mortgage	Per cent value of land and buildings
Alameda	1,204	467	19	384	\$3,691,870	\$958,687	26.0
Alpine	22	10		8	87,050	30,800	35.1
Amador	364	72	1	62	347,628	86,515	24.9
Butte	745	470	15	385	3,325,191	807,233	24.3
Calaveras	456	95	5	71	357,205	95,080	26.6
Colusa	251	196	2	123	1,443,045	444,355	30.8
Contra Costa	642	243	5	184	2,122,140	574,965	27.1
Del Norte	59	20		16	137,300	44,900	32.7
El Dorado	492	145	5	127	567,100	161,873	28.5
Fresno	2,072	3,128	27	2,734	24,983,327	6,388,563	25.6
Glenn	291	220	1	170	1,703,360	403,568	23.7
Humboldt	687	293	11	230	2,436,615	611,134	25.1
Imperial	584	236	4	194	2,867,600	697,384	24.3
Inyo	254	106	1	96	1,184,200	277,142	19.2
Kern	530	311	5	256	2,764,650	751,974	27.2
Kings	642	747	2	587	5,888,820	1,541,990	26.2
Lake	346	132	6	107	847,400	213,200	25.2
Lassen	290	122	2	108	1,464,400	272,163	18.6
Los Angeles	3,176	2,321	102	1,889	31,540,310	6,465,025	20.5
Madera	294	114	11	77	1,182,365	190,817	16.1
Marin	118	73	5	65	664,175	259,074	39.0
Mariposa	242	39	11	35	250,720	52,275	20.8
Mendocino	796	266	7	225	1,832,841	453,647	24.8
Merced	613	782	10	584	6,570,345	1,409,143	21.4
Modoc	432	159	3	130	1,786,230	354,669	19.9
Mono	63	12		10	230,900	52,350	22.7
Monterey	749	295	19	222	3,002,171	755,391	25.2
Napa	750	411	5	358	2,905,375	745,253	25.7
Nevada	398	76	2	63	260,165	56,270	21.6
Orange	1,294	1,228	9	957	12,557,760	2,934,955	23.4
Placer	478	269	1	217	1,614,735	371,680	23.0
Plumas	131	51	1	43	566,940	113,354	20.0
Riverside	1,279	996	16	816	11,969,410	2,953,463	24.7
Sacramento	673	326	12	273	3,894,145	840,241	21.6
San Benito	385	262	6	210	2,354,830	767,233	32.6
San Bernardino	1,344	1,178	10	961	17,434,500	3,958,213	22.7
San Diego	1,339	501	5	342	3,235,500	732,270	22.6
San Francisco	57	14	11	9	126,600	30,250	23.9
San Joaquin	1,181	1,172	17	887	8,729,605	2,272,853	26.0
San Luis Obispo	710	341	5	193	1,779,070	489,925	27.5
San Mateo	249	47	6	39	610,350	103,505	17.0
Santa Barbara	533	227	4	134	2,790,140	706,315	25.3
Santa Clara	2,092	1,500	30	1,186	11,700,415	3,391,948	29.0
Santa Cruz	671	410	7	357	3,667,630	815,705	22.2
Shasta	658	177	4	147	919,980	211,200	23.0
Sierra	72	21		17	160,500	48,350	30.1
Siskiyou	688	251	9	210	2,760,855	683,580	24.8
Solano	441	328	4	237	3,732,565	992,293	26.6
Sonoma	2,254	1,498	19	1,399	11,018,235	3,009,142	27.3
Stanislaus	890	1,301	9	972	9,721,155	2,394,773	24.6
Sutter	362	307	5	225	3,076,708	785,106	25.5
Tehama	518	288	4	241	2,061,515	543,342	26.4
Trinity	233	40	1	36	221,425	51,498	23.3
Tulare	1,778	1,511	18	1,197	15,911,023	3,263,701	20.5
Tuolumne	269	71	2	63	378,650	98,677	26.1
Ventura	497	393	5	229	6,013,275	1,098,618	18.3
Yolo	482	397	8	283	4,329,746	1,154,656	26.7
Yuba	248	83	1	50	417,430	114,374	27.4
Totals	39,368	26,749	515	21,430	\$250,199,190	\$60,036,660	24.0

\*No mortgage reports were secured for farms operated by tenants or managers.

TABLE X.

Improved and Unimproved Farm Land by Counties, 1910.

Counties	Number of farms	Average acreage of farms	Improved land	Wood land in farms	Other unimproved land	Total land in farms
Alameda	2,422	128.5	177,314	51,484	82,529	311,327
Alpine	42	762.0	7,579	7,597	16,628	32,004
Amador	537	543.3	46,969	114,960	129,801	291,730
Butte	1,500	327.2	247,097	119,126	124,554	490,777
Calaveras	632	429.4	59,104	149,642	62,655	271,401
Colusa	667	783.2	336,509	38,252	147,615	522,376
Contra Costa	1,465	277.4	262,152	28,766	115,515	406,433
Del Norte	114	315.3	12,439	10,574	12,934	35,947
El Dorado	716	294.5	41,682	137,057	32,142	210,881
Fresno	6,245	177.2	590,205	93,194	423,217	1,106,616
Glenn	663	740.9	309,765	67,665	113,768	491,198
Humboldt	1,534	418.9	105,248	174,354	362,934	642,536
Imperial	1,322	169.1	176,069	1,138	46,395	223,602
Inyo	438	251.5	38,698	1,631	69,813	110,142
Kern	1,167	1,202.5	315,387	235,014	852,649	1,403,350
Kings	1,837	203.5	196,569	6,724	170,530	373,823
Lake	603	360.6	42,768	71,388	103,308	217,464
Lassen	502	589.1	122,057	27,688	145,983	295,728
Los Angeles	7,919	95.7	418,998	18,051	320,936	757,985
Madera	573	1,083.2	391,086	41,612	187,965	620,663
Marin	498	529.0	93,115	49,978	120,349	263,442
Mariposa	330	624.4	37,017	85,150	83,892	206,059
Mendocino	1,356	532.0	82,578	247,758	390,989	721,325
Merced	1,856	626.2	607,742	49,818	504,607	1,162,167
Modoc	736	557.2	164,784	75,668	169,682	410,134
Mono	91	1,271.1	43,382	8,303	63,987	115,672
Monterey	1,658	692.0	371,509	140,377	635,530	1,147,416
Napa	1,537	234.6	101,114	193,578	65,888	360,580
Nevada	544	322.4	24,542	48,449	102,407	175,318
Orange	3,165	117.4	189,463	4,476	177,753	371,692
Placer	1,062	233.6	98,608	32,194	117,278	248,080
Plumas	221	607.5	54,281	27,238	52,740	134,259
Riverside	2,688	193.8	278,151	30,231	212,424	520,806
Sacramento	1,601	295.5	275,682	20,964	176,398	473,044
San Benito	921	591.0	186,573	52,466	305,262	544,301
San Bernardino	2,949	70.7	136,625	23,137	48,634	208,396
San Diego	2,298	363.1	234,045	71,020	529,361	834,426
San Francisco	157	13.3	1,562	289	240	2,091
San Joaquin	3,286	232.2	611,762	35,387	115,899	763,048
San Luis Obispo	1,714	926.9	326,928	174,891	1,086,841	1,588,660
San Mateo	665	241.6	100,800	27,334	32,521	160,655
Santa Barbara	1,355	826.9	215,552	276,071	628,852	1,120,475
Santa Clara	4,731	155.3	237,170	153,835	343,814	734,819
Santa Cruz	1,466	107.3	66,875	44,157	46,276	157,308
Shasta	1,010	385.4	96,217	151,113	141,888	389,218
Sierra	110	765.6	30,794	18,168	35,258	84,220
Siskiyou	1,114	409.2	186,147	82,544	187,185	455,876
Solano	1,143	415.5	310,452	44,534	119,880	474,866
Sonoma	4,772	156.0	248,271	278,507	217,866	744,644
Stanislaus	2,687	241.7	512,189	18,756	118,447	649,392
Sutter	873	441.5	199,510	13,956	171,996	385,462
Tehama	1,006	909.8	186,642	206,234	522,351	915,227
Trinity	308	296.5	13,800	31,882	46,128	91,310
Tulare	4,021	259.9	507,024	161,360	376,847	1,045,231
Tuolumne	386	500.2	36,407	62,215	94,450	193,072
Ventura	1,293	425.5	213,868	56,061	280,270	550,199
Yolo	1,255	369.2	317,268	77,576	68,539	463,383
Yuba	436	571.3	94,250	70,175	84,683	249,108
Totals	88,197	av. 316.7	11,389,894	4,541,767	11,999,783	27,931,444

Irrigation, 1900-1910.<sup>1</sup>

Of the 88,197 farms in the State 39,352, or rather more than two fifths (44.6 per cent), are irrigated. The total acreage irrigated is 2,664,104 acres, or 23.4 per cent of the improved land in farms. The enterprises existing in 1910 were capable of supplying water to 3,619,378 acres, and the total acreage included in irrigation projects, completed or under way, was 5,490,360 acres.

The following table shows the number of farms irrigated in comparison with the total number of farms in the State, the total land area, the total land in farms, and the total acreage of improved land in farms, together with the areas not yet irrigated for which water was available, and the acreage included in projects completed or under way:

Land and farms	1900	1910	Increase or decrease	
			Amount	Per cent
Number of all farms-----	72,542	88,197	15,655	21.6
Approximate land area of State-----	99,617,280	99,617,280		
Land in farms-----	28,828,951	27,931,411	-897,507	-3.1
Improved land in farms-----	11,958,837	11,389,894	-568,943	-4.8
Number of farms irrigated-----	25,675	39,352	13,677	53.3
Acreage irrigated-----	1,416,114	2,664,104	1,217,990	81.2
Acreage enterprises capable of irrigating-----	*	3,619,378		
Acreage included in projects-----	*	5,490,360		
Percentage irrigated of number of all farms-----	35.4	44.6	9.2	
Approximate land area of State-----	1.5	2.7	1.2	
Land in farms-----	5.0	9.5	4.5	
Improved land in farms-----	12.1	23.4	11.3	
Excess of acreage enterprises were capable of irrigating over acreage irrigated in 1910-----		955,274		
Excess of acreage included in projects over acreage irrigated in 1910-----		2,826,256		

<sup>1</sup>For complete details see Part VI.

\*No record.

## DOMESTIC ANIMALS.

## Farm Animals in 1914.

During the past fiscal year there has been very little change in the number of farm animals in the State, but the average price has increased in several cases.

Animals	Number		Average price	
	1913	1914	1913	1914
Horses-----	498,000	503,000	\$100 00	\$100 00
Mules-----	73,000	74,000	120 00	120 00
Milch cows-----	515,000	541,000	62 00	72 00
Other cattle-----	1,410,000	1,480,000	33 00	39 30
Sheep-----	2,551,000	2,500,000	3 80	4 50
Swine-----	797,000	877,000	10 50	10 50



In the imports and exports there are several changes both in numbers and prices, the most remarkable being the great increase in the number of cattle and sheep imported for breeding purposes.

Horses for breeding purposes fell off from 5,713 in 1913 to 4,406 in 1914, while the number of other horses shows a remarkable increase, in 1913 the number being 4,295, which was the largest number in the last ten years, but last year the number increased to 28,613, mostly from Mexico. The number of mules imported was 4,883, a slight increase over the previous year, but cattle for breeding purposes, of which the number is generally only two of three thousand, went up from 1,388 in 1913, to 718,352 last year, and the value from \$234,489 to \$16,328,819. Sheep for breeding purposes also shows a large gain, from 388 in 1913, to 221,836 in 1914, and the value from \$8,903 to \$516,912.

In exports the number of horses fell from 28,707 in 1913 to 22,776 last year; the number of mules exported shows a small increase, from 4,744 to 4,883; the number of cattle exported fell from 24,714 to 18,376; and the number of sheep from 187,132 to 152,600, while the number of swine fell from 15,332 to 10,122.

Cattle not being native to America, there are no strictly American breeds, but owing to difference in climate, care and ideals of American breeders, the European breeds which have been brought to America have changed to some extent.

**\*Summary of All Domestic Animals and Their Value, 1910.**

Kind	On farms		Not on farms		Total	
	Number	Value	Number	Value	Number	Value
All cattle -----	2,077,025	\$52,785,068	46,176	\$1,604,717	2,123,201	\$54,389,785
Dairy cows -----	467,332	18,597,328	29,962	1,321,897	497,294	19,919,225
Horses -----	468,886	47,099,196	132,521	15,142,841	601,407	62,242,037
Mules -----	69,761	9,016,444	10,612	1,638,381	80,373	10,654,825
Asses and burros	2,592	347,315	1,057	45,114	3,649	392,429
Swine -----	766,551	5,106,803	12,168	100,761	778,719	5,207,564
Sheep -----	2,417,477	8,348,997	64,631	232,572	2,482,108	8,581,569
Goats -----	138,413	320,829	7,113	32,629	145,526	353,458
Totals -----		\$123,024,652		\$18,797,015		\$141,821,667

\*Most of the domestic animals not on farms are found in cities, towns, and villages.

#### Neat Cattle.\*

Considerable attention has been given to breeding cows for dairy purposes only, and with this object in view large importations have been made of the Jerseys, Guernseys and Alderneys.

The Shorthorns, Herefords, and Polled Angus comprise practically all of the pure-blooded cattle in the United States used for breeding and for grading up native cattle for beef purposes. There are now also a number of Holstein-Friesians and Durhams.

#### Working Oxen.

In the early days oxen were largely employed in farming operations. In 1860, they numbered upward of 26,000, but the number declined rapidly during the next ten years, and after 1890 they dwindled away.

**Asses and Burros.**

In 1832, Henry Clay, who was a great advocate of the use of mules, brought the first pure-blooded Catalonian jack to Kentucky, and from then until the civil war quite a number of jacks were imported. With the revival of business after the war, there was a great demand for jacks, and they were imported from all the Mediterranean countries.

Until this time there had been but two breeds of asses generally recognized in this country, the Maltese and Spanish. The importations into Tennessee and Kentucky have resulted in the production of a native type that is regarded by some breeders as better than any now imported.

There are also a large number of small donkeys, or burros, descendants of the small asses brought into Mexico and New Mexico at the early settlement of that section by the Spaniards, and are used principally by the Spanish and Mexican element. They are most useful in the mountainous sections.

**Sheep.**

In 1565, Spanish sheep were introduced into Florida, and those in that state today preserve traces of their Spanish origin. In 1773 they were introduced into California, and under the care of the Missions rapidly increased until, in 1825, it was estimated that seventeen of these Missions, extending from San Diego to San Francisco, held an aggregate of 1,003,970 sheep, exclusive of flocks owned by ranchers.

Sheep, of which at one time there were very large flocks, have fallen off since the year 1880, when they numbered 4,152,349; in 1910 there were 2,417,477, or a decrease of 1,734,872 since the former year.

The following statement shows at a glance the changes that have taken place in the number of domestic animals during the last sixty years:

**Summary of the Number of Domestic Animals, 1850-1910.**

Year	Horses and colts	Mules and colts	Cows and calves	Other cattle	Sheep and lambs	Swine
1850 -----	21,719	1,666	4,280	258,379	17,574	2,776
1860 -----	160,610	3,681	205,407	974,735	1,088,002	456,396
1870 -----	192,273	17,533	164,093	467,305	2,768,187	444,617
1880 -----	237,710	28,343	210,078	604,966	5,727,349	*868,419
1890 -----	*455,073	*53,627	317,201	*1,291,217	3,373,036	*594,009
1900 -----	421,293	96,190	307,245	*1,137,379	2,803,509	598,336
1910 -----	468,886	69,761	467,332	1,609,693	2,417,477	766,551

Prior to 1890, asses and burros were included with mules.

\*Including estimated number of range animals separately reported.

The principal breeds now are Southdown, Shropshire, Leicestershire, Cotswold, Oxford Down, Hampshire Down, Dorset Horns, Spanish and French Merino, and Persian.

**Goats.**

The Angora goat, a native of Asia Minor, was introduced into this country in 1849, and has been bred extensively in the United States. It crosses readily with the common goat, and the cross-breed frequently becomes the foundation of a good flock of fleece-bearing animals. The common goat has often been described as the poor man's cow. The Angora goat has been found to be of great service in clearing land of

brush and low growths that sheep and cattle will not touch. The meat of the kids is said to be fully equal to the best young lamb, from which it is difficult to distinguish it. Angoras are among the most useful of domestic animals. Their fleeces, called the mohair, furnish material for the manufacture of some of the finest fabrics, their flesh is exceedingly delicate and nutritious, and their milk is richer than that of a cow.

The number of goats of all kinds in 1910 was 138,000, the lead being taken by Tehama County, with 28,000, and Shasta, with 18,000. Lake and Mendocino counties lead in Angora goats, having upward of 5,000 each.

#### Swine.

The swine introduced into the United States by the early colonists were of inferior stock. Between 1818 and 1830, the Chester White was evolved. The Berkshire was introduced from England about 1830, but did not come into general favor until 1870 to 1880. The Poland-China originated in Ohio between 1838 and 1840. Other breeds are Yorkshires and Hampshires. The interest in swine breeding in recent years is illustrated by the dates of first registration of the different Swine Breeders' Associations, which were as follows: American Berkshire, 1875; Standard Poland-China, 1877; Central Poland-China, 1879; American Chester White, 1884; American Essex, 1887; American Duroc-Jersey and Standard White, 1890.

As a result of this interest, swine in this country have attained a high standard, with regard to form, bone, and line of maturity.

#### RECOGNIZED BREED AND PUREBRED ANIMALS IMPORTED.

(Under an act of Congress, approved August 5, 1909, effective on and after February 1, 1912.)

##### HORSES.

Belgian Draft.	Percheron.	Thoroughbred.
Clydesdale.	Shetland Pony.	Welsh Pony and Cob.
French Draft.	Shire.	
Hackney.	Suffolk.	

##### CATTLE.

Aberdeen-Angus.	Guernsey.	Kerry and Dexter.
Alderney.	Hereford.	Red Polled.
Ayrshire.	Highland.	Shorthorn.
Devon.	Holstein-Friesian.	Sussex.
Galloway.	Jersey.	Welsh.

##### SHEEP.

Cheviot.	Kerry Hill.	Shropshire.
Cotswold.	Leicester.	Southdown.
Dorset Horn.	Leicester [Border].	Suffolk.
Hampshire Down.	Lincoln.	Wensleydale.
Kent or Romney Marsh.	Oxford Down.	

##### PIGS.

Berkshire.	Tamworth.	Yorkshire.
Large Black.		

The Bureau of Animal Industry has listed all horses imported for breeding purposes for which certificates of pure breeding have been issued by the Federal department. This list includes names of animals, their registration number, the name of the importer, and the department number of the various breeds.

NOTE.—For full details regarding the number and different breeds of stallions in the State, see the Report of the California Stallion Registration Board. For further information relating to Working Oxen, Sheep and Goats, see the Statistical Report of the State Board of Agriculture for 1913.



## CLASSIFIED SUMMARY OF DOMESTIC ANIMALS ON FARMS IN 1910.

Description	Number	Value	Average value
<b>Cattle—</b>			
Dairy cows (cows and heifers kept for milk, born before January 1, 1909)-----	467,332	\$18,597,328	\$39 79
Other cows (cows and heifers not kept for milk, born before January 1, 1909)-----	576,909	14,798,012	25 65
Heifers born in 1909-----	218,480	3,448,595	15 78
Calves born after January 1, 1910-----	267,799	1,883,523	7 03
Steers and bulls born in 1909-----	163,728	2,889,503	17 65
Steers and bulls born before January 1, 1909-----	321,984	9,941,169	30 87
Unclassified cattle -----	60,793	1,226,938	20 18
<b>Totals -----</b>	<b>2,677,025</b>	<b>\$52,785,068</b>	<b>*\$25 41</b>
<b>Horses and colts—</b>			
Mares, stallions and geldings born before January 1, 1909-----	402,584	\$43,770,557	\$108 72
Colts born in 1909-----	41,927	2,389,191	56 98
Colts born after January 1, 1910-----	23,037	767,648	33 32
Unclassified horses -----	1,338	171,800	128 40
<b>Totals -----</b>	<b>468,886</b>	<b>\$47,099,196</b>	<b>*\$100 45</b>
<b>Mules and mule colts—</b>			
Mules born before January 1, 1909-----	61,997	\$8,552,021	\$137 94
Mule colts born in 1909-----	4,913	351,667	71 58
Mule colts born after January 1, 1910-----	2,851	112,756	39 55
<b>Totals -----</b>	<b>69,761</b>	<b>\$9,016,444</b>	<b>*\$129 25</b>
<b>Asses and burros (all ages)-----</b>	<b>2,592</b>	<b>\$347,315</b>	<b>*\$133 99</b>
<b>Swine—</b>			
Hogs and pigs born before January 1, 1910-----	482,810	\$4,346,824	\$9 00
Pigs born after January 1, 1910-----	283,741	759,979	2 68
<b>Totals -----</b>	<b>766,551</b>	<b>\$5,106,803</b>	<b>*\$6 66</b>
<b>Sheep and lambs—</b>			
Ewes born before January 1, 1910-----	1,217,515	\$4,914,783	\$4 04
Rams and wethers born before January 1, 1910-----	307,773	1,326,699	4 31
Lambs born after January 1, 1910-----	892,189	2,107,515	*2 36
<b>Totals -----</b>	<b>2,417,477</b>	<b>\$8,348,997</b>	<b>*\$3 45</b>
<b>Goats and kids (all ages)-----</b>	<b>138,413</b>	<b>\$320,829</b>	<b>*\$2 32</b>
<b>Grand total -----</b>		<b>\$123,024,652</b>	

\*Average.

## Sheep and Wool, Goats and Mohair, in 1909-1910.

According to the Census Bureau, the total number of sheep of shearing age in California on April 15, 1910, was 1,525,000, representing a decrease of 11.6 per cent as compared with the number in 1900. The approximate production of wool during 1909 was 2,563,000 fleeces, weighing 14,065,000 pounds and valued at \$2,424,000.

Although 1,714 farmers reported 138,413 goats and kids on their farms in 1910, only 367 reported the production of goat hair or mohair during 1909. These farmers reported 102,134 fleeces, weighing 282,596 pounds and valued at \$60,821. The production shows a considerable increase between 1899 and 1909, but it is believed that the figures are somewhat short of the actual production.



# NUMBER AND VALUE OF FARM ANIMALS IN CALIFORNIA, 1874-1914, IMPORTS AND EXPORTS, 1904-1914.

(Compiled from the reports of the United States Department of Agriculture.)

## HORSES, 1874-1914.

Year	Number, December 31	Average farm price, December 31	Farm value, December 31
1874	232,500	\$47 48	\$11,039,100
1875	230,100	41 61	9,574,461
1876	209,300	45 46	9,514,778
1877	260,000	39 50	10,270,000
1878	262,000	40 94	10,750,844
1879	273,000	43 95	11,998,350
1880	273,000	46 18	12,673,500
1881	281,990	45 03	12,698,010
1882	240,087	47 30	11,356,115
1883	240,567	54 89	13,204,723
1884	252,595	61 33	15,491,651
1885	265,225	62 05	16,457,211
1886	275,834	63 00	17,377,542
1887	289,626	64 00	18,534,948
1888	307,004	71 00	21,797,255
1889	368,400	70 19	25,857,259
1890	372,084	63 60	23,664,984
1891	360,921	67 22	24,262,579
1892	415,059	62 67	26,010,045
1893	518,824	57 48	29,821,982
1894	513,636	41 98	21,562,949
1895	513,636	31 94	16,404,965
1896	482,818	27 16	13,114,254
1897	439,364	27 40	12,037,918
1898	417,396	28 96	12,085,909
1899	342,265	27 54	9,426,483
1900	321,729	38 61	12,422,429
1901	363,982	49 66	18,074,805
1902	353,063	56 28	19,869,542
1903	370,716	60 66	22,485,881
1904	367,000	65 66	24,099,139
1905	363,339	67 48	24,518,741
1906	399,673	76 32	30,505,037
1907	391,680	92 00	36,120,721
1908	396,000	94 00	37,224,000
1909	412,000	90 00	37,080,000
1910	483,000	105 00	49,245,000
1911	493,000	117 00	57,681,000
1912	503,000	109 00	54,827,000
1913	498,000	100 00	49,800,000
1914	503,000	100 00	50,300,000

## Horses Imported, 1904-1914.

Year	For breeding purposes*		Other horses		Total horses	
	Number	Value	Number	Value	Number	Value
1904 -----	2,634	\$1,090,596	2,092	\$369,691	4,726	\$1,460,287
1905 -----	2,853	1,169,011	2,327	422,072	5,180	1,591,083
1906 -----	3,377	1,266,987	2,644	449,688	6,021	1,716,675
1907 -----	3,644	1,574,020	2,436	404,085	6,080	1,978,105
1908 -----	3,562	1,325,784	1,925	278,608	5,487	1,604,392
1909 -----	4,953	1,658,640	2,131	348,636	7,084	2,007,276
1910 -----	7,867	2,660,241	3,753	635,781	11,620	3,296,022
1911 -----	6,331	2,055,418	3,662	636,656	9,993	2,692,074
1912 -----	3,849	1,579,377	2,758	343,648	6,607	1,923,025
1913 -----	5,713	1,653,713	4,295	472,162	10,008	2,125,875
1914 -----	4,406	1,476,905	28,613	1,128,124	33,019	2,605,029

\*Including teams of immigrants.

## Horses Exported, 1904-1914.

Year	Number	Value
1904 -----	42,001	\$3,189,100
1905 -----	34,822	3,175,259
1906 -----	40,087	4,365,981
1907 -----	33,882	4,359,957
1908 -----	19,000	2,612,587
1909 -----	21,616	3,386,617
1910 -----	28,910	4,081,157
1911 -----	25,145	3,845,253
1912 -----	34,828	4,764,815
1913 -----	28,707	3,960,102
1914 -----	22,776	3,388,819

*Duty on Imported Horses.*—For breeding purposes and of purebred and teams of immigrants, free. All others, 10 per cent ad valorem on October 4, 1913, and after.

The following table shows the number of certificated horses imported for breeding purposes during 1914, for which certificates of pure breeding have been issued by the Federal department:

Breeds	Stallions	Mares	Total
Belgian draft -----	234	157	391
Clydesdale -----	17	34	51
Hackney -----	3	19	22
Percheron -----	343	181	524
Shetland pony -----	2	22	24
Shire -----	54	14	68
Standard bred -----	2	2	4
Suffolk -----	11	19	30
Thoroughbred -----	31	5	36
Welsh pony -----	11	49	60
Totals -----	708	502	1,210

## MULES, 1874-1914.

Year	Number, December 31	Average farm price, December 31	Farm value December 31
1874	23,000	\$63 74	\$1,466,020
1875	23,200	66 49	1,542,568
1876	19,400	77 20	1,497,680
1877	26,500	67 75	1,795,375
1878	25,400	68 98	1,752,092
1879	25,700	66 24	1,702,368
1880	25,700	67 54	1,735,778
1881	25,700	68 79	1,767,903
1882	28,910	69 20	2,000,572
1883	30,066	70 98	2,134,085
1884	29,765	80 18	2,386,558
1885	31,551	84 30	2,659,749
1886	31,551	77 65	2,450,081
1887	36,284	83 67	3,035,912
1888	38,824	85 03	3,301,389
1889	40,765	83 78	3,415,201
1890	42,803	78 21	3,347,496
1891	43,659	79 41	3,467,093
1892	54,574	74 72	4,077,548
1893	60,031	67 90	4,076,130
1894	63,033	56 38	3,553,899
1895	63,033	46 25	2,915,041
1896	59,251	35 02	2,074,789
1897	57,473	36 89	2,120,329
1898	56,898	38 33	2,180,836
1899	52,915	34 15	1,807,174
1900	48,682	48 49	2,300,713
1901	77,452	60 44	4,681,555
1902	72,030	69 23	4,986,745
1903	67,708	72 02	4,876,600
1904	67,031	72 68	4,871,487
1905	66,361	76 39	5,069,044
1906	69,679	91 30	6,361,689
1907	80,750	106 00	8,599,875
1908	82,000	113 00	9,266,000
1909	83,000	107 00	8,881,000
1910	71,000	122 00	8,540,000
1911	72,000	136 00	9,792,000
1912	73,000	130 00	9,490,000
1913	73,000	120 00	8,760,000
1914	74,000	120 00	8,880,000

## Mules Imported.

(Included in "All Other" Animals.)

## Mules Exported, 1904-1914.

Year	Number	Value
1904	3,658	\$412,971
1905	5,826	645,464
1906	7,167	989,639
1907	6,781	850,901
1908	6,609	990,667
1909	3,432	472,017
1910	4,512	614,094
1911	6,585	1,070,051
1912	4,901	732,095
1913	4,744	733,795
1914	4,883	690,974

*Duty on Imported Mules.*—Teams of immigrants, free. All others, 10 per cent ad valorem on October 4, 1913, and after.

## MILCH COWS, 1874-1914.

Year	Number December 31	Average farm price December 31	Farm value December 31
1874	310,500	\$35 28	\$10,954,440
1875	340,000	32 19	10,944,600
1876	363,800	31 46	11,445,148
1877	381,900	30 64	11,701,416
1878	389,500	28 23	10,955,585
1879	459,600	25 90	11,903,640
1880	473,400	28 65	13,562,910
1881	473,400	31 67	14,992,578
1882	214,280	32 70	7,006,956
1883	214,280	36 17	7,750,508
1884	220,708	38 00	8,386,904
1885	231,743	38 50	8,922,106
1886	236,378	38 75	9,159,648
1887	243,469	33 22	8,088,040
1888	250,773	33 00	8,275,509
1889	258,296	31 38	8,105,328
1890	268,628	27 75	7,454,427
1891	282,059	29 00	8,179,711
1892	290,521	26 95	7,829,541
1893	299,237	27 25	8,154,208
1894	329,161	25 82	8,498,937
1895	339,036	23 78	8,062,276
1896	335,646	23 75	7,971,593
1897	339,002	25 57	8,668,281
1898	342,392	28 65	9,809,531
1899	318,425	28 00	8,915,900
1900	308,872	33 75	10,424,430
1901	321,227	37 10	11,917,522
1902	327,652	40 05	13,122,463
1903	337,482	40 43	13,664,397
1904	344,232	38 55	13,270,144
1905	354,559	36 57	12,966,223
1906	390,015	34 65	13,514,020
1907	405,616	35 00	14,196,560
1908	410,000	36 00	14,760,000
1909	430,000	36 00	15,480,000
1910	495,000	38 40	17,933,000
1911	505,000	53 00	26,765,000
1912	510,000	53 50	27,285,000
1913	515,000	62 00	31,930,000
1914	541,000	72 00	38,952,000



## OTHER CATTLE, 1874-1914.

Year	Number December 31	Average farm price December 31	Farm value December 31
1874	428,900	\$19 52	\$8,372,128
1875	660,000	18 92	12,487,200
1876	1,075,000	20 08	21,586,000
1877	1,053,500	16 52	17,403,820
1878	1,600,800	17 23	17,243,784
1879	1,010,000	18 91	19,099,100
1880	999,900	18 47	18,468,153
1881	999,900	20 35	20,347,965
1882	422,433	21 77	9,196,366
1883	575,000	27 48	15,801,000
1884	609,500	29 15	17,766,925
1885	615,595	30 38	18,701,776
1886	627,907	28 66	17,994,559
1887	659,302	20 64	13,607,595
1888	692,267	20 50	14,194,447
1889	726,880	19 37	14,080,181
1890	697,805	16 80	11,719,707
1891	558,244	17 73	9,895,321
1892	602,904	17 39	10,481,663
1893	916,414	17 12	15,690,840
1894	925,578	16 17	14,962,157
1895	916,322	15 28	14,003,785
1896	888,832	15 82	14,057,319
1897	853,279	16 93	14,448,828
1898	810,615	18 91	15,328,334
1899	664,704	18 01	11,970,981
1900	604,881	24 57	14,864,947
1901	1,048,046	22 25	23,315,670
1902	1,089,968	23 48	25,593,770
1903	1,111,767	24 51	27,244,079
1904	1,089,532	21 98	23,944,214
1905	1,122,218	19 29	21,648,258
1906	1,167,107	17 52	20,453,549
1907	1,167,107	18 00	21,474,767
1908	1,155,000	19 00	21,945,000
1909	1,155,000	17 50	20,212,000
1910	1,546,000	20 10	32,361,000
1911	1,515,000	26 70	40,450,000
1912	1,454,000	29 20	42,457,000
1913	1,410,000	33 00	46,530,000
1914	1,480,000	39 30	58,164,000

## Cattle Imported, 1904-1914.

Year	For breeding purposes*		Other cattle		Total cattle	
	Number	Value	Number	Value	Number	Value
1904	684	\$79,986	15,372	\$230,751	16,056	\$310,737
1905	2,314	93,084	25,541	365,488	27,855	458,572
1906	829	118,368	28,190	430,062	29,019	548,430
1907	835	122,230	31,567	442,892	32,402	565,122
1908	3,188	149,142	89,168	1,358,168	92,356	1,507,310
1909	3,049	140,713	136,135	1,858,709	139,184	1,999,422
1910	2,611	291,139	193,327	2,708,685	195,138	2,999,824
1911	2,441	362,220	180,482	2,590,857	182,923	2,953,077
1912	2,129	305,222	316,243	4,500,352	318,372	4,805,574
1913	1,388	234,489	420,261	6,406,179	421,649	6,640,668
1914	718,352	16,328,819	150,016	2,367,899	868,368	18,696,718

\*Including teams of immigrants.

## Cattle Exported, 1904-1914.

Year	Number	Value
1904	593,409	\$42,256,291
1905	567,806	40,598,048
1906	584,239	42,081,170
1907	423,051	34,577,392
1908	349,210	29,339,134
1909	207,542	18,046,976
1910	139,430	12,200,154
1911	150,100	13,163,920
1912	105,506	8,870,075
1913	24,714	1,177,199
1914	18,376	647,288

*Duty on Imported Cattle.*—Free October 4, 1913, and after.

## SHEEP, 1874-1914.

Year	Number December 31	Average farm price December 31	Farm value December 31
1874	4,683,200	\$2 31	\$10,818,192
1875	4,683,200	2 53	11,848,496
1876	6,750,000	2 02	13,635,000
1877	7,290,000	1 40	10,206,000
1878	6,561,000	1 52	9,972,720
1879	6,889,000	1 61	11,091,290
1880	7,646,800	1 62	12,387,816
1881	7,493,864	1 70	12,739,569
1882	6,352,344	1 65	10,481,368
1883	5,907,680	2 02	11,933,514
1884	6,203,064	1 90	11,785,822
1885	5,892,911	1 89	11,137,602
1886	6,069,698	1 81	10,961,268
1887	6,069,698	1 77	10,728,192
1888	5,462,728	1 88	10,291,779
1889	3,956,000	1 88	7,453,104
1890	4,035,120	2 08	8,409,190
1891	3,712,310	2 20	8,157,801
1892	4,083,541	2 42	9,884,211
1893	4,124,376	2 32	9,559,479
1894	3,918,157	1 81	7,074,625
1895	3,526,341	1 65	5,817,052
1896	2,962,126	1 85	5,483,784
1897	2,577,050	1 86	4,800,787
1898	2,589,935	2 23	5,785,915
1899	2,175,545	2 64	5,742,352
1900	2,001,501	2 85	5,710,282
1901	2,342,923	3 00	7,033,221
1902	2,319,494	2 90	6,729,085
1903	2,365,884	2 92	6,915,716
1904	2,271,249	2 75	6,237,758
1905	2,180,399	2 67	5,824,718
1906	2,398,439	3 03	7,273,266
1907	2,422,423	3 30	8,006,107
1908	2,422,000	3 47	8,404,000
1909	2,325,000	2 80	6,510,000
1910	2,683,000	3 30	9,694,000
1911	2,656,000	3 60	9,562,000
1912	2,603,000	3 70	9,631,000
1913	2,551,000	3 80	9,694,000
1914	2,500,000	4 50	11,250,000

## Sheep Imported, 1904-1914.

Year	For breeding purposes		Other sheep		Total sheep	
	Number	Value	Number	Value	Number	Value
1904	1,253	\$23,298	236,841	\$791,991	238,094	\$815,289
1905	2,200	45,319	184,742	659,402	186,942	704,721
1906	2,679	53,951	238,068	966,408	240,747	1,020,359
1907	3,081	67,555	221,717	1,052,870	224,798	1,120,425
1908	5,609	104,509	219,156	978,097	224,765	1,082,606
1909	4,860	89,272	97,803	413,368	102,663	502,640
1910	6,335	135,019	119,817	561,860	126,152	696,879
1911	5,341	116,277	48,114	261,348	53,455	377,625
1912	2,208	29,106	21,380	128,151	23,588	157,257
1913	388	8,903	15,040	81,118	15,428	90,021
1914	221,836	516,912	1,883	15,492	532,404	223,719

## Export of Domestic Sheep, 1904-1914.

Year	Number	Value
1904	301,313	\$1,954,604
1905	268,365	1,687,321
1906	142,630	804,090
1907	135,344	750,242
1908	101,000	539,285
1909	67,656	365,155
1910	44,517	209,600
1911	121,491	636,272
1912	157,263	626,985
1913	187,132	605,725
1914	152,600	534,543

*Duty on Imported Sheep*—Free October 4, 1913, and after.

## SWINE, 1874-1914.

Year	Number December 31	Average farm price December 31	Farm value December 31
1874	448,600	\$6 16	\$2,763,376
1875	403,700	5 77	2,329,349
1876	363,300	7 17	2,664,861
1877	417,700	6 20	2,589,740
1878	438,500	6 27	2,749,395
1879	565,000	5 95	3,361,750
1880	661,000	3 97	2,624,170
1881	667,600	4 98	3,324,648
1882	585,443	6 20	3,629,747
1883	856,000	7 14	6,111,840
1884	950,160	5 66	5,377,966
1885	978,665	5 80	5,676,257
1886	1,027,598	4 15	4,266,586
1887	1,017,322	3 78	3,841,469
1888	1,047,842	4 62	4,836,000
1889	647,000	5 59	3,616,213
1890	647,000	4 91	3,175,476
1891	517,600	5 26	2,723,611
1892	512,424	5 35	2,741,675
1893	399,691	6 12	2,446,110
1894	435,663	5 57	2,427,342
1895	487,943	5 54	2,702,812
1896	507,461	4 03	2,045,677
1897	487,163	4 13	2,013,738
1898	467,676	4 08	1,906,247
1899	374,141	4 47	1,673,907
1900	329,244	6 26	2,061,068
1901	521,906	6 61	3,449,172
1902	506,249	6 79	3,439,457
1903	511,311	7 63	3,901,303
1904	526,650	6 55	3,449,558
1905	521,384	6 10	3,180,442
1906	573,522	5 45	3,125,695
1907	550,581	7 10	3,909,125
1908	551,000	7 20	3,967,000
1909	562,000	6 50	3,653,000
1910	790,000	8 20	6,289,000
1911	830,000	8 30	6,289,000
1912	822,000	9 20	7,562,000
1913	797,000	10 50	8,368,000
1914	877,000	10 50	9,208,000

## Swine Exported,\* 1904-1914.

Year	Number	Value
1904	6,345	\$53,780
1905	41,496	416,692
1906	59,170	630,998
1907	24,262	309,440
1908	30,818	307,202
1909	18,655	144,605
1910	4,410	46,955
1911	8,551	74,032
1912	19,038	159,370
1913	15,332	151,747
1914	10,122	133,751

\*Swine imported are not given separately, but included under "All Other" Animals.

*Duty on Imported Swine.*—Free October 4, 1913, and after.



TABLE XI.  
Horses, Colts and Mules by Counties, 1910.

Counties	Mature horses	Yearling colts	Spring colts	Total	Mature mules	Yearling colts	Spring colts	Total
Alameda	9,266	842	536	10,644	223	4		227
Alpine	376	38	12	426	18			18
Amador	2,291	218	176	2,685	212	10	17	239
Butte	6,608	645	402	7,655	1,719	151	91	1,961
Calaveras	3,143	302	203	3,648	25	13	25	63
Cotusa	3,992	481	259	4,732	4,607	437	247	5,291
Contra Costa	9,494	1,095	644	11,233	564	63	24	651
Del Norte	382	45	14	441	3			3
El Dorado	2,274	180	90	2,544	93	9	10	112
Fresno	22,063	1,899	1,047	25,009	3,498	298	183	3,979
Glenn	3,319	339	262	3,946	3,033	207	122	3,362
Humboldt	5,851	421	131	6,403	189			189
Imperial	6,277	580	372	7,229	1,583	69	20	1,672
Inyo	4,074	555	403	5,032	249	55	33	337
Kern	8,670	987	530	10,347	1,099	103	46	1,248
Kings	9,417	1,174	882	11,473	855	142	72	1,069
Lake	2,172	216	104	2,492	182	45	36	263
Lassen	7,548	1,406	561	9,515	414	185	103	702
Los Angeles	20,375	1,376	673	22,424	2,459	76	35	2,570
Madera	3,498	334	238	4,070	2,928	154	59	3,141
Marin	2,338	166	54	2,558	11			11
Mariposa	1,896	218	126	2,240	201	46	49	296
Mendocino	5,300	510	184	5,994	298	10	1	309
Merced	10,308	1,453	795	12,556	3,673	198	204	4,075
Modoc	12,247	2,212	976	*15,636	565	441	126	1,132
Mono	1,655	310	132	2,097	73	46	17	136
Monterey	14,172	1,993	1,268	*17,444	546	66	30	642
Napa	5,145	528	237	5,910	345	18	9	372
Nevada	1,890	124	70	*2,074	57	11		68
Orange	9,580	760	225	10,565	2,223	38	7	2,268
Placer	3,762	294	137	4,193	459	13	26	498
Plumas	1,770	206	68	2,044	41	2		43
Riverside	8,969	943	403	10,315	1,303	83	43	1,429
Sacramento	8,770	773	426	9,969	703	30	10	743
San Benito	6,921	955	599	8,475	74	19	3	96
San Bernardino	6,339	372	167	6,878	757	18	3	778
San Diego	9,663	1,130	705	11,498	683	60	23	766

	318	1	319						
San Francisco	18,256	1,597	*20,972	3,169	217	144	3,530		
San Joaquin	12,601	1,686	15,274	754	83	40	877		
San Luis Obispo	3,940	253	4,295	10	2		12		
San Mateo	10,621	1,442	13,034	362	56	25	443		
Santa Barbara	14,405	899	15,816	267	7		274		
Santa Clara	3,914	260	4,290	84	4		88		
Santa Cruz	4,516	488	5,217	224	57	13	294		
Shasta	1,199	155	1,394	20			20		
Sierra	7,690	1,037	9,150	390	76	37	503		
Siskiyou	6,993	695	8,050	2157	84	78	2,319		
Solano	12,611	733	13,728	388	8	2	398		
Sonoma	11,818	1,120	*14,357	5,032	236	174	5,412		
Stanislaus	4,869	587	5,684	1,922	107	67	2,095		
Sutter	5,073	525	5,876	1,409	163	103	1,675		
Tehama	1,150	117	1,306	142	19	7	168		
Trinity	18,917	2,003	*22,200	3,149	288	218	3,655		
Tulare	2,053	242	2,491	76	7	8	91		
Tuolumne	9,955	906	*11,480	2,250	66	46	2,362		
Ventura	7,127	814	8,315	3,501	265	189	3,955		
Yolo	2,803	288	3,244	726	48	26	810		
Yuba									
Totals	402,584	41,927	23,037	61,997	4,913	2,851	69,761		
			*468,886						

\*Includes animals, age or sex not specified.

TABLE XII.  
Cattle by Counties in 1910.

Counties	Dairy cows	Other cows	Yearling heifers	Calves	Yearling steers and bulls	Other steers and bulls	Total
Alameda	9,172	5,827	2,609	4,113	1,107	1,491	*24,319
Alpine	759	661	485	426	400	23	2,754
Amador	2,747	7,985	2,175	3,444	1,970	3,945	22,266
Butte	4,713	8,359	2,605	3,772	2,109	4,660	*26,584
Calaveras	1,824	8,407	2,432	3,355	2,057	2,902	20,977
Colusa	3,128	6,571	2,140	2,606	1,556	2,619	*18,750
Contra Costa	9,469	6,567	3,240	4,479	1,123	1,651	26,529
Del Norte	3,575	620	849	1,306	273	234	6,857
El Dorado	2,823	4,338	1,683	2,154	1,138	912	13,048
Fresno	22,241	42,001	13,117	12,682	15,354	22,230	127,625
Glenn	3,688	3,601	1,410	2,409	1,925	2,051	*16,214
Humboldt	21,572	7,837	5,531	8,334	3,413	6,590	*53,775
Imperial	9,653	2,728	2,560	2,772	1,379	1,817	*22,741
Inyo	2,267	8,970	2,583	2,255	2,445	1,788	20,308
Kern	6,917	38,101	8,441	7,372	6,459	24,271	*118,320
Kings	18,593	21,655	7,281	8,793	3,745	14,908	74,975
Lake	1,487	2,113	821	1,133	574	1,286	7,414
Lassen	2,890	18,444	5,975	4,906	5,456	6,161	43,832
Los Angeles	20,524	8,027	5,561	6,211	1,666	1,106	43,095
Madera	1,592	12,406	2,425	2,975	2,252	3,946	*27,905
Marin	24,803	3,564	2,880	6,509	567	641	*39,266
Mariposa	905	7,477	1,602	2,115	1,683	2,876	*16,671
Mendocino	6,454	9,280	3,054	3,980	2,503	4,883	30,154
Merced	19,678	43,250	14,858	14,625	11,036	34,767	*150,467
Modoc	2,903	18,502	6,937	4,608	6,517	7,449	46,916
Mono	450	2,270	803	666	685	427	5,301
Monterey	14,066	27,626	11,046	13,806	7,502	13,133	*88,889
Napa	6,270	3,945	1,403	2,518	758	937	*15,866
Nevada	2,395	2,950	832	1,069	495	865	8,606
Orange	6,184	4,473	2,124	2,231	1,168	2,040	18,220
Placer	2,421	2,283	602	1,204	428	532	*7,510
Plumas	3,437	1,954	1,561	1,586	1,468	1,395	11,401
Riverside	5,235	4,449	2,493	2,203	1,333	3,755	19,468
Sacramento	11,979	5,484	3,195	5,568	1,529	1,961	*31,188
San Benito	4,828	11,064	4,459	5,864	4,151	8,987	*39,703
San Bernardino	3,043	4,389	1,075	926	481	2,847	12,761
San Diego	10,633	15,815	7,874	8,088	6,490	9,877	58,777
San Francisco	1,645	10	581	174	75	25	2,510
San Joaquin	11,904	6,861	3,636	4,960	1,937	1,998	31,296
San Luis Obispo	24,193	22,903	10,345	15,635	8,948	33,180	*118,704
San Mateo	8,119	2,305	1,848	2,375	369	272	15,288
Santa Barbara	11,690	23,752	6,891	11,524	8,666	24,578	*87,576
Santa Clara	12,181	12,251	4,449	5,443	3,133	7,552	*46,080
Santa Cruz	4,210	1,811	1,113	1,779	438	749	10,100
Shasta	2,923	15,433	3,678	3,308	3,197	5,580	34,119
Sierra	1,563	2,268	850	874	831	1,401	7,787
Siskiyou	7,018	14,781	5,965	4,919	5,359	6,513	*45,079
Solano	9,279	4,257	1,933	3,720	1,187	1,408	21,784
Sonoma	24,961	5,835	4,804	9,517	1,805	1,705	*48,727
Stanislaus	20,678	9,047	5,294	7,252	2,922	3,765	*49,132
Sutter	6,728	3,254	1,939	2,623	1,012	823	*16,604
Tehama	3,462	10,691	2,646	3,520	2,590	2,400	25,309
Trinity	804	5,143	1,415	1,126	1,308	2,089	11,885
Tulare	26,765	29,478	11,911	16,092	8,784	10,429	*104,484
Tuolumne	1,773	8,415	2,040	2,977	1,531	1,223	*18,659
Ventura	2,666	5,887	2,139	2,442	2,095	10,850	*29,929
Yolo	7,197	3,761	2,654	2,649	1,194	1,522	18,977
Yuba	2,255	4,773	1,628	1,827	1,152	1,959	13,594
Totals	467,332	576,909	218,480	267,799	163,728	321,984	2,077,025

\*Includes animals, age or sex not specified.

TABLE XIII.

## Sheep, Lambs, and Swine, 1910.

Counties	Rams, ewes and wethers	Spring lambs	Total	Mature hogs	Spring pigs	Total
Alameda	5,680	3,507	9,187	3,640	2,770	6,410
Alpine	9,832	6,808	16,640	309	208	517
Amador	3,919	2,726	6,645	3,623	1,673	5,296
Butte	29,137	15,940	45,077	9,317	5,016	14,333
Calaveras	10,145	5,215	15,360	2,588	1,586	4,174
Colusa	39,801	24,791	64,592	17,646	10,418	28,064
Contra Costa	14,132	5,463	19,595	3,887	3,054	6,941
Del Norte	1,341	506	1,841	1,153	617	1,770
El Dorado	1,763	1,399	3,162	1,428	973	2,401
Fresno	94,757	47,254	142,011	20,134	13,016	33,150
Glenn	70,210	41,153	111,363	12,483	5,827	18,310
Humboldt	62,423	24,650	87,073	7,688	4,945	12,633
Imperial	13,786	9,553	23,339	45,764	24,798	70,562
Inyo	17,240	26,106	43,346	1,795	1,560	3,355
Kern	19,801	10,516	30,317	13,376	7,137	20,513
Kings	40,483	21,891	62,374	22,775	17,858	40,633
Lake	7,436	3,511	10,947	5,301	2,737	8,038
Lassen	42,490	30,225	72,725	3,079	1,955	5,034
Los Angeles	22,261	8,830	31,091	18,418	10,524	28,942
Madera	6,269	3,837	10,106	4,444	2,409	6,853
Marin	1,930	1,025	2,955	8,812	7,287	16,099
Mariposa	877	304	1,181	6,160	2,722	8,882
Mendocino	88,760	41,010	129,770	14,600	7,469	22,069
Merced	28,044	11,724	39,768	19,414	10,121	29,535
Modoc	46,078	30,484	76,562	5,328	3,160	8,488
Mono	40,805	22,241	63,046	179	244	423
Monterey	17,029	11,845	28,874	12,567	7,464	20,031
Napa	5,794	5,084	10,878	5,160	3,184	8,344
Nevada	6,553	4,309	11,162	1,067	749	1,816
Orange	31,802	11,876	43,678	2,265	2,183	4,448
Placer	15,142	9,326	24,468	1,822	1,565	3,387
Plumas	845	314	1,159	665	744	1,409
Riverside	5,589	1,420	7,009	3,892	2,258	6,150
Sacramento	25,828	21,129	46,957	6,421	4,034	10,455
San Benito	10,635	4,511	15,146	5,572	2,560	8,132
San Bernardino	7	-----	7	2,562	1,187	3,749
San Diego	220	69	289	4,261	3,130	7,391
San Francisco	3	-----	3	181	100	281
San Joaquin	14,807	10,012	24,819	13,473	9,981	23,454
San Luis Obispo	54,717	32,236	86,953	11,750	6,118	17,868
San Mateo	767	562	1,329	8,692	3,990	12,682
Santa Barbara	60,205	20,328	80,533	15,113	6,960	22,073
Santa Clara	4,449	5,606	10,055	4,165	3,184	7,349
Santa Cruz	876	703	1,579	2,165	1,509	3,674
Shasta	11,449	5,574	17,023	12,832	5,968	18,800
Sierra	3,005	93	3,098	370	294	664
Siskiyou	18,013	11,909	29,922	6,116	3,396	9,512
Solano	96,921	73,232	170,153	8,836	4,732	13,568
Sonoma	44,095	21,220	65,315	10,995	7,428	18,423
Stanislaus	15,874	7,778	23,252	13,610	9,417	23,027
Sutter	51,135	38,530	89,665	9,121	6,008	15,129
Tehama	185,023	112,713	297,736	10,915	4,025	14,940
Trinity	2,732	1,081	3,813	2,594	1,457	4,051
Tulare	14,014	7,170	21,184	23,942	14,250	38,192
Tuolumne	1,795	671	2,466	2,590	1,303	3,893
Ventura	16,113	15,658	31,771	6,984	3,514	10,498
Yolo	49,807	29,639	79,446	15,483	8,714	24,197
Yuba	40,344	27,318	67,662	3,288	2,251	5,539
Totals	1,525,288	892,189	2,417,477	482,810	283,741	766,551



TABLE XIV.

## Wool Produced by Counties, 1860-1900.

(Compiled from reports of the Census Bureau.)

(Pounds.)

Counties	1860	1870	1880	1890	1900
Alameda -----	284,735	138,975	205,955	156,065	148,810
Alpine -----		281,700	90	2,015	6,480
Amador -----	20,650	73,010	64,808	53,879	30,385
Butte -----	92,400	351,023	323,483	307,739	551,590
Calaveras -----	10,335	129,025	161,351	130,761	120,090
Colusa -----	66,900	1,086,599	661,782	603,822	113,040
Contra Costa -----	74,108	58,800	27,293	92,415	20,900
Del Norte -----		3,471	6,462	7,524	3,520
El Dorado -----	1,130	50,096	73,233	2,251	980
Fresno -----		191,594	1,477,000	1,802,043	425,862
Glenn -----					328,020
Humboldt -----		51,867	647,492	997,649	948,970
Imperial -----					
Inyo -----			35,382	139,252	264,290
Kern -----		281,100	666,427	1,163,056	792,700
Kings -----		72			678,630
Lake -----		58,046	185,418	139,584	41,940
Lassen -----		75	92,748	152,232	269,180
Los Angeles -----	209,869	962,603	1,499,895	544,660	244,380
Madera -----					279,810
Marin -----	17,820	6,692	2,080	153	2,947
Mariposa -----		87,816	163,896	225,895	15,290
Mendocino -----	18,794	178,493	990,264	1,048,020	1,089,490
Merced -----	28,500	231,072	631,725	984,505	712,310
Modoc -----			71,378	86,499	310,725
Mono -----		7,000	350	15,888	176,520
Monterey -----	485,167	1,054,310	523,612	267,247	56,100
Napa -----	31,390	20,789	157,085	156,368	17,810
Nevada -----			8,002	6,816	15,750
Orange -----				1,110,112	293,620
Placer -----	31,330	169,033	233,901	439,723	145,810
Plumas -----		13,023	23,608	5,833	27,290
Riverside -----					76,650
Sacramento -----	67,005	515,213	509,834	254,263	227,900
San Benito -----			323,285	128,247	59,740
San Bernardino -----	4,000	71,075	250,338	176,100	38,574
San Diego -----	5,150	9,250	811,308	130,180	91,040
San Francisco -----					
San Joaquin -----	36,477	86,700	466,960	111,585	176,160
San Luis Obispo -----	260,100	903,863	643,853	146,740	77,800
San Mateo -----	7,535	12,625	2,819	4,040	4,510
Santa Barbara -----	150,200	996,200	692,415	71,600	509,250
Santa Clara -----	19,000	179,465	73,024	1,103	15,920
Santa Cruz -----	24,875	3,100	3,640	3,760	4,410
Shasta -----		15,820	88,142	68,164	126,900
Sierra -----			3,625		8,310
Siskiyou -----	1,150	43,858	135,164	62,024	85,920
Solano -----	240,937	306,817	290,996	208,385	412,140
Sonoma -----	78,223	230,394	664,721	547,120	335,010
Stanislaus -----	38,249	749,263	787,516	176,807	216,990
Sutter -----	83,062	126,657	152,367	181,489	305,150
Tehama -----	32,675	445,456	484,763	1,408,818	1,648,750
Trinity -----			80,115	64,189	62,290
Tulare -----	16,900	660,645	460,080	1,112,091	355,142
Tuolumne -----	150	48,525	58,535	39,170	9,930
Ventura -----			728,932	281,504	10,000
Yolo -----	146,806	437,048	276,721	280,977	456,870
Yuba -----	97,487	63,425	194,163	258,155	232,960
Totals -----	2,683,109	11,391,743	16,798,036	16,358,547	13,680,495

<sup>1</sup>Exclusive of wool obtained from range sheep.<sup>2</sup>In a summary issued in 1900, the total wool produced is stated at 24,092,954 pounds.

TABLE XV.

## Goats, Wool, Mohair, and Goat Hair, 1900-1910.

(Compiled from the Reports of the Census Bureau.)

Counties	Number of goats, 1900	Number of goats, 1910	Number of wool fleeces shorn, 1910	Mohair and goat hair fleeces shorn, 1910	Value of wool and mohair pro- duced, 1910
Alameda	66	64	5,783		\$4,930
Alpine		10	6,790		9,561
Amador	1,584	1,597	7,253	449	5,882
Butte	1,562	3,215	38,261	1,749	33,991
Calaveras	1,142	3,348	15,677	517	11,551
Colusa	4,289	2,154	73,221	4,009	56,620
Contra Costa	79	17	14,715		10,869
Del Norte		465	1,238	40	2,070
El Dorado	591	3,315	3,808	933	3,504
Fresno	517	4,558	107,802	1,900	109,982
Glenn	4,571	2,813	131,612	5,177	101,749
Humboldt	920	3,747	85,212	2,540	104,430
Imperial		147	12,755	26	17,067
Inyo	8,382	2,846	17,847	505	27,761
Kern	3,364	930	24,177	355	26,540
Kings	870	507	73,393	26	58,836
Lake	10,512	9,018	10,372	6,603	12,922
Lassen	45	586	36,768	2,088	55,154
Los Angeles	13,580	8,238	31,754	230	32,366
Madera	83	278	4,905	60	2,272
Marin	25	147	2,823		2,816
Mariposa	1,026	931	355	154	376
Mendocino	3,627	3,927	149,260	2,315	158,918
Merced	1,878	5,246	46,908	8,400	39,400
Modoc	1,280	549	39,538	1,356	55,583
Mono	651	25	29,160		41,209
Monterey	3,127	3,983	24,884	3,000	26,549
Napa	632	556	9,955	153	7,196
Nevada	989	2,198	10,607	1,043	8,382
Orange	396	423	62,072		51,474
Placer	945	1,542	28,841	177	21,728
Plumas	23	10	593		767
Riverside	384	924	1,536	13	2,600
Sacramento	67	89	41,103	7	35,449
San Benito	139	489	19,457	33	18,974
San Bernardino	126	81			
San Diego	2,290	1,147	155	60	195
San Francisco	19	9	3		4
San Joaquin	132	260	20,477	37	14,114
San Luis Obispo	1,502	7,390	64,719	4,758	52,868
San Mateo	363	154	1,013	26	1,162
Santa Barbara	1,118	558	27,787	68	26,308
Santa Clara	5,143	163	4,765		3,596
Santa Cruz	1,505	1,043	799	630	1,444
Shasta	8,792	18,403	17,862	11,606	25,705
Sierra	104	73	2,333		3,940
Siskiyou	3,772	384	14,975	134	23,038
Solano	56	392	157,499	3	161,312
Sonoma	1,544	2,991	75,925	2,330	74,951
Stanislaus	159	217	22,837	50	22,700
Sutter	173	511	149,821	800	110,738
Tehama	10,667	28,473	336,373	36,119	349,689
Trinity	108	845	2,603	44	1,892
Tulare	1,190	2,979	33,150	510	35,218
Tuolumne	1,119	1,609	1,408	177	996
Ventura	1,022	621	21,465	400	14,306
Yolo	322	716	82,602	316	76,497
Yuba	298	502	63,383	208	45,777
Indian reservation	151				
Totals	109,021	138,413	2,275,389	102,134	\$2,205,928

TABLE XVI.

Counties	Domestic animals on farms and				
	Horses and colts	Cattle	Mules and colts	Asses and burros	Swine (all ages)
Alameda	10,644	24,319	227	3	6,410
Alpine	426	2,754	18	14	517
Amador	2,685	22,266	239	23	5,296
Butte	7,655	*26,584	1,961	18	14,333
Calaveras	3,648	20,977	63	27	4,174
Colusa	4,732	*18,750	5,291	65	28,064
Contra Costa	11,233	26,529	651	6	6,941
Del Norte	441	6,857	3	-----	1,770
El Dorado	2,544	13,048	112	17	2,401
Fresno	25,009	127,625	3,979	101	33,150
Glenn	*3,946	*16,214	3,362	29	18,310
Humboldt	6,403	*53,775	189	11	12,633
Imperial	7,229	*22,741	1,672	56	70,562
Inyo	5,032	20,308	337	309	3,355
Kern	*10,347	*118,320	1,248	130	20,513
Kings	11,473	74,975	1,069	23	40,633
Lake	2,492	7,414	263	10	8,038
Lassen	9,515	43,832	702	119	5,034
Los Angeles	22,424	43,095	2,570	84	28,942
Madera	4,070	*27,905	3,141	49	6,853
Marin	2,558	*39,266	11	-----	16,099
Mariposa	2,240	*16,671	296	83	8,882
Mendocino	5,994	30,154	309	29	22,069
Merced	12,556	*150,467	4,075	107	29,535
Modoc	*15,636	46,916	1,132	98	8,488
Mono	2,097	5,301	136	62	423
Monterey	*17,444	*88,889	642	26	20,031
Napa	5,910	*15,866	372	10	8,344
Nevada	*2,074	8,606	68	10	1,816
Orange	10,565	18,220	2,268	25	4,448
Placer	4,193	*7,510	498	66	3,387
Plumas	2,044	11,401	43	5	1,409
Riverside	10,315	19,468	1,429	88	6,150
Sacramento	9,969	*31,188	743	19	10,455
San Benito	8,475	*39,703	96	29	8,132
San Bernardino	6,878	12,761	778	88	3,749
San Diego	11,498	58,777	766	181	7,391
San Francisco	319	2,510	-----	-----	281
San Joaquin	*20,972	31,296	3,530	62	23,454
San Luis Obispo	15,274	*118,704	877	19	17,868
San Mateo	4,295	15,288	12	2	12,682
Santa Barbara	13,034	*87,576	443	24	22,073
Santa Clara	15,816	*46,030	274	11	7,349
Santa Cruz	4,290	10,100	88	6	3,674
Shasta	5,217	34,119	294	23	18,800
Sierra	1,394	7,787	20	4	664
Siskiyou	9,150	*45,079	503	22	9,512
Solano	8,050	21,784	2,319	23	13,568
Sonoma	13,728	*48,727	398	28	18,423
Stanislaus	*14,357	*49,132	5,442	31	23,027
Sutter	5,684	*16,604	2,096	20	15,129
Tehama	5,876	25,309	1,675	23	14,940
Trinity	1,306	11,885	168	8	4,051
Tulare	*22,200	*104,484	3,655	103	38,192
Tuolumne	2,491	*18,659	91	26	3,893
Ventura	*11,480	*29,929	2,362	60	10,498
Yolo	8,315	18,977	3,955	46	24,197
Yuba	3,244	13,594	800	31	5,539
Totals	*468,886	*2,077,025	69,761	2,592	766,551

\*Including animals, age or sex not specified.

## SUMMARY.

ranges, 1910		Domestic animals in inclosures (not on farms), 1910				
Sheep—rams, ewes, wethers and lambs	Goats	Cattle	Horses	Mules, asses and burros	Swine	Sheep and goats
9,187	64	2,938	11,439	289	429	3,065
16,640	10	7	16	2	5	22
6,645	1,597	303	492	34	56	-----
45,077	3,215	686	1,835	16	201	23
15,360	3,348	1,056	746	22	107	32
64,592	2,154	479	726	291	172	131
19,595	17	726	1,378	48	103	92
1,841	465	75	114	1	1	-----
3,162	3,315	709	473	20	137	-----
142,011	4,558	1,428	4,525	674	341	58
111,363	2,813	313	694	115	43	5
87,073	3,747	1,363	1,549	20	1,132	165
23,339	147	244	1,278	559	878	435
43,346	2,846	315	902	761	140	16,111
30,317	930	820	3,565	1,482	108	7,597
62,374	507	243	1,005	24	124	5
10,947	9,018	365	395	24	193	34
72,725	586	7,528	25,297	3,425	807	3,025
31,091	8,238	313	743	26	87	18,064
10,106	278	155	436	76	30	1
2,955	147	361	1,227	81	1	26
1,181	931	42	256	75	-----	-----
129,770	3,927	806	1,280	27	348	4
39,768	5,246	130	520	30	69	11,028
76,562	549	433	811	21	156	-----
63,016	25	65	170	16	-----	-----
28,874	3,983	505	1,535	112	53	7
10,878	556	251	899	14	38	91
11,162	2,198	799	946	36	350	89
43,678	423	885	1,923	179	90	649
24,468	1,542	1,076	1,442	162	252	78
1,159	10	162	451	14	79	6
7,009	924	1,163	2,815	249	131	2,833
46,957	89	646	3,917	74	164	80
15,146	489	148	407	4	20	-----
7	81	1,671	2,977	757	409	1,324
289	1,147	1,210	3,303	434	15	118
3	9	2,280	21,184	320	1,243	2,924
24,819	260	840	2,405	67	150	84
86,953	7,390	1,144	1,301	18	52	18
1,329	154	913	1,424	23	964	114
80,533	558	1,010	2,801	73	40	61
10,055	163	1,105	5,156	66	125	116
1,579	1,043	536	1,543	66	65	79
17,023	18,403	948	1,274	60	486	529
3,098	73	180	312	55	35	42
29,922	384	745	1,393	130	229	28
170,153	392	579	1,168	19	24	31
65,315	2,991	959	2,166	23	164	27
23,252	217	653	1,454	99	157	3
89,665	511	387	386	19	83	1,903
297,736	28,473	273	568	6	35	12
3,813	845	508	277	48	106	-----
21,184	2,979	831	1,765	137	100	16
2,466	1,609	740	923	108	319	473
31,771	621	576	1,374	93	280	41
79,446	716	371	834	30	195	43
67,662	502	179	386	15	47	2
2,417,477	138,413	46,176	132,521	11,669	12,168	71,744



## POULTRY.

With the exception of the turkey, all the different species of poultry now kept on American farms are of European or Asiatic origin. The fowl, or chicken, is unquestionably of Asiatic origin.

## VARIETIES.

The chickens of the United States may be divided into ten classes:

*The American class* includes the—  
Plymouth Rock.  
Wyandotte.  
Java.  
American Dominique.  
Jersey Blue.

*The Asiatic class*—  
Brahma.  
Cochin.  
Langshan.

*The Mediterranean class*—  
Leghorn.  
Minorca.  
Andalusian.  
Spanish.

*The Polish class*—  
White Crested.  
Black.  
Golden.  
Silver.  
White and Bearded Golden.  
Bearded White.  
Bearded Silver.  
Buff Laced.

*The Dutch or Hamburg class*—  
Hamburgs.  
Red Caps.  
Campines.

*French class*—

Houdans.  
Crévecœurs.  
La Fleche.

*Game and Game Bantam class*—

Black-breasted Red.  
Brown Red.  
Golden and Silver Duckwing.  
Red Pyle.  
White, Black, Birchen, Cornish, and  
Indian Games.  
Malays.

*Bantams other than Game*—

Bebrights.  
Rose Combed.  
Booted.  
White.  
Cochin.  
Japanese.  
Polish.

*English class*—

Dorkings.  
Orpingtons.

*Miscellaneous class*—

Russian.  
Sumatra.  
Silky.  
Sultan.  
Frizzles.  
Rumples.  
Yokohama.  
Naked Neck.

Classified according to their prominent characteristics, they may be divided into four classes. The egg breeds, which are the greatest egg producers, are the Leghorns, Spanish, Minorcas, and Hamburgs.

The meat breeds, whose chief value is as meat producers: Brahma, Cochin, and Langshan. The general utility fowls furnish fair quantities of eggs and meat. The Plymouth Rock and Wyandotte belong to this class.

The fancy breeds are reared chiefly on account of their appearance: the Polish, Games, Bantams, and some miscellaneous breeds are the chief representatives of this class.

For general purposes the Plymouth Rock and Wyandotte are the most popular of all fowls, the Plymouth Rock in particular being in great favor.

The turkey is an American bird. The wild turkey was once found all along the Atlantic coast, throughout Mexico, Central America, and the great interior plains of North America. The recognized varieties of the domestic turkey are the Bronze, Narragansett, White, Holland, Buff, Slate, and Black.

## DUCKS

The six leading varieties are the White Pekin, White Aylesbury, Colored Rouen, Black Cayuga, Colored Muscovy, and White Muscovy.

The most prominent breeds of geese are the Toulouse, African, Embden, Chinese, Wild, and Egyptian.

The raising of poultry in California is carried on successfully and on a large scale, the center of this industry being at Petaluma, in Sonoma County.

## THE OSTRICH INDUSTRY.\*

In January, 1910, there were at least 6,100 breeding or feather-producing ostriches in this country, of which Arizona had 80 per cent, California 17 per cent, Arkansas 2 per cent, the small remainder being in Texas and Florida. There are ostrich farms at Pasadena, Sacramento and Brawley in Imperial County.

The question of the nature of the country most favorable for ostriches is largely affected by the kind of vegetation peculiarly suited to the soil, which in turn is undoubtedly affected by the amount of rainfall. Alfalfa pasture makes an ideal run for the birds, furnishing a large percentage of their food; hence a soil which is or can be made suitable for alfalfa is one of the essentials to success in ostrich farming. A dry, sandy soil, made suitable by drainage and irrigation for raising alfalfa, has proved best adapted to successful ostrich farming. Such a soil is generally peculiarly adapted for raising large crops of alfalfa, and makes an ideal soil for an alfalfa pasture. Under such conditions, it is essential to have some shade.

The demand for information concerning ostriches indicates that the number of individuals who are interested in ostrich farming is rapidly increasing.

The profit to be derived from the business will depend on the management, on the success secured in the raising of the young birds, and on the production of feathers in good quality. The average yearly yield of feathers from an ostrich is 1½ pounds. Birds produce from 12 to 20 ounces of feathers at each plucking, with an average of 16 ounces.

There were nine ostrich farms, returning 974 ostriches valued at \$224,000. There were also reported peafowls valued at \$1,431, pheasants valued at \$342, and India Jungle fowls valued at \$150. The number of farms reporting poultry increased 10,772 since 1900.

Poultry in California, 1880-1910.

	1880	1890	1900	1910	Value 1910
Chickens -----	1,425,991	3,504,251	3,947,200	5,665,964	\$3,237,049
Turkeys -----		287,799	158,356	116,602	258,033
Ducks -----		157,514	62,293	40,061	28,325
Geese -----		37,659	28,419	14,195	18,609
Guinea fowls -----			1	2,920	1,993
Pigeons -----				246,065	69,254
Ostriches -----			198	1,082	229,340
All other fowls -----	184,176	482,972	249,068	378	1,923
Totals -----	1,610,167	4,470,195	4,196,466	6,087,267	\$3,844,526

<sup>1</sup>Included with chickens. <sup>2</sup>Not reported.

\*For further details regarding the Ostrich industry, see the Statistical Report of the State Board of Agriculture for 1913.

## Eggs.\*

The production of eggs in California in 1909 was 41,022,000 dozen, valued at \$10,263,000.

Number of eggs—	Dozens	Value
In 1899 -----	24,443,540	\$3,864,679
In 1909 -----	41,022,395	10,262,694
Increase 1889 to 1909 -----	16,578,855	6,398,015
Per cent of increase -----	67.8	165.6

\*The center of the poultry industry in California is at Petaluma, in Sonoma County.

TABLE XVII.  
Poultry and Eggs—1909-1910.

Counties	Number of poultry raised in 1909	Number of poultry in 1910	Dozens of eggs pro- duced in 1909
Alameda	230,417	240,914	1,391,728
Alpine	2,547	2,159	8,904
Anador	23,628	23,630	142,824
Butte	94,183	74,982	377,598
Calaveras	31,410	23,242	107,387
Colusa	73,034	61,113	249,229
Contra Costa	154,332	118,944	664,951
Del Norte	3,357	3,911	13,767
El Dorado	28,499	24,308	132,910
Fresno	266,221	213,108	1,267,840
Glenn	67,529	50,336	252,286
Humboldt	67,310	54,834	332,115
Imperial	84,062	72,252	264,826
Inyo	50,007	30,132	146,952
Kern	89,520	75,900	394,130
Kings	153,839	102,747	687,052
Lake	37,976	27,435	135,001
Lassen	28,907	19,297	106,897
Los Angeles	586,566	513,965	2,332,397
Madera	28,137	23,246	67,932
Marin	141,629	203,277	1,465,911
Mariposa	19,583	12,217	49,728
Mendocino	64,935	56,807	337,781
Merced	136,305	83,998	454,115
Modoc	38,112	23,789	134,731
Mono	2,559	2,515	4,541
Monterey	123,743	128,325	751,177
Napa	105,428	108,777	662,159
Nevada	35,776	23,482	150,596
Orange	239,536	186,746	1,198,290
Placer	62,151	43,619	235,606
Plumas	15,163	9,649	48,511
Riverside	95,767	84,226	438,099
Sacramento	144,704	116,556	666,906
San Benito	79,550	95,289	696,264
San Bernardino	105,606	91,098	579,685
San Diego	174,778	130,158	921,117
San Francisco	196,020	42,649	110,057
San Joaquin	212,434	175,456	955,501
San Luis Obispo	109,871	119,822	840,405
San Mateo	43,946	47,625	236,642
Santa Barbara	91,159	89,995	407,168
Santa Clara	233,729	209,093	1,166,782
Santa Cruz	79,015	85,705	577,989
Shasta	52,607	35,873	199,858
Sierra	6,993	4,458	24,877
Siskiyou	57,444	43,413	254,107
Solano	66,403	74,683	426,261
Sonoma	1,512,601	1,362,399	9,470,880
Stanislaus	121,677	128,905	648,248
Sutter	101,908	68,861	420,198
Tehama	96,134	59,852	306,452
Trinity	10,800	7,712	31,776
Tulare	204,167	191,965	1,033,110
Tuolumne	22,710	15,989	94,507
Ventura	61,703	60,921	372,111
Yolo	84,010	76,972	347,209
Yuba	44,202	27,936	111,892
Totals	7,096,339	6,087,267	35,907,973

## DAIRY PRODUCTS.

Dairy products in general are somewhat less accurately reported than the principal crops. This is particularly the case as regards the quantity of milk produced. Less than one third of the milk produced was sold as such. Large quantities of milk and cream were sold on the butter fat basis. The butter made on farms in 1909, was valued at \$4,086,000.

(From report of Census Bureau.)

Dairy cows and products	Number	Value
Dairy cows on farms April, 1910.....	467,332 head	-----
On farms reporting dairy products in 1909.....	408,812 head	-----
On farms reporting milk produced in 1909.....	315,385 head	-----
Specified dairy products, 1909:		
Milk .....	154,901,956 gals.	
Butter .....	15,301,871 lbs.	\$4,085,992
Cheese .....	2,777,873 lbs.	383,494
Milk sold .....	45,333,432 gals.	7,346,176
Cream sold .....	3,397,061 gals.	2,861,921
Butter fat sold .....	19,176,719 lbs.	5,766,394
Butter sold .....	10,285,583 lbs.	2,763,392
Cheese sold .....	2,513,815 lbs.	345,414
Total receipts from sales, 1909.....	-----	\$19,083,297
Total value of milk, cream, and butter fat sold, and butter and cheese made.....	-----	20,443,977

## CHEESE AND BUTTER.

The production of cheese and butter, as given by counties by the Census Bureau, is that made on farms only, the production by creameries in 1909 was 37,283,450, and full cream cheese 1,567,640 pounds. The decrease from 1904, when it amounted to 3,601,051, is, no doubt, due in part to the increasing practice of separating the cream on the farm, as it is now more profitable to sell the separated cream to the butter factories. The figures issued by the State Dairy Bureau are also given. The cheese produced is, with a few exceptions, only that made by the ordinary Cheddar process. There is a considerable amount of fancy and handmade cheese which has not been reported. That the production of cheese in the State is far below the demand, is proved by the fact that more than double the amount manufactured in this State is received in the San Francisco market alone. We have the finest land for pasture and conditions favorable for the production of this article.

The amount of the output of cheese reported is much below the actual production in the State, and it is impossible to estimate it, as the owners of factories constantly change from making cheese to the production of cream. It has never been attempted to get a report on other than that made by the ordinary Cheddar process.



TABLE XVIII.

**Butter and Cheese Produced on Farms.\* 1910.**

(Compiled from the returns of the Bureau of the Census.)

(Pounds.)

Counties	1889		1899		1909	
	Butter	Cheese	Butter	Cheese	Butter	Cheese
Alameda	509,614	62,132	526,978	6,716	252,603	675
Alpine	25,075	110	12,495		28,613	500
Amador	168,436	4,395	91,584	5,184	68,812	32,517
Butte	178,329	1,143	149,200	40	124,437	
Calaveras	35,546	550	66,946	1,155	51,841	2,787
Colusa	177,100	100	107,222		75,829	272
Contra Costa	315,181	27,802	449,511	21,046	226,976	9,790
Del Norte	455,960		300,990		461,303	
El Dorado	216,790	9,125	162,072	9,200	176,354	3,734
Fresno	382,744	11,370	609,676	122,058	514,946	41,210
Glenn					86,762	
Humboldt	1,922,282	9,712	791,850	81	475,773	
Imperial					71,581	1,400
Inyo	55,316	3,373	47,813	185	116,364	5,426
Kern	104,633	88,850	142,392	12,403	73,839	30,051
Kings			145,704	2,575	78,295	139,000
Lake	119,349	350	121,186	102	92,723	200
Lassen	200,691	5,650	235,258	69,763	279,685	160
Los Angeles	676,575	250,890	509,757	5,243	323,374	1,643
Madera					48,459	
Marin	3,928,009	3,000	3,234,320	4,870	2,289,217	101,743
Mariposa	21,158	695	35,760	196	12,753	
Mendocino	375,445	22,000	349,840	3,924	355,048	1,357
Merced	153,467	4,420	138,243	98,595	94,602	200,840
Modoc	142,057	10,150	127,930		153,175	3,680
Mono	55,093	870	29,832	1,325	30,202	
Monterey	1,743,162	101,600	712,845	559,923	286,450	59,680
Napa	405,587	43,070	395,494	51,260	381,930	35,826
Nevada	147,042	100	119,236		158,271	1,970
Orange	295,146	3,480	220,218	938	333,283	50
Placer	195,507	520	217,508		108,876	30,545
Plumas	531,549	15,378	474,599	30,170	237,330	2,500
Riverside			298,345	208	312,248	650
Sacramento	725,404	230,455	551,020	543,356	164,427	497,064
San Benito	215,545	572,262	223,333	124,351	74,131	137,685
San Bernardino	303,420	1,460	249,439		207,745	362
San Diego	408,915	4,472	448,076	7,204	575,662	2,895
San Francisco	7,805	200	104,150	10	144	
San Joaquin	326,880	1,755	351,312	3,713	341,820	93,630
San Luis Obispo	3,322,918	417,791	1,286,289	135,023	1,369,563	169,350
San Mateo	655,008	521,936	349,421	509,714	91,997	64,751
Santa Barbara	1,055,380	94,235	821,804	57,773	244,632	25,665
Santa Clara	351,248	491,876	484,856	514,563	320,236	577,350
Santa Cruz	425,071	383,165	405,504	372,749	224,392	227,905
Shasta	111,484	6,000	122,610	148	137,723	
Sierra	123,598	170	114,546		135,938	1,318
Siskiyou	312,814	27,000	279,776	35,065	254,999	39,470
Solano	579,422	650	505,128	2,364	381,903	873
Sonoma	2,971,664	234,000	2,093,892	121,695	1,192,532	211,319
Stanislaus	143,231	25,160	153,026	228,363	154,998	2,125
Sutter	160,612	45,300	151,809	249,638	183,527	
Tehama	125,425	430	160,711	7,599	182,953	
Trinity	15,509		34,433		46,277	
Tulare	354,368	35,738	329,018	1,407	201,880	16,850
Tuolumne	27,716	525	60,150	60	35,522	155
Ventura	226,792	84,840	270,109	624	267,905	
Yolo	195,879		233,345	326,706	88,338	
Yuba	93,153	11,320	83,695		40,673	900
Totals	26,776,704	3,871,575	20,853,360	4,249,588	15,301,871	2,777,873

\*This is made on farms, and does not include the amount made in creameries or factories, which is very much larger.

## SUMMARY OF BUTTER AND CHEESE PRODUCED ON FARMS.

(Compiled from the returns of the Bureau of the Census.)

## Butter, 1850-1910.

Year	Made on farm (pounds)	Made in factories (pounds)	Total (pounds)
1850	705		705
1860	3,095,035		3,095,035
1870	7,969,744		7,969,744
1880	14,084,405	2,074,344	16,158,749
1890	26,776,704	271,767	27,048,471
1900	20,853,360	13,147,137	34,000,497
1910	15,301,871	37,283,450	52,585,321

## Cheese, 1850-1910.

Year	Made on farm (pounds)	Made in factories (pounds)	Total (pounds)
1850	150		150
1860	1,343,689		1,343,689
1870	3,395,074		3,395,074
1880	2,566,618	1,154,121	3,720,739
1890	3,871,575	1,091,222	4,962,797
1900	4,249,588	2,676,543	6,926,131
1910	2,777,873	1,567,640	4,345,513

TABLE XIX.

## Production of Butter and Cheese in California, 1912-1914.

(Compiled from the returns of the State Dairy Bureau. For year ending September 30, 1914.)

Counties	Butter, pounds			Cheese, pounds		
	1912	1913	1914	1912	1913	1914
Alameda	689,774	300,330	316,912			
Alpine	40,000	30,000	25,000			
Amador	145,000	142,208	140,000		11,043	10,272
Butte	772,629	769,740	924,616		78,840	93,000
Calaveras	80,875	161,666	155,000			
Colusa	490,000	443,089	473,938			25,944
Contra Costa	445,121	502,163	545,095			
Del Norte	740,664	746,637	664,186			
El Dorado	146,548	145,786	125,660			
Fresno	4,144,404	3,878,289	3,292,572	129,615	130,600	169,546
Glenn	284,028	590,365	770,202			
Humboldt	5,095,014	5,168,990	5,251,887	199,157	372,000	386,000
Imperial	4,110,736	5,398,228	5,710,287	66,580	110,000	185,600
Inyo	179,742	217,595	171,241	8,175		
Kern	732,059	566,965	986,457		54,700	36,275
Kings	3,069,880	2,313,963	3,164,620	139,375	136,850	54,750
Lake	51,760	54,420	114,124			
Lassen	225,000	208,000	202,200	115,535	232,808	115,519
Los Angeles	295,018	311,437	534,180			55,050
Madera	163,784	156,606	162,636			
Marin	1,709,603	2,119,071	2,046,325	678,825	554,180	558,630
Mariposa						
Mendocino	549,429	462,061	447,049		26,192	
Merced	3,351,049	3,910,815	3,876,875	342,720	227,760	190,020
Modoc	54,400	30,000	25,000	6,000	46,936	70,394
Mono	4,200	10,800	10,000	18,800	12,000	8,000
Monterey	664,930	589,467	660,715	697,671	886,183	728,111
Napa	602,756	624,273	665,151	23,000	24,620	26,000
Nevada	90,290	63,554	162,920			
Orange	104,965	75,000	75,000			
Placer	186,500	93,554	105,000			
Plumas	240,940	243,965	295,598			
Riverside	92,676	104,770	141,720			
Sacramento	1,900,417	1,936,560	1,649,153	266,900	656,260	542,330
San Benito	317,250	249,000	275,857	419,959	382,322	269,577
San Bernardino	89,613	95,866	105,000			
San Diego	593,236	411,888	570,929			
San Francisco	10,000	6,600	15,750			
San Joaquin	1,336,344	1,215,644	1,292,474	84,970	103,327	108,747
San Luis Obispo	2,070,619	1,846,828	1,909,176	254,403	156,380	216,090
San Mateo	224,570	207,829	211,000	142,740	134,878	204,175
Santa Barbara	568,795	269,262	331,148			10,000
Santa Clara	336,839	375,614	299,750	426,864	379,709	768,101
Santa Cruz	182,500	233,136	183,902	173,518	187,150	218,292
Shasta	123,400	90,804	91,620			45,407
Sierra	140,550	140,000	145,000			
Siskiyou	506,929	566,309	798,975	10,852	14,921	26,894
Solano	1,031,137	1,102,756	2,449,695			
Sonoma	2,881,889	2,478,008	1,464,456	163,000	158,750	206,736
Stanislaus	6,894,225	7,541,900	8,184,390	30,000	82,500	71,500
Sutter	822,046	842,417	881,805	268,370	339,563	368,860
Tehama	144,284	321,165	504,975			27,992
Trinity						
Tulare	3,947,284	3,971,217	4,362,290		63,750	54,100
Tuolumne						
Ventura	48,286	52,887	56,937			
Yolo	1,104,509	1,034,902	1,061,703	45,588	14,850	16,903
Yuba	112,390	118,310	198,309	73,000	21,900	118,000
Totals	54,940,886	55,542,709	59,286,460	4,785,617	5,600,972	6,016,815

NOTE.—Mariposa, Trinity, and Tuolumne counties are the only three which produce neither butter nor cheese.

## Summary of Butter, Cheese, and Condensed Milk Production, 1904-1914.

(Compiled from the reports of the State Dairy Bureau.)

Year	Butter, pounds	Cheese, pounds	Condensed milk, cases
1904	35,636,969	6,133,898	186,905
1905	41,961,047	6,020,672	244,878
1906	44,044,578	6,418,480	113,025
1907	44,599,211	5,928,942	134,907
1908	48,469,585	6,262,194	101,069
1909	43,899,018	4,431,194	83,476
1910	45,989,141	4,648,348	172,916
1911	50,380,736	4,580,495	116,384
1912	54,940,886	4,785,617	172,309
1913	55,542,709	5,600,972	172,800
1914	59,286,460	6,016,815	274,096

## Receipts of Butter in San Francisco, 1904-1914.

Year	Pounds
1904	15,713,592
1905	17,936,782
1906	*
1907	15,384,137
1908	14,610,522
1909	14,328,000
1910	13,934,200
1911	19,033,600
1912	23,548,850
1913	23,905,100
1914	22,580,950

\*Not available.

## Annual Value of Dairy Products, 1913-1914.

1913—	
Butter, 55,542,709 pounds	\$17,840,318
Cheese, 5,600,972 pounds	890,516
Condensed, evaporated and powdered milk, 8,637,928 pounds	777,468
Casein, 665,000 pounds	33,250
Market milk, cream and ice cream	11,000,000
Calves produced on dairies	2,000,000
Skim milk and buttermilk	1,500,000
Total	\$34,050,552
1914—	
Butter, 59,286,460 pounds	\$16,368,992
Cheese, 6,016,815 pounds	950,055
Condensed, evaporated and powdered milk, 14,153,401 pounds	1,076,300
Casein, 992,917 pounds	46,146
Market milk, cream and ice cream	11,500,000
Calves produced on dairies	2,500,000
Skim milk and buttermilk	1,500,000
Total	\$33,941,493



**Imports and Exports.**

About 50,000,000 pounds of cheese is imported, and on an average of about 3,000,000 pounds of domestic cheese exported. The duty on imported butter is  $2\frac{1}{2}$  cents per pound, and cheese 20 per cent ad valorem on October 4, 1913, and after.

**BEES, HONEY, AND WAX.**

In the earlier years the parent stock of the honey bee in this country was the common brown or black bee of Germany. In 1860 the Department of Agriculture introduced the Italian bee, about twenty years later the Cyprian, and still later the Carniolan.

**Summary of Honey and Wax, 1860-1910.**

(From census reports.)

Year	Honey, pounds	Wax, pounds
1860 -----	12,276	584
1870 -----	294,326	4,903
1880 -----	574,029	14,672
1890 -----	3,929,889	60,237
1900 -----	3,667,738	115,330
1910 -----	10,264,715	126,445

The number of farms reporting bees decreased from 6,915 in 1900 to 6,870 in 1910, while the colonies of bees increased from 129,444 to 201,023, or 55.3 per cent, and the value increased from \$363,885 to \$729,793, or 100.6 per cent.

The average production of honey is 70 pounds to the colony, and the average value 6 cents per pound. The price varies according to color and quality, the extracted honey from 4 to  $7\frac{1}{2}$  cents, and comb honey from 10 to 18 cents per pound. In many portions of the State great loss is caused by American foul brood and European foul brood, commonly called black brood, the percentage of damage having steadily risen from 7 per cent in 1909 to 20 per cent in 1912, and 25 per cent in southern California in 1913.

In 1913 the honey crop was a failure in the southern part of the State, except in Imperial County. Taking the average yield of honey and wax as 70 pounds per colony, the crop averaged 70 to 80 per cent in other parts of the State.

Water-white orange extracted honey brought from 9 to 10 cents a pound, comb honey  $17\frac{1}{2}$  to 20 cents, and dark extracted "River Honey" (Sacramento Valley)  $3\frac{1}{2}$  to 4 cents a pound. The price paid to growers was  $8\frac{1}{2}$  to 15 cents a pound for comb honey and  $3\frac{1}{2}$  to 7 cents for extracted honey.

**Production of Honey, 1902-1914.**

Years	Pounds	Years	Pounds
1902 -----	5,125,000	1909 -----	10,500,000
1903 -----	8,400,000	1910 -----	4,500,000
1904 -----	1,040,000	1911 -----	5,600,000
1905 -----	9,500,000	1912 -----	4,800,000
1906 -----	5,250,000	1913 -----	3,200,000
1907 -----	6,550,000	1914 -----	7,900,000
1908 -----	5,250,000		

TABLE XX.

## Bees, Beeswax, and Honey by Counties.

(From the census reports.)

Counties	Colonies, 1909	Honey, pounds, 1909	Beeswax, pounds, 1909
Alameda	610	9,848	179
Alpine	49	220	
Amador	170	2,402	100
Butte	1,384	9,702	170
Calaveras	362	8,413	118
Colusa	1,406	67,689	798
Contra Costa	698	15,950	284
Del Norte	78	1,395	
El Dorado	464	8,105	75
Fresno	9,242	616,609	7,261
Glenn	420	10,982	250
Humboldt	1,803	23,481	367
Imperial	4,740	514,125	4,453
Inyo	5,868	312,620	2,131
Kern	4,501	204,920	2,832
Kings	4,690	238,791	3,148
Lake	276	5,165	43
Lassen	298	5,642	5
Los Angeles	25,990	1,289,820	15,501
Madera	375	16,439	370
Marin	20	205	55
Mariposa	34	300	25
Mendocino	441	6,090	34
Merced	4,072	204,098	3,150
Modoc	839	19,796	232
Mono	438	20,355	425
Monterey	3,669	177,279	2,619
Napa	524	8,939	204
Nevada	260	5,452	42
Orange	5,159	325,656	2,764
Placer	657	7,338	80
Plumas	121	2,280	5
Riverside	18,900	902,106	12,915
Sacramento	1,835	55,272	160
San Benito	1,777	68,253	773
San Bernardino	8,073	363,025	5,983
San Diego	30,566	1,559,607	18,589
San Francisco	6		
San Joaquin	3,014	104,645	3,459
San Luis Obispo	3,936	177,342	1,983
San Mateo	289	5,458	193
Santa Barbara	4,072	288,875	4,060
Santa Clara	2,542	77,252	842
Santa Cruz	693	11,032	98
Shasta	689	8,466	185
Sierra	49	2,081	10
Siskiyou	2,775	85,322	324
Solano	256	2,873	
Sonoma	824	7,014	44
Stanislaus	2,554	61,592	1,371
Sutter	2,055	76,812	745
Tehama	786	15,779	115
Trinity	98	1,605	12
Tulare	9,568	290,435	4,743
Tuolumne	363	12,310	65
Ventura	23,714	1,839,986	20,918
Yolo	2,442	106,982	1,125
Yuba	149	545	10
Totals	201,023	10,264,715	126,445

# CALIFORNIA HONEY CROP, AND IMPORTS AND EXPORTS OF HONEY AND WAX, 1900-1914.\*

(Duty on imported honey, 10 cents per gallon.)

Year	California crop, pounds	Exports of domestic honey, value	Imports, gallons	Value
1900	2,208,000	\$30,191	146,860	\$70,857
1901	8,112,000	55,574	182,196	83,599
1902	5,125,000	106,112	167,301	56,383
1903	8,400,000	64,220	287,696	115,400
1904	1,040,000	69,317	206,292	69,053
1905	9,500,000	63,367	198,617	76,719
1906	5,250,000	111,945	138,221	50,651
1907	6,500,000	93,690	175,672	70,854
1908	5,250,000	78,102	211,992	98,425
1909	10,500,000	85,578	145,691	60,884
1910	4,500,000	159,401	103,640	52,968
1911	9,500,000	81,649	112,553	62,942
1912	4,800,000	212,652	115,040	62,684
1913	3,200,000	182,252	116,271	68,717
1914	7,900,000	135,669	75,079	38,665

## IMPORTS AND EXPORTS OF BEESWAX, 1900-1914.

(Duty free.)

Years	Exported domestic		Imported	
	Pounds	Value	Pounds	Value
1900	319,379	\$91,913	213,813	\$51,526
1901	140,276	39,464	213,773	55,884
1902	125,283	36,541	408,706	115,937
1903	70,811	21,337	488,576	127,220
1904	55,631	16,545	425,168	116,878
1905	85,406	24,966	373,569	101,121
1906	101,726	29,894	587,617	168,014
1907	117,169	36,392	917,088	264,637
1908	90,506	28,659	671,526	194,769
1909	77,547	23,293	764,937	231,559
1910	89,890	27,740	972,145	282,905
1911	101,735	31,404	902,904	270,112
1912	109,478	32,556	1,076,741	328,752
1913	116,296	33,131	828,793	253,867
1914	96,215	27,292	1,412,200	476,364

\*For the statistics previous to 1904, see the Report for 1913, pages 64, 66.

## WOOL.\*

The following estimates are taken from the annual report of the National Association of Wool Manufacturers, Boston:

	1911	1912	1913	1914
Sheep of shearing age on April 1st.....	1,700,000	1,700,000	1,600,000	*1,852,000
Average weight of fleece, pounds.....	7	7	7	6.2
Per cent of shrinkage.....	67	67	67	65
Wool washed and unwashed, pounds.....	11,900,000	11,900,000	11,200,000	11,480,000
Equivalent quantity of scoured wool, pounds.....	3,927,000	3,927,000	3,696,000	4,100,800
Average value per scoured pound				
October 1st.....	\$0 42	\$0 56	\$0 45	\$0 54
Total value October 1st.....	\$1,649,340	\$2,199,120	\$1,663,200	\$2,214,432

\*Number of fleeces.

The comparative prices of California wool at Boston has been as follows on the scoured basis per pound:

Year	Cents		Year	Cents	
	Spring	Fall		Spring	Fall
1904 -----	62	53	1910 -----	55	45
1905 -----	74	62	1911 -----	48	40
1906 -----	70	60	1912 -----	54	45
1907 -----	68	58	1913 -----	48	40
1908 -----	50	40	1914 -----	53	45
1909 -----	70	53			

#### CALIFORNIA WOOL PRODUCTION, 1904-1914.

(Commercial estimates.) (Duty—Free on and after December, 1913.)

Year	Pounds	Year	Pounds
1904 -----	21,500,000	1910 -----	13,500,000
1905 -----	22,000,000	1911 -----	12,000,000
1906 -----	24,000,000	1912 -----	11,900,000
1907 -----	15,750,000	1913 -----	11,200,000
1908 -----	14,560,000	1914 -----	11,480,000
1909 -----	15,000,000		

\*For the California wool production from 1854-1903, see Report for 1913, page 67. The imports of wool are given under so many classifications of camel, goat, alpaca, etc., unmanufactured and manufactured, that space will not allow the details to be given here.



# PART III.

## AGRICULTURE.

(CONTINUED.)

### FARMS AND FARM CROPS.

CEREALS, HAY AND FORAGE, SUGAR BEETS, HOPS, COTTON, RICE,  
TOBACCO, GINSENG, VEGETABLES, PLANTS, AND  
NURSERY PRODUCTS.

California Farm Crops for Ten Years, 1904-1914. Principal Crops by Counties.

#### FARM CROPS.

In comparing one year with another it should be borne in mind that acreage is, on the whole, a better index of the general change or tendencies of agriculture than either the quantity or the value of the crops, since variations in quantity may be due largely to temporarily favorable or unfavorable climatic conditions, and variations in the value of the crops are largely affected by changes in prices. The acreage in fruits and nuts can not be given, as the extent of the industry has always been calculated by the number of trees only.

Crops.	Acreage, 1909	Value
Cereals .....	1,970,492	\$28,039,826
Other grains and seeds.....	163,776	6,517,453
Hay and forage.....	2,533,347	42,187,215
Tobacco .....	4	479
Cotton (including cotton seed).....	324	12,776
Hemp .....	300	39,000
Hops .....	8,391	1,731,110
Broom corn .....	1,023	32,509
Sugar crops .....	79,604	4,335,358
Sundry minor crops.....	7	840
Potatoes and sweet potatoes and yams.....	72,799	5,235,073
Other vegetables .....	79,163	6,886,885
Flowers, plants, and nursery products.....	5,816	3,601,301
Small fruits .....	9,687	1,789,214
Totals .....	4,924,733	\$100,409,039
Seeds .....		\$800,758
Fruits and nuts.....		48,917,655
Forest products of farm.....		2,949,732
Miscellaneous .....		33,829
Totals .....		\$52,701,974

**Summary of California Crops Harvested in 1909.**  
(Compiled from reports of the Bureau of the Census.)

Crop cereals	Number of farms reporting	Acres	Amount, bushels	Value
Corn -----	5,728	51,935	1,273,901	\$1,077,411
Oats -----	2,477	192,158	4,143,688	2,637,047
Wheat, total -----		478,217	6,203,206	6,323,983
Common winter -----	3,628	413,687	5,168,210	5,311,387
Common spring -----	1,075	64,070	1,029,907	1,006,819
Durum or macaroni -----	7	460	5,089	5,777
Emmer and spelt -----	19	840	19,755	13,758
Barley -----	7,597	1,195,158	26,441,954	17,184,508
Buckwheat -----	26	849	14,681	11,569
Rye -----	193	7,027	70,683	65,846
Kaffir corn and Milo maize -----	2,521	44,308	938,049	725,704
<b>Total cereals -----</b>		<b>1,970,492</b>	<b>39,105,917</b>	<b>\$28,039,826</b>
Hay and forage—			<b>Tons</b>	
Timothy alone -----	370	13,725	20,001	\$185,579
Timothy and clover mixed -----	958	46,661	73,183	629,575
Clover alone -----	703	8,519	20,380	213,289
Alfalfa -----	19,904	484,134	1,639,707	13,088,530
Millet or Hungarian grasses -----	101	2,142	2,688	27,483
Other tame or cultivated grasses -----	2,274	90,414	119,415	1,253,428
Wild, salt or prairie grasses -----	3,679	253,127	281,033	2,028,494
Grains cut green -----	39,397	1,604,745	2,019,526	24,056,727
Coarse forage -----	2,175	25,868	60,611	438,095
Root forage -----	1,021	4,012	90,586	266,015
<b>Totals -----</b>	<b>53,760</b>	<b>2,533,347</b>	<b>4,327,130</b>	<b>\$42,187,215</b>
Sundry crops—			<b>Bushels</b>	
Potatoes -----	12,533	67,888	9,824,005	\$4,879,449
Sweet potatoes and yams -----	1,133	5,111	572,814	355,624
Tobacco -----	12	4	<sup>1</sup> 4,502	479
Cotton -----	18	324	<sup>2</sup> 183	11,744
Cotton seed (estimated), 92 tons -----				1,032
Hops -----	273	8,391	<sup>1</sup> 11,994,953	1,731,110
Hemp -----	2	300	<sup>1</sup> 600,000	39,000
Broom corn -----	24	1,023	<sup>1</sup> 614,250	32,509
Sundry minor crops -----		7		840
Other grains and seeds—			<b>Bushels</b>	
Dry edible beans -----	3,054	157,987	3,328,218	\$6,295,457
Horse beans -----	67	150	5,534	5,659
Dry peas -----	262	2,959	57,468	101,016
Peanuts -----	42	99	2,991	2,889
Flaxseed -----	8	240	1,882	3,224
Mustard seed -----	66	1,964	63,365	100,731
Sorghum cane seed -----	14	103	1,147	1,997
Sunflower seed -----	21	257	6,855	6,264
Timothy seed -----	4		357	1,065
Clover seed -----	10		310	2,823
Alfalfa seed -----	347		23,791	200,823
Other tame grass seed -----	5		1,077	1,323
Flower and garden seeds -----	109			594,724
<b>Totals -----</b>		<b>163,776</b>	<b>3,467,885</b>	<b>\$6,517,453</b>

<sup>1</sup>Pounds. <sup>2</sup>Bales.

### Size of Cereal Crops.

The acreage sown to wheat and other cereal crops in California has greatly decreased in recent years, the land being devoted to orchards and vineyards, which yield a much higher profit.

#### Barley.

California, however, has held the first place in the production of barley for a number of years, as far back as the year 1852. The area in barley has been upwards of 1,000,000 acres since 1901, the largest area being in 1910, with 1,195,000 acres. The yield per acre varied from 16.7 bushels in 1900 to 31.0 in 1910, when the production was 46,500,000 bushels, or the largest on record. In 1914 the estimated acreage was 1,402,000 and the production 42,060,000 bushels.

#### Buckwheat.

This crop has never been grown to any extent in California; therefore, the production being so small, regular records have not been kept. The area under cultivation is but a few hundred acres, and the production from 10,000 to 15,000 bushels.

#### Corn.

Corn has also fallen off; the acreage was between 100,000 and 161,000 in former years, the highest production being in 1891, when it amounted to upward of 5,570,000 bushels. In 1910 it amounted to only 1,273,000 bushels, and in 1914 to 2,160,000 bushels.

#### Oats.

In oats the acreage has increased from 153,000 acres in 1900 to 192,000 in 1910 and 220,000 in 1914, producing 7,700,000 bushels.

#### Rye.

Rye has always been a small crop in California, and the area and production have fallen off greatly in recent years, the acreage being 62,925 in 1900 and 7,027 in 1910, and the production 524,451 and 70,683 bushels, respectively. In 1914 the acreage was 8,000 and the production 136,000 bushels.

#### Wheat.

In wheat, the production has decreased heavily between 1900 and 1910, while potatoes, hay, and hops all show an increase. The acreage in wheat in 1914 was 400,000, and the estimated production 6,800,000 bushels.

#### Broom Corn.

This crop has never been grown to any extent in California. The production from 1880 to 1910 has been: In 1880, 191,600 pounds; 1890, 815 acres and 611,975 pounds; 1900, 1669 acres, 1,146,000 pounds, and 1910, 1,023 acres and 614,250 pounds.

#### Potatoes.

The acreage in potatoes in 1914 was 75,000, compared with 68,000 the previous year, and the production 10,350,000 bushels, compared with 8,092,000 in 1913.

## Sweet Potatoes.

In 1914 the acreage in sweet potatoes was 6,000, and the production 966,000 bushels, the same acreage in 1913 produced 1,020,000 bushels.

## Hay.

The acreage in hay in 1914 was 2,700,000, compared with 2,400,000 the previous year, and the production 5,265,000 tons, compared with 3,600,000 tons. It may be noted that the average yield, and average price of the above crops in California are in most cases considerably above the average for the United States as a whole.

## SUMMARY OF FARM CROPS, 1850-1910.\*

(Compiled from the reports of the Bureau of the Census.)

Year	Barley		Buckwheat		Corn	
	Acres	Bushels	Acres	Bushels	Acres	Bushels
1850		9,712				12,256
1860		4,415,426		76,887		510,708
1870		8,783,490		21,928		1,221,222
1880	586,350	12,463,561	1,012	22,307	71,781	1,993,325
1890	815,995	17,548,386	664	10,388	70,303	2,381,270
1900	1,029,647	25,149,335	395	7,835	53,930	1,477,093
1910	1,195,158	26,441,954	849	14,681	51,935	1,273,901

Year	Oats		Rye		Wheat	
	Acres	Bushels	Acres	Bushels	Acres	Bushels
1850						17,328
1860		1,043,006		52,140		5,928,470
1870		1,757,507		26,275		16,676,702
1880	49,947	1,341,271	20,281	181,681	1,832,429	29,017,707
1890	57,569	1,463,068	27,413	243,871	2,840,807	40,869,337
1900	153,734	4,972,356	62,925	524,451	2,683,405	36,534,407
1910	192,158	4,143,688	7,027	70,683	478,217	6,203,206

Year	Potatoes		Hay		Hops	
	Acres	Bushels	Acres	Tons	Acres	Pounds
1850		9,292		2,038		
1860		1,789,463		305,655		80
1870		2,049,227		551,773		625,064
1880		4,550,565	758,024	1,045,119		1,444,077
1890	38,178	3,664,920	1,431,574	2,218,285	3,974	6,547,338
1900	42,098	5,242,596	2,339,601	3,035,266	6,890	10,124,660
1910	67,688	9,824,005	2,533,347	4,327,130	8,391	11,994,953

\*When blank, the acreage or production, if any, was not reported.



## THE BEST COUNTIES FOR CERTAIN CROPS.

The six leading counties in the production of cereals, hay and forage, potatoes, sweet potatoes, beans, peas, and other vegetables, and sugar beets are as follows, and may be taken to show the districts in which experience has proved that they are best suited. The acreage is that given in the last census.

## Barley.

County	Acreage	County	Acreage
San Joaquin -----	125,114	Colusa -----	89,985
Monterey -----	98,923	Merced -----	88,145
Madera -----	90,341	Stanislaus -----	57,529

## Corn.

Los Angeles -----	9,084	Tulare -----	2,527
San Diego -----	4,554	San Joaquin -----	2,547
Orange -----	3,054	Ventura -----	2,409

## Oats.

Stanislaus -----	38,546	San Mateo -----	16,125
San Joaquin -----	23,208	Madera -----	10,569
Merced -----	19,843	Santa Barbara -----	9,494

## Rye.

Merced -----	2,108	Lassen -----	526
San Joaquin -----	1,843	Modoc -----	406
Plumas -----	704	Siskiyou -----	306

## Wheat.

Tulare -----	66,567	San Joaquin -----	24,786
Madera -----	39,468	Monterey -----	22,924
San Luis Obispo -----	33,608	Stanislaus -----	22,068

## Kaffir Corn and Milo Maize.

Tulare -----	10,987	Kings -----	3,931
Imperial -----	9,789	San Joaquin -----	2,968
Stanislaus -----	4,448	Kern -----	2,813

## Hay and Forage.

Los Angeles -----	154,048	Fresno -----	95,265
San Joaquin -----	104,916	Contra Costa -----	88,937
Tulare -----	91,595	Riverside -----	88,430

**Potatoes.**

County	Acreage	County	Acreage
San Joaquin .....	9,895	Los Angeles .....	2,799
Sacramento .....	5,036	Monterey .....	2,374
Sonoma .....	3,260	Alameda .....	1,854

**Sweet Potatoes.**

Merced .....	780	San Joaquin .....	88
Los Angeles .....	218	Orange .....	75
Sacramento .....	117	Sutter .....	48

**Beans.**

Ventura .....	58,744	San Joaquin .....	13,954
Santa Barbara .....	22,355	San Luis Obispo .....	11,169
Orange .....	21,186	Sacramento .....	7,801

**Peas.**

Ventura .....	756	Alameda .....	215
Humboldt .....	517	San Mateo .....	186
Stanislaus .....	415	Monterey .....	154
San Joaquin .....	362		

**All Other Vegetables.**

Los Angeles .....	13,385	Sacramento .....	6,367
Alameda .....	7,459	Santa Clara .....	4,241
San Joaquin .....	6,728	Orange .....	3,785

**Sugar Beets.**

Ventura .....	14,333	Orange .....	10,275
Los Angeles .....	14,191	Monterey .....	9,900
Santa Barbara .....	11,320	Yolo .....	5,714

**Value of Farm Crops by Counties.**

The leading counties in the production of various crops, classed according to value, are as follows:

**Cereals.**

(Value of \$1,000,000 and upward.)

County	Value	County	Value
San Joaquin .....	\$3,238,000	Solano .....	\$1,292,000
Monterey .....	1,695,000	Madera .....	1,220,000
Merced .....	1,691,000	Yolo .....	1,032,000
Colusa .....	1,578,000	Tulare .....	1,442,000
Stanislaus .....	1,315,000		

**Hay and Forage.**

(Value of \$1,000,000 and upward.)

Los Angeles .....	\$3,430,000	Stanislaus .....	\$1,424,000
San Joaquin .....	1,763,000	Tulare .....	1,362,000
Fresno .....	1,702,000	Merced .....	1,355,000
Riverside .....	1,624,000	Kings .....	1,171,000
Contra Costa .....	1,617,000	Sonoma .....	1,170,000
Santa Clara .....	1,587,000	Monterey .....	1,125,000
Alameda .....	1,547,000	San Diego .....	1,110,000

## Vegetables.

County	Value
San Joaquin .....	\$2,149,000
Los Angeles .....	1,255,000
Contra Costa .....	1,125,000

## BEET-SUGAR.\*

All the coast valleys of California are favorably situated, in respect to temperature, for the production of sugar beets, and the same may be said of certain lands in other parts of the State. In California there is a larger acreage that is well adapted to the growing of sugar beets than is found in any other state in the Union.

## California Sugar Crops, 1899 and 1909.

(From the Reports of the Census.)

(Sugar beets and sorgham cane.)

Product	Number of farms	Acres	Production		
			Amount	Unit	Value
Sugar beets—					
1899 .....	863	41,242	356,535	tons	\$1,550,346
1909† .....	1,113	78,957	845,191	tons	4,320,532
Sorghum cane—					
Total cane, 1899 .....					\$3,788
In 1899 cane grown .....	54	140	1,085	tons	10
In 1899 cane sold as such .....			6	tons	3,778
In 1899 syrup made .....			8,671	gallons	14,826
Total cane, 1909 .....					
In 1909 cane grown .....	48	647	3,021	tons	2,340
In 1909 syrup made .....	8		4,330	gallons	

†Includes beets and cane used as forage.

The cultivation of the beet greatly improves the land. According to a Leipzig University professor, the following was the average increase in ten years on one estate:

	Yield before beet culture (bushels per acre)	Yield after beet culture (bushels per acre)	Per cent increase because of beet culture
Wheat .....	24.5	41.3	68.6
Rye .....	28.4	40.8	43.7
Oats .....	61.8	75.3	21.8
Barley .....	23.2	43.5	87.5
Potatoes .....	218.6	238.0	8.97
Rape .....	23.2	48.8	110.0

\*For further details regarding Beet-sugar, see Report for 1913, pages 73-77.

## Beet-sugar, 1900-1914.

(Duty on beets, 15 per cent ad valorem; sugar-beet seed free.)

Year	California production, pounds	Imported raw beet-sugar	
		Pounds	Value
1900	60,638,000	701,539,452	\$14,800,609
1901	137,400,000	908,683,078	20,028,575
1902	147,535,000	255,030,219	4,202,044
1903	131,080,000	87,130,805	1,223,023
1904	118,394,000	2,414,454	50,525
1905	122,500,000	223,944,976	4,797,278
1906	178,000,000	48,548,919	1,032,040
1907	154,800,000	397,745,046	8,203,309
1908	195,000,000	221,036,900	5,401,378
1909	245,000,000	98,625,908	2,521,798
1910	289,493,000	1,148	43
1911	325,076,000	24,669,287	593,037
1912	317,363,000	6,504,260	239,484
1913	342,416,000	182,647,582	4,169,523
1914	338,135,600	2,367,708	70,829

## Sugar Beets and Beet-sugar Produced in California, 1904-1914.

Year	Number factories in operation	Sugar beets			Sugar made (chiefly refined)	
		Area harvested, acres	Beets used for sugar, short tons	Average per acre, short tons	Short tons	Pounds
1904		32,801	395,452	12.06	46,656	93,311,900
1905		51,857	514,391	9.92	73,893	147,786,900
1906	8	60,141	671,571	11.17	92,740	185,480,000
1907	8	47,387	484,816	10.23	73,023	146,045,500
1908	8	62,302	647,085	10.39	89,890	179,780,000
1909	10	83,000	882,084	10.63	127,272	254,544,000
1910	8	90,500	923,100	10.20	139,890	279,780,000
1911	10	99,545	1,037,283	10.42	161,300	322,600,000
1912	11	111,416	1,004,328	9.01	158,904	317,808,000
1913	12	127,610	1,138,003	8.92	171,208	342,416,000
1914	10	104,000	1,082,000	10.4	169,004	338,008,000

## Sorghum Syrup, 1860-1910.

Sorghum was first introduced into the United States in 1853. Tennessee, Missouri, and Kentucky are the largest producers. The following table shows the production in California from 1860 to 1910:

Year	Gallons
1860	552
1870	333
1880	2,459
1890	1,670
1900	8,671
1910	4,330

## HOPS.\*

The leading states in the production of hops are California, Oregon, Washington and New York.

The total area devoted to the production of hops in California in 1909 was 8,391 acres, producing about 11,994,953 pounds of hops, valued at

\*For further details regarding hops, see Report for 1913, pages 77-79.



\$1,731,110. The climatic conditions and soil of California are more perfectly adapted to this crop than any other state in the Union, and its average production per acre is greater. The average production per acre in other hop-producing countries of the world has been estimated as follows: England, 905 pounds; Germany, 510 pounds; in the United States, 885 pounds, and in California, 1,469 pounds.

The cultivation of hops in California has increased rapidly, as shown by the following figures:

**California Hop Crop, 1860-1910.**  
(From the Bureau of the Census.)

Year	Acres	Pounds
1860		80
1870		625,064
1880	1,119	1,444,077
1890	3,974	6,547,338
1900	6,890	10,124,660
1910	8,391	11,994,953

NOTE.—The acreage was not reported prior to 1880.

The highest and lowest prices per pound paid to growers during the last six years have been as follows:

Year	Highest, cents	Lowest, cents
1908	14	7
1909	25	12
1910	30	15
1911	45	25
1912	22	13
1913	26	13
1914	18	5

**California Hops, Imports and Exports, 1900-1914.**  
(Duty, 16 cents per pound.)

Year	California crop		Exports		Imports	
	Bales*	Pounds	Pounds	Value	Pounds	Value
1900	36,000	7,056,000	12,639,474	\$1,707,660	2,589,725	\$713,701
1901	48,000	9,360,000	14,963,676	2,466,515	2,606,708	851,008
1902	53,000	10,176,000	10,715,151	1,550,657	2,805,293	833,702
1903	56,000	10,752,000	7,794,705	1,909,951	6,012,510	1,808,491
1904	63,000	12,222,000	10,985,988	2,116,180	21,758,163	1,374,327
1905	67,500	13,095,000	14,858,612	4,480,666	4,339,379	1,980,804
1906	80,000	15,520,000	13,026,904	3,125,843	10,113,989	2,326,982
1907	82,000	16,072,000	16,809,534	3,531,972	6,211,983	1,974,900
1908	68,000	13,260,000	22,920,480	2,963,167	8,493,265	1,989,261
1909	69,000	12,765,000	10,446,884	1,271,629	7,386,574	1,337,099
1910	71,000	13,135,000	10,589,254	2,062,140	3,200,560	1,499,354
1911	87,000	16,095,000	13,104,774	2,130,972	8,557,531	2,706,600
1912	117,000	21,645,000	12,190,663	4,648,505	2,991,125	2,231,348
1913	118,500	21,922,500	17,591,195	4,764,713	8,494,144	2,852,865
1914	110,000	20,350,000	24,262,896	6,953,529	5,382,025	2,790,516

\*A bale averages from 185 to 190 pounds net, the variation depending upon the quality and the compression of the hops.

## CALIFORNIA COTTON.\*

Cotton is one of the most important crops grown in the United States, but it is only in the last three or four years that it became a recognized crop in California, where it is grown on a commercial scale in Imperial County.

The first cotton produced was in 1909-1910, and amounted to 350 bales. In 1910, the acreage reported was 10,000, and 12,000 acres in 1911. In 1910-1911 the production was 4,000 bales of 500 pounds and 5,258,000 pounds of lint. In 1911-1912 the production was 9,420 bales and 4,302,000 pounds of lint. In the season of 1912-1913 the acreage was 8,450 and the production 7,250 bales. The yield per acre was 390 pounds in 1911 and 430 pounds in 1912. This is the highest average in the United States. The estimated acreage in 1914 was 35,000, compared with 14,000 the previous year. The yield per acre was 500 pounds in 1913, and 506 in 1914, and the total production 23,000 bales of 500 pounds gross weight in 1913, and 37,000 bales in 1914. The average price per pound to producers was 13 cents in 1913, and 7 cents in 1914.

The highest price paid for cotton during 1911-1912 was 11 cents and the lowest 8.20 cents. In 1910-1911 the highest was 14 cents and the lowest 11.50 cents. These prices are for "middling" cotton; the price for higher and lower grades varied according to grade. The acreage in 1913 was 22,000, and the yield 21,500 bales of 500 pounds each, very close to a bale per acre, the value amounting to one and a half million dollars. The staple cotton (or Durango) crop amounted to 6,000 bales. The price for short cotton ranged from \$12.00 to \$13.70 per hundredweight; Durango or staple, \$15.00 to \$16.50.

There is about 45,000 bales of cotton grown in Imperial Valley this season, *i. e.*, the season of 1914-1915. The average yield per acre this year has been even better than in previous years and will probably average 500 pounds to the acre. So far as price is concerned, the first part of the year was very depressing on account of the great decline in the cotton market, due to the situation brought about by the European war. Prices have recovered considerably, however, and today cotton is practically normal, good cotton selling at about 9 cents per pound in the valley.

In Imperial Valley the farmers have practically stopped growing long staple cotton, 90 per cent of the present crop being Mebane or other varieties of short staple cotton. This is due to the fact that they find a larger production of short staple cotton to the acre, which offsets the difference in price. Palo Verde Valley in Riverside County, about 150 miles north of Imperial Valley, is also becoming identified with cotton growing, and this year will probably turn out 2,500 bales of short staple cotton.

## SILK.

The production of silk in California is named in the Census of 1870, when 3,587 pounds of silk cocoons were reported. In 1880 a State Silk Culture Association was organized, but later became dormant until revived in 1908 as the Ladies' Silk Culture Society of California. The society has established a farm at Rutherford, Napa County, where they have nearly 800 white and red mulberry trees, and distribute cuttings

\*For further details regarding cotton, see Report for 1912, pages 79-80.

free to all parts of the State. A ten thousand dollar building has been constructed for hatching worms, and other purposes.

Silkworm eggs have been secured from France and Italy, and in the course of time it is hoped that the work will develop into an important industry. At the San Francisco Land Show, in October, 1913, a gold medal and the blue ribbon were awarded for raw silk produced at the Rutherford farm.

#### RICE.

If its importance as a food product is to be measured by the number of persons who consume it, rice must, without a doubt, be considered the greatest cereal, as it is more widely and generally used as a food material than any other. Half a century ago experiments were made in the cultivation of rice in California, but they were not successful. In 1860, small quantities were raised in Alameda, Tehama, San Mateo, Santa Cruz, and Sonoma, but the total amount produced was only 2,140 pounds.

Experiments in California have been conducted on three types of soil, covering a large area in the Sacramento Valley. Three years' results indicate the possibility of growing rice in this region on a commercial scale, the important thing now being to determine the varieties best adapted to the region.

The successful introduction of this crop is dependent upon an abundant supply of water, which must always be available during the growing season. The soil area adapted to rice in this valley is sufficiently large to produce many times the 55,000,000 pounds of cleaned rice which are consumed each year on the Pacific coast. How much of this area has sufficient available water for proper irrigation is uncertain, though for a good portion of it there is apparently an abundant supply. Increase in the rice acreage should therefore be made with care.\*

Its culture has opened up a new industry for lands which have hitherto been deemed unfit for anything but wheat, on account of the adobe conditions of the soil. The time of harvest varies, according to the variety, from August to November.

In 1913 there were 6,200 acres of rice in California, all but about 150 acres in the Sacramento Valley. The results obtained were very good, the yield ranging from 2,500 to 5,000 pounds per acre, averaging about 3,200. About 1,000 acres were late and could not be threshed before the rains started in the fall.

Rice is grown successfully in the northern part of Kern County, on heavily laden alkali land which had hitherto been regarded as practically worthless. From 15 acres 349 sacks, weighing from 100 to 110 pounds, were produced, valued at 3 cents per pound.

In 1914 there were 16,000 acres in rice, compared with 6,200 the previous year. The average yield was about 2,800 pounds per acre, the total crop amounting to about 44,800,000 pounds, the quality being good and the average price about 2 cents per pound to the grower. About 1,750 acres were not harvested.

Low yields and failures in some cases were due principally to late seeding and watering and damage caused by barnyard grass.

There were six rice mills in the State in 1914 with a daily capacity of approximately 5,000 bags (100 pounds each) per day.

\*Report on Rice Growing, Circular No. 97, U. S. Department of Agriculture.



The growers received from 2.20 to 1.90 f. o. b. cars shipping point for the 1914 crop, per bag of 100 pounds. It is estimated that the 1915 crop will be about 26,000 acres.

The mills handle the complete process from the time the rice leaves the threshing machine on the field until it is packed in 2½ pound cotton bags ready for retail consumption, both in the polished and unpolished. The by-products, such as bran and rice meal, are very nutritious for cattle and hog feed.

The only rice flour mill in the State is operated in Sacramento, and is competing successfully with the foreign product, which was shipped into the United States previously from Holland and Germany.

#### TOBACCO.\*

For several years extensive and exhaustive experiments in the production of tobacco from Turkish seed have been carried on at the Exeter Tobacco Ranch in Tulare County. There have been a number of types of tobacco experimented with, but the types that have been attended with the greatest success are such as are suitable for cigarette manufacture. The tobacco raised during the last four years has been produced about equally by Fresno and Tulare counties, the total quantity being 7,500 pounds in 1909; 15,000 in 1910; 45,000 in 1911, and 150,000 in 1912. The 1912 crop sold at from 30 cents to 60 cents per pound; most of it averaged 47½ cents. Some tobacco is also from Los Angeles County and the southern part of the State.

In 1913 the crop of leaf tobacco amounted to about 175,000 pounds, some of which it is stated was purchased by the eastern market. According to a leading authority, the crop was not as good as in former years, owing to the farmers planting too large an acreage and not being familiar with the culture of tobacco. The growers in Fresno County, where a considerable quantity has been produced, have experienced much difficulty in disposing of their crop at a fair price, so the cultivation of tobacco will probably fall off.

#### VEGETABLES.

The potato is the most important vegetable raised; the acreage in 1912 was 78,000, and the production 10,140,000 bushels, valued at \$6,591,000, an average of 130 bushels to the acre.

Next to the Irish potato, the sweet potato is the most extensively grown vegetable in the United States. In California it is not cultivated on a large scale. In 1909, the acreage amounted to 5,111, with a production of 572,814 bushels.†

Beans and Peas Produced, 1850-1910.‡  
(From the Bureau of the Census.)

Year	Beans, bushels	Peas, bushels
1850	2,292	
1860	165,574	
1870	380,010	
1880	378,971	40,806
1890	713,480	32,364
1900	658,515	57,299
1910	3,323,608	57,468

\*For the early experiments in growing tobacco in California, see the Report for 1913, page 82.

†For the production of potatoes and sweet potatoes by counties, see page 89.

‡Beans and peas were reported as one product in 1850, 1860, and 1870.



The acreage in beans in 1910 was 157,825, producing beans of the value of \$6,292,955; the acreage in dry peas was 2,959, valued at \$101,016.

#### Lima Beans.

Lima beans are only grown in any quantity in five counties, and have come into great favor in recent years. They were first cultivated in Carpinteria Valley about forty years ago, and after 1884 the growing extended. The bulk of the crop is raised in Ventura County; Orange, Santa Barbara, Los Angeles and San Diego counties being next in order. San Diego County, however, is increasing its acreage in lima beans very fast. Some of the best sections yield 40 to 45 sacks per acre. The average yield is 14 sacks of 80 pounds, or 1,120 pounds to the acre, but in the best sections 35 or even 40 sacks of 80 pounds to the acre have been raised.

In Ventura County the yield is not less than 20 80-pound sacks to the acre, whereas 12 sacks is considered a good yield in Orange County. The other varieties of beans are grown mostly in the delta region of the Sacramento and San Joaquin rivers. The pink variety is grown generally in all the bean sections of California; the large white or Lady Washington in the Sacramento and San Joaquin River sections; the Blackeye is in reality a cowpea and is grown all over the State, but principally in the San Joaquin Valley; the Bayo is not grown extensively, and is produced in a limited area of the choicest river bottom lands in the Sacramento and San Joaquin Valley sections; the small white, or navy bean, is a late variety and grown mostly in the coastal counties of Monterey, San Luis Obispo, and Santa Barbara. Large quantities are shipped to Boston, where they are prepared as "Boston baked beans."

Beans have become one of the most important vegetable crops in the State.

#### California Beans, 1909-1914.

(Sacks.)

Variety	1909	1910	1911	1912	1913	1914
Limas†	1,050,000	1,175,000	1,300,000	1,200,000	1,050,000	1,500,000
Blackeyes	80,000	100,000	225,000	204,000	80,000	150,000
Large whites	300,000	150,000	75,000	63,000	115,000	100,000
Small whites	225,000	250,000	215,000	215,000	40,000	325,000
Bayos	100,000	75,000	150,000	65,000	60,000	75,000
Pinks	325,000	250,000	710,000	298,000	250,000	500,000
Various	100,000	100,000	150,000	118,000	120,000	125,000
Totals	2,180,000	2,100,000	2,825,000	2,163,000	1,715,000	2,775,000

†On the basis of bags of 80 pounds, although bags of 100 pounds are increasing every year.

## California Bean Crop, 1904-1914, Imports and Exports.\*

(Duty--beans, 25 cents per bushel of 60 pounds; dried peas, 10 cents per bushel; split peas, 20 cents per bushel.)

Year	California bean crop, bags	Exported†		Imported	
		Bushels	Value	Bushels	Value
1904 -----	1,337,000	248,805	\$546,479	978,187	\$1,223,309
1905 -----	1,921,400	330,321	730,922	472,572	628,775
1906 -----	1,779,000	447,474	960,710	458,041	667,214
1907 -----	1,000,000	435,490	932,264	406,679	656,898
1908 -----	1,929,000	306,939	708,201	1,657,401	2,406,935
1909 -----	2,340,000	298,209	702,819	3,355,405	4,926,199
1910 -----	1,950,000	365,721	973,231	1,015,157	1,621,207
1911 -----	2,825,000	288,638	814,663	1,037,371	1,733,697
1912 -----	2,013,000	341,268	1,011,466	1,004,930	1,857,220
1913 -----	1,165,000	400,868	1,080,066	1,048,297	1,938,105
1914 -----	2,905,000	314,655	875,493	1,634,070	2,955,663

## Celery.

Celery is an important crop and is grown on a large scale in Orange County, but owing to the fact that the blight has damaged the celery to some extent in this county, and that a large quantity is being raised near El Monte, in Los Angeles County, and also a large acreage near Stockton, in San Joaquin County, the growers are turning to lima beans and sugar beets, which are more certain and less expensive to raise.

The onion crop the last two years has not much changed. In 1913 the acreage was 7,327, producing an average of 355 bushels to the acre, or a total of 2,597,915; and in 1914, 7,250 acres produced 2,900,000 bushels, or a yield of 400 bushels per acre.

According to the figures of the California Vegetable Union, Los Angeles County leads in the production of cauliflower, cabbage, lettuce, tomatoes and mixed vegetables; San Joaquin in potatoes and onions; San Mateo in artichokes, and Sacramento in asparagus.

The annual average shipments are approximately as follows:

Vegetables	Number of cars	Average price paid to growers
Artichokes -----	150	25 cents to \$1.00 per dozen.
Asparagus -----	350	3 cents to 4 cents per pound.
Celery -----	2,500	15 cents to 40 cents per dozen.
Cauliflower -----	1,000	15 cents to 60 cents per dozen.
Cabbage -----	1,000	\$8.00 to \$40.00 per ton.
Potatoes -----	10,000	50 cents to \$2.00 per cwt.
Lettuce -----	300	8 cents to 25 cents per dozen.
Tomatoes -----	300	\$15.00 to \$30.00 per ton.
Onions -----	2,000	50 cents to \$2.00 per cwt.
Mixed vegetables -----	1,000	

## CANNED VEGETABLES.

California ranks first among the states in the production of canned asparagus, and sixth in that of canned tomatoes. The case which is used as the unit of measure consists of 24 standard-size cans No. 2 (also called 2-pound cans) for beans, peas, and No. 3 (also called 3-pound cans) for all other vegetables. Where the output has been reported in other forms by the canneries, the quantities have been reduced to standard cases.

†In the exports dried peas are included in the total with beans.

\*For the production of dried beans and peas by counties, see page 90.

The value of the vegetables canned increased throughout during the decade of 1899-1909; the rate of increase from 1904 to 1909 being much higher than that during the preceding five-year period. The value of canned asparagus formed over half of the value of all canned vegetables in 1909.

#### Canned Vegetables, 1899-1909.

(Compiled from the Reports of the Census Bureau.)

Product	1899		1904		1909	
	Cases	Value	Cases	Value	Cases	Value
Asparagus -----					198,123	\$1,794,346
Beans -----	34,209	\$56,797	65,641	\$133,494	47,525	87,059
Peas -----	72,760	145,987	68,142	144,033	123,349	250,624
Pumpkins -----	1,033	1,860	18,852	30,156	11,694	15,165
Tomatoes -----	794,566	2,068,997	541,776	845,805	545,131	1,120,632
All other -----	148	396	286,172	1,213,173	65,812	202,795
<b>Totals -----</b>		<b>\$2,274,037</b>		<b>\$2,366,661</b>		<b>\$3,470,621</b>

#### Duty on Imported Preserved Vegetables.

All kinds 25 per cent ad valorem.

#### Canned Vegetables, 1900-1914.

Year	California pack, cases	Exported value	Year	California pack, cases	Exported value
1900 -----	803,617	\$603,288	1908 -----	1,501,885	\$621,987
1901 -----	1,076,058	528,914	1909 -----	1,242,720	728,111
1902 -----	1,151,268	560,612	1910 -----	2,250,645	782,973
1903 -----	1,343,574	597,759	1911 -----	2,293,000	1,061,259
1904 -----	961,783	719,580	1912 -----	2,271,700	1,822,357
1905 -----	1,192,455	580,048	1913 -----	2,809,000	1,819,281
1906 -----	1,747,595	658,739	1914 -----	3,194,327	1,520,879
1907 -----	1,941,755	598,628			

#### California Vegetable Pack by Varieties, 1910-1914.

(Cases.)

	1910	1911	1912	1913	1914
Tomatoes -----	1,350,310	1,500,000	1,500,000	1,490,000	2,058,657
Peas -----	167,775	185,000	270,000	200,000	162,093
Asparagus -----	617,275	700,000	730,000	710,000	768,810
Spinach -----			16,500	16,000	
Squash -----			21,000	19,000	
Beans and other vegetables.	115,285	130,000	172,500	156,000	204,767
<b>Total vegetables -----</b>	<b>2,250,645</b>	<b>2,515,000</b>	<b>2,809,000</b>	<b>2,591,000</b>	<b>3,194,327</b>
<b>Total fruits and vegetables.</b>	<b>6,259,893</b>	<b>6,684,023</b>	<b>7,739,150</b>	<b>6,606,500</b>	<b>9,320,396</b>

#### GINSENG IN CALIFORNIA.\*

Many demands are made for information regarding the cultivation of this plant, many appearing to believe that owing to its high price it must be an exceedingly profitable crop, but it offers little inducement for inexperienced growers looking for quick profits from a small invest-

\*For a full description of the cultivation and prices of ginseng, see Report for 1913, pages 85-86.

ment. The plant takes eighteen months to germinate, and six years to mature; it requires good soil, shade, and careful cultivation. Last year in the San Francisco market it brought from \$4 to \$7 per pound, according to grade.

The market rates per pound on December 31, 1913, were \$12.50 gold for extra and selected, \$11 for good root, and \$9.55 for fair root, as compared with \$10.10, \$9 and \$7.87 per pound on December 31, 1912.

The rates for cultivated root during 1913 varied from \$2.20 to \$11 gold per pound, depending upon quality and condition. A large portion of the American imports were sold as of too poor a quality to be graded in the usual manner. The necessity of preparing root in accordance with Chinese ideas, rather than American ideas of what the Chinese ought to want, must not be forgotten.†

#### Exports of Ginseng From the United States, 1908-1914.

Year	Pounds	Value
1908	154,180	\$1,111,994
1909	186,257	1,270,632
1910	192,406	1,439,434
1911	153,999	1,088,202
1912	155,308	1,119,301
1913	221,901	1,665,731
1914	224,605	1,832,686

†Consular Reports, March, 1914.

#### Vegetables, Flowers and Plants and Nursery Products, 1899-1909.

(Compiled from the Reports of the Bureau of the Census.)

Crop	Number of farms	Acres		Value of products	
		1899	1909	1899	1909
Vegetables other than potatoes and sweet potatoes	*33,755	32,401	79,163	\$2,858,832	\$6,886,885
Farms reporting a product of \$500 or over	2,075		53,369		4,836,001
All other farms	31,680		25,794		2,050,884
Flowers and plants, total	442	672	1,013	580,646	1,388,513
Farms reporting a product of \$250 or over	347				1,373,577
All other farms	95				14,936
Nursery products, total	566	2,914	4,803	558,329	2,212,788
Farms reporting a product of \$250 or over	296				2,134,713
All other farms	270				78,075

In 1909 the total acreage of potatoes and other vegetables was 151,962 and their value \$12,121,958. Excluding potatoes and sweet potatoes the acreage of vegetables was 79,163 and their value \$6,887,000, both being more than twice as great as in 1899. The above table distinguishes between farms which make the raising of vegetables a business of some importance, and others on most of which vegetables are raised mainly for home consumption.

\*Not including 9,393 farms that had vegetable gardens, but gave no information as to their products.



**FLOWERS, PLANTS, AND NURSERY PRODUCTS.**

The choice of crops by the florist is largely influenced by changes in popular taste, the camellia, which was the most popular flower years ago, having been superseded in recent years by the rose, carnation, violet, chrysanthemum, and lily of the valley. There is also a growing demand for orchids.

The raising of flowers and plants and of nursery products is also of considerable importance in California, 5,816 acres being devoted to them in 1909, and the output being valued at \$3,601,301. Most of the product was raised on farms where these branches of agriculture were carried on as an important business.

In 1909, a total of 96,230,420 square feet, or over 2,200 acres, of land under glass was reported in the United States.

In California, 430 farms reported as florists' establishments, with 1,572,480 square feet under glass.

There is comparatively little land under glass in California, compared with the eastern states, as the climate does not require it.

## CALIFORNIA FARM CROPS FOR TWENTY-FOUR YEARS

1890-1914.

## Barley, Buckwheat, Corn, Oats, Rye, Wheat, Potatoes, Hay.\*

(Compiled from the Reports of the United States Department of Agriculture.)

## California Barley Crops, 1890-1914.

Year	Acreage	Average yield per acre, bushels	Production, bushels	Average farm price, December 1	Farm value, December 1
1890	677,276	22.3	15,103,255	\$0 75	\$11,327,441
1891	812,731	23.7	19,261,725	61	11,749,652
1892	845,240	24.0	20,285,760	47	9,534,307
1893	760,716	22.5	17,116,110	42	7,188,766
1894	737,895	15.2	11,216,004	45	5,047,202
1895	937,127	20.3	19,023,678	40	7,609,471
1896	918,384	21.6	19,837,094	48	9,521,805
1897	881,649	23.0	20,277,927	54	10,950,081
1898	872,833	10.5	9,164,746	65	5,957,085
1899	855,376	26.0	22,239,776	50	11,119,888
1900	889,591	16.7	14,856,170	43	6,388,153
1901	1,089,785	26.0	28,334,410	41	11,617,108
1902	1,144,274	26.0	29,751,124	63	18,743,208
1903	1,201,488	25.7	30,878,242	61	18,835,728
1904	1,237,533	22.7	28,091,999	60	16,855,199
1905	1,237,533	21.5	26,606,960	59	15,698,106
1906	1,425,000	27.2	38,760,000	54	20,930,400
1907	1,040,000	28.9	30,056,000	78	23,444,000
1908	1,082,000	23.5	25,427,000	74	18,816,000
1909	1,180,000	26.5	31,270,000	74	23,140,000
1910	1,500,000	31.0	46,500,000	55	25,575,000
1911	1,450,000	28.0	40,600,000	85	34,510,000
1912	1,392,000	30.0	41,760,000	70	29,232,000
1913	1,275,000	26.0	33,150,000	68	22,542,000
1914	1,402,000	30.0	42,060,000	59	24,815,000

\*For production of these crops by counties, see pages 86-89.

Exports of domestic barley in 1913, 17,536,703 bushels; in 1914, 6,644,747 bushels.

## Duty on Imported Cereals, Potatoes, and Hay.

Barley.....	15c per bushel of 48 pounds	Oats.....	6c per bushel of 32 pounds
Wheat .....	free	Rye .....	free
Buckwheat .....	free	Potatoes .....	free
Corn .....	free	Hay.....	\$2.00 per ton
Wheat flour.....	free		

NOTE.—The imports of breadstuffs are comparatively small. In 1914 the quantities were: Corn, 12,367,369 bushels; oats, 22,273,624 bushels; wheat, 1,978,937 bushels, and wheat flour, 89,911 barrels.

The crops of barley, buckwheat, corn, oats, rye, wheat, potatoes and hay, from 1868-1903, will be found in the Report for 1913, pages 88-95.

## California Buckwheat Crops, 1890-1896.

Year	Acreage	Average yield per acre, bushels	Production, bushels	Average farm price, December 1	Farm value, December 1
1890 -----	677	14.5	9,816	\$0 73	\$7,166
1891 -----	683	15.3	10,450	58	8,051
1892 -----	697	16.5	11,500	53	6,141
1893 -----	691	21.5	14,857	71	10,548
1894 -----	691	18.0	12,438	45	5,597
1895 -----	726	30.0	21,780	64	13,939
1896 -----	690	18.7	12,903	39	5,032

NOTE.—The production of buckwheat is so small that it has not been recorded in recent years, the area being only a few hundred acres. The crop is raised in any quantity in only twenty-four states. Very little is exported. The acreage in buckwheat in 1910 was only 849, producing 14,681 bushels. The exports of buckwheat in 1913 were 1,347 bushels, and in 1914, 580 bushels.

## California Corn Crops, 1890-1914.

Year	Acreage	Average yield per acre, bushels	Production, bushels	Average farm price, December 1	Farm value, December 1
1890 -----	159,871	27.5	4,396,000	\$0 65	\$2,857,694
1891 -----	161,470	34.5	5,571,000	71	3,955,208
1892 -----	72,500	30.3	2,197,000	55	1,208,213
1893 -----	71,775	37.1	2,275,268	50	1,137,634
1894 -----	66,751	19.3	1,288,294	57	734,328
1895 -----	65,416	34.5	2,256,852	53	1,196,132
1896 -----	59,529	37.0	2,202,573	53	1,167,364
1897 -----	60,720	31.5	1,912,680	56	1,071,101
1898 -----	45,540	26.0	1,184,040	62	734,105
1899 -----	56,925	27.0	1,536,975	60	922,185
1900 -----	54,079	25.0	1,351,975	61	824,705
1901 -----	59,703	31.0	1,850,793	68	1,258,539
1902 -----	60,300	30.5	1,839,150	77	1,416,146
1903 -----	57,888	30.7	1,777,162	74	1,315,100
1904 -----	54,415	28.0	1,556,269	78	1,213,890
1905 -----	56,592	32.0	1,810,944	76	1,376,317
1906 -----	57,158	34.9	1,994,814	67	1,336,525
1907 -----	54,000	34.0	1,836,000	85	1,561,000
1908 -----	50,000	32.0	1,600,000	88	1,408,000
1909 -----	50,000	34.8	1,740,000	91	1,583,000
1910 -----	50,000	37.5	1,875,000	80	1,500,000
1911 -----	51,000	36.0	1,836,000	90	1,652,000
1912 -----	52,000	37.0	1,924,000	85	1,635,000
1913 -----	55,000	33.0	1,815,000	88	1,597,000
1914 -----	60,000	36.0	2,160,000	87	1,879,000

Exports of domestic corn in 1913, 49,064,967 bushels; value, \$28,800,544; in 1914, 9,380,855 bushels; value \$7,008,028.

## California Oat Crops, 1890-1914.

Year	Acreage	Average yield per acre, bushels	Production, bushels	Average farm price, December 1	Farm value, December 1
1890	70,655	27.5	1,943,000	\$0 56	\$1,088,087
1891	84,786	28.5	2,416,000	60	1,449,841
1892	67,829	29.3	1,987,000	40	794,956
1893	59,011	25.5	1,504,781	38	571,817
1894	57,831	35.6	2,058,784	44	905,865
1895	60,144	28.1	1,690,046	39	659,118
1896	58,941	31.0	1,827,171	44	803,955
1897	57,173	18.0	1,029,114	49	504,266
1898	58,888	33.0	1,943,304	50	971,652
1899	59,477	31.0	1,843,787	47	866,580
1900	60,072	24.6	1,477,771	46	679,775
1901	160,768	30.4	4,887,347	44	2,150,433
1902	168,806	30.5	5,148,583	51	2,625,777
1903	165,430	34.8	5,756,964	54	3,108,761
1904	167,084	34.1	5,697,564	57	3,247,611
1905	168,755	28.0	4,725,140	51	2,409,821
1906	163,692	31.5	5,156,298	52	2,681,275
1907	136,000	33.5	4,556,000	71	3,235,000
1908	200,000	33.5	6,700,000	67	4,489,000
1909	200,000	31.4	6,280,000	66	4,145,000
1910	200,000	37.0	7,400,000	50	3,700,000
1911	210,000	34.0	7,140,000	59	4,213,000
1912	200,000	39.0	7,800,000	55	4,290,000
1913	210,000	31.6	6,636,000	60	3,982,000
1914	220,000	35.0	7,700,000	53	4,081,000

The exports of domestic oats in 1913 amounted to 33,759,177 bushels, valued at \$13,206,247, and in 1914, 1,859,949 bushels, value \$757,527.

## California Rye Crops, 1890-1914.

Year	Acreage	Average yield per acre, bushels	Production, bushels	Average farm price, December 1	Farm value, December 1
1890	27,413	14.0	383,782	\$0 70	\$268,647
1891	27,961	16.5	461,357	90	415,221
1892	28,800	11.5	331,200	67	221,904
1893	28,800	17.5	504,000	60	302,400
1894	29,376	13.2	387,763	60	232,658
1895	36,720	11.6	425,952	53	247,052
1896	38,556	14.5	559,062	60	335,437
1897	40,484	12.2	493,905	65	321,038
1898	40,079	9.0	360,711	70	252,498
1899	36,472	15.0	547,080	78	426,722
1900	38,660	13.0	502,580	58	291,496
1901	66,087	12.8	845,914	57	482,171
1902	67,409	12.0	808,908	75	606,681
1903	68,083	12.3	837,421	77	644,814
1904	67,402	7.6	512,255	78	399,559
1905	67,402	13.0	876,226	77	674,694
1906	62,684	12.8	802,355	71	569,672
1907	65,800	19.0	1,251,000	85	1,063,000
1908	66,000	12.0	792,000	88	697,000
1909	61,000	13.8	842,000	1 04	876,000
1910	7,000	17.0	119,000	86	102,000
1911	8,000	17.0	136,000	85	116,000
1912	8,000	17.6	141,000	90	127,000
1913	8,000	15.0	120,000	75	90,000
1914	8,000	17.0	136,000	85	116,000

The exports of domestic rye in 1913 amounted to 1,822,962 bushels; value \$1,260,384, and in 1914, 2,222,934 bushels, value \$1,555,012.



## California Wheat Crops, 1890-1914.

Year	Acreage	Average yield per acre, bushels	Production, bushels	Average farm price, December 1	Farm value, December 1
1890	2,426,730	12.0	29,121,000	\$0 76	\$22,131,778
1891	2,815,007	13.0	36,595,000	95	34,765,336
1892	3,012,057	13.0	39,157,000	68	26,626,584
1893	2,620,490	13.3	34,852,517	53	18,471,834
1894	2,688,204	11.3	30,576,705	57	17,314,722
1895	3,084,446	13.0	40,097,798	60	24,058,679
1896	3,088,849	14.6	45,097,195	83	37,430,672
1897	3,239,402	10.0	32,394,020	83	26,887,037
1898	1,343,341	9.1	12,224,405	72	8,801,570
1899	2,393,185	14.1	33,743,909	62	20,921,223
1900	2,771,226	10.3	28,543,628	58	16,555,304
1901	2,672,547	13.0	34,743,111	60	20,845,847
1902	2,052,679	10.9	22,374,201	80	17,899,361
1903	1,868,410	11.2	20,926,192	87	18,205,787
1904	1,618,043	10.8	17,474,864	88	15,377,880
1905	1,886,238	9.3	17,542,013	82	14,384,451
1906	1,572,144	17.1	26,883,662	75	20,162,746
1907	1,368,000	15.0	20,520,000	98	20,110,000
1908	800,000	14.6	11,680,000	1 02	11,914,000
1909	825,000	14.0	11,550,000	1 11	12,820,000
1910	550,000	18.0	9,900,000	94	9,306,000
1911	480,000	18.0	8,640,000	88	7,603,000
1912	370,000	17.0	6,290,000	93	5,850,000
1913	300,000	14.0	4,200,000	95	3,990,000
1914	400,000	17.0	6,800,000	1 04	7,072,000

NOTE.—All winter wheat; no spring wheat grown in California.

The exports of domestic wheat in 1913 amounted to 91,602,974 bushels, value \$89,036,428, and in 1914 to 92,393,775 bushels, value \$87,953,456.

## California Potato Crops, 1890-1914.

Year	Acreage	Average yield per acre, bushels	Production, bushels	Average farm price, December 1	Farm value, December 1
1890	39,655	95	3,767,225	\$0 68	\$2,561,713
1891	41,241	95	3,918,465	54	2,115,971
1892	38,354	75	2,876,550	59	1,697,164
1893	37,203	96	3,571,488	50	1,785,744
1894	26,786	52	1,392,872	49	682,507
1895	25,179	75	1,888,425	48	906,444
1896	22,158	80	1,772,640	53	939,499
1897	21,493	105	2,256,765	49	1,105,815
1898	20,418	95	1,939,710	55	1,066,840
1899	26,543	119	3,158,617	63	1,989,929
1900	26,808	104	2,788,032	53	1,477,657
1901	45,259	101	4,571,159	77	3,519,792
1902	47,975	118	5,661,050	58	3,283,409
1903	46,536	130	6,049,680	66	3,992,789
1904	47,001	129	6,063,129	67	4,062,296
1905	50,291	165	8,298,015	67	5,559,670
1906	50,291	125	6,286,375	74	4,651,918
1907	48,000	145	6,900,000	90	6,264,000
1908	49,000	107	5,243,000	77	4,037,000
1909	60,000	130	7,800,000	77	6,006,000
1910	70,000	130	9,100,000	85	7,735,000
1911	72,000	135	9,720,000	90	8,748,000
1912	78,000	130	10,140,000	65	6,591,000
1913	68,000	119	8,092,000	70	5,664,000
1914	75,000	138	10,350,000	70	7,245,000

The imports of potatoes generally averaged less than half a million bushels, until 1913; in 1914 the quantity was 3,645,993 bushels, value \$1,763,782. The exports of domestic potatoes in 1913 amounted to 2,028,261 bushels, value \$1,646,176, and in 1914, 1,794,073 bushels, value \$1,463,514.

## California Hay Crops, 1890-1914.

Year	Acreage	Average yield per acre, tons	Production, tons	Average farm price, December 1	Farm value, December 1
1890	1,412,676	1.40	1,977,746	\$10 50	\$20,766,333
1891	1,497,437	1.40	2,096,412	11 00	23,060,532
1892	1,617,232	1.50	2,425,848	8 76	21,250,428
1893	1,681,921	1.60	2,842,446	7 87	22,370,050
1894	1,665,102	1.93	3,213,647	9 50	30,529,647
1895	1,681,753	1.66	2,791,710	7 06	19,709,473
1896	1,732,206	1.65	2,858,140	6 35	18,149,189
1897	1,697,562	1.60	2,716,099	9 00	24,444,891
1898	1,459,903	1.60	2,335,845	14 25	33,285,791
1899	1,708,087	1.63	2,784,182	8 00	22,273,456
1900	793,491	1.51	1,708,171	8 15	22,071,594
1901	550,325	1.82	1,001,592	7 92	7,932,609
1902	555,828	1.81	1,006,049	9 41	9,466,921
1903	550,270	2.08	1,144,562	11 66	13,345,593
1904	583,266	2.03	1,184,071	10 41	12,326,179
1905	589,119	2.40	1,413,886	10 05	14,209,554
1906	612,684	1.85	1,133,465	11 25	12,751,481
1907	637,000	1.75	1,115,000	12 50	13,938,000
1908	605,000	1.35	817,000	13 25	10,825,000
1909	650,000	1.70	1,105,000	11 50	12,708,000
1910	2,400,000	1.83	4,392,000	9 60	*42,163,000
1911	2,500,000	1.75	4,375,000	10 90	*47,688,000
1912	2,500,000	1.53	3,825,000	13 70	*52,402,000
1913	2,400,000	1.50	3,600,000	13 50	48,600,000
1914	2,700,000	1.95	5,265,000	8 20	43,173,000

\*Including forage.

The imports and exports of hay are not large. In 1913 156,323 tons, value \$1,514,311, and in 1914, 170,786 tons, value \$1,634,390. The exports were 60,720 tons in 1913, value \$964,429, and 50,151 tons in 1914, value \$827,205.

TABLE XXI.

## Value of All Crops.

(From Census Reports in 1909.)

Counties	Cereals	Other grains and seeds	Hay and forage	Vegetables	Fruits and nuts	All other crops	Total
Alameda	\$394,907 00	\$31,257 00	\$1,547,119 00	\$810,628 00	\$860,977 00	\$686,079 00	\$4,276,967 00
Alpine	25,833 00	8 00	49,147 00	3,291 00	1,444 00	3,483 00	83,206 00
Amador	55,405 00	90 00	229,982 00	41,583 00	59,599 00	65,651 00	452,270 00
Butte	556,107 00	767 00	806,735 00	55,314 00	797,893 00	147,699 00	2,364,515 00
Calaveras	7,881 00	755 00	217,191 00	58,093 00	53,368 00	71,880 00	406,168 00
Colusa	1,578,543 00	36,023 00	340,462 00	30,458 00	129,389 00	49,424 00	2,164,299 00
Contra Costa	604,035 00	104,487 00	1,617,610 00	1,125,668 00	499,436 00	80,818 00	4,632,054 00
Del Norte	8,877 00	164 00	85,763 00	10,605 00	2,878 00	3,665 00	111,952 00
El Dorado	15,189 00	120 00	196,638 00	41,950 00	143,924 00	73,693 00	471,514 00
Fresno	510,053 00	13,685 00	1,702,818 00	108,690 00	5,279,794 00	376,147 00	7,991,187 00
Glenn	909,796 00	700 00	327,008 00	13,644 00	35,661 00	64,101 00	1,350,910 00
Humboldt	117,802 00	19,249 00	893,913 00	175,817 00	141,493 00	90,151 00	1,438,425 00
Imperial	755,239 00	-----	802,990 00	295,389 00	26,864 00	20,876 00	1,901,358 00
Inyo	156,416 00	3,495 00	252,610 00	57,314 00	44,047 00	18,760 00	532,643 00
Kern	500,973 00	13,580 00	953,044 00	96,968 00	159,698 00	78,992 00	1,803,255 00
Kings	550,869 00	20,704 00	1,171,101 00	140,137 00	1,219,568 00	77,735 00	3,180,114 00
Lake	129,857 00	17,641 00	196,995 00	44,701 00	90,001 00	38,601 00	517,796 00
Lassen	214,275 00	20,267 00	582,371 00	51,047 00	16,304 00	13,685 00	897,949 00
Los Angeles	806,507 00	218,428 00	3,430,698 00	1,255,093 00	6,731,532 00	2,278,626 00	14,720,884 00
Madera	1,220,003 00	900 00	290,258 00	27,895 00	126,124 00	21,138 00	1,636,418 00
Marin	19,766 00	15 00	425,987 00	42,916 00	31,816 00	13,883 00	534,383 00
Mariposa	18,515 00	1,430 00	109,699 00	28,024 00	43,025 00	29,939 00	230,632 00
Mendocino	175,678 00	927 00	596,680 00	121,941 00	166,534 00	540,218 00	1,531,986 00
Merced	1,691,556 00	11,251 00	1,355,098 00	187,563 00	147,964 00	30,142 00	3,423,574 00
Modoc	329,318 00	59,506 00	621,177 00	98,574 00	49,894 00	17,569 00	1,176,038 00
Mono	5,023 00	552 00	85,083 00	13,396 00	3,038 00	665 00	107,757 00
Monterey	1,695,220 00	57,676 00	1,125,740 00	330,296 00	438,763 00	677,840 00	4,325,535 00
Napa	168,471 00	6,224 00	465,362 00	126,348 00	766,745 00	104,292 00	1,637,442 00
Nevada	3,101 00	58 00	159,879 00	54,554 00	89,771 00	78,963 00	386,326 00
Orange	562,563 00	653,763 00	976,896 00	540,864 00	2,497,734 00	617,637 00	944,517 00
Placer	104,677 00	-----	194,464 00	52,253 00	1,318,731 00	143,294 00	1,813,419 00
Plumas	74,736 00	-----	299,817 00	21,772 00	3,872 00	32,722 00	432,919 00
Riverside	895,051 00	10,180 00	1,624,675 00	133,199 00	2,393,371 00	77,100 00	5,133,576 00
Sacramento	232,584 00	405,143 00	786,239 00	509,231 00	2,965,690 00	521,123 00	4,720,010 00
San Benito	268,068 00	138,590 00	963,249 00	34,425 00	281,891 00	54,932 00	1,741,155 00

San Bernardino	93,464 00	1,097 00	932,219 00	107,283 00	5,357,098 00	327,042 00	6,818,233 00
San Diego	458,836 00	91,268 00	1,110,127 00	174,869 00	941,767 00	84,269 00	2,861,136 00
San Francisco		3,310 00	1,460 00	190,965 00	920 00	127,271 00	323,926 00
San Joaquin	3,238,767 00	533,977 00	1,763,286 00	2,149,300 00	1,307,448 00	89,462 00	9,082,240 00
San Luis Obispo	869,268 00	517,452 00	681,886 00	141,685 00	155,094 00	116,427 00	2,481,812 00
San Mateo	260,218 00	36,742 00	361,266 00	459,470 00	73,272 00	204,403 00	1,395,371 00
Santa Barbara	585,079 00	869,908 00	771,922 00	244,205 00	538,465 00	558,671 00	3,568,250 00
Santa Clara	170,190 00	265,665 00	1,587,494 00	450,065 00	4,234,874 00	280,150 00	6,988,438 00
Santa Cruz	94,360 00	24,514 00	327,572 00	164,518 00	1,656,212 00	141,259 00	2,408,435 00
Shasta	74,831 00	1,719 00	410,532 00	85,381 00	248,442 00	118,890 00	939,795 00
Sierra	25,769 00		180,874 00	12,369 00	7,618 00	7,524 00	234,154 00
Siskiyou	325,312 00	6,872 00	851,817 00	130,817 00	41,170 00	70,306 00	1,426,394 00
Solano	1,292,481 00	103,660 00	572,822 00	84,337 00	1,495,713 00	20,953 00	3,569,946 00
Sonoma	50,993 00	809 00	1,170,906 00	185,749 00	2,034,805 00	1,008,116 00	4,451,378 00
Stanislaus	1,315,180 00	17,411 00	1,424,229 00	181,282 00	207,508 00	53,050 00	3,198,640 00
Sutter	588,103 00	150,486 00	419,331 00	57,388 00	470,985 00	63,149 00	1,749,422 00
Tehama	249,157 00	756 00	376,843 00	46,108 00	428,108 00	127,278 00	1,228,250 00
Trinity	12,394 00	604 00	167,713 00	58,211 00	11,874 00	18,549 00	263,345 00
Tulare	1,442,685 00	17,311 00	1,362,609 00	192,030 00	2,053,596 00	285,763 00	5,353,994 00
Tuolumne	14,453 00	183 00	167,810 00	39,885 00	31,044 00	44,121 00	237,496 00
Ventura	347,954 00	2,711,809 00	931,688 00	61,878 00	1,795,606 00	942,824 00	6,751,759 00
Yolo	1,032,710 00	112,847 00	984,115 00	126,359 00	677,099 00	341,320 00	3,274,450 00
Yuba	134,728 00	2,075 00	214,158 00	38,083 00	73,358 00	237,734 00	700,136 00
Totals	\$28,039,826 00	\$7,318,211 00	\$42,187,215 00	\$12,121,958 00	\$50,706,869 00	\$12,736,934 00	\$153,111,013 00



## FARM CROPS BY COUNTIES.

## CEREALS.

Barley, Corn, Oats, Rye, Wheat, Potatoes, Hay and Forage, in 1910.

(From Reports of the Bureau of the Census.)

TABLE XXII.

## Barley, Corn, and Oats.

Counties	Barley		Corn		Oats	
	Acres	Bushels	Acres	Bushels	Acres	Bushels
Alameda	12,650	473,575	503	13,097	1,725	53,745
Alpine	38	1,480			135	7,274
Amador	1,513	29,071	301	12,526	1,354	30,813
Butte	17,705	326,447	359	14,856	1,432	54,685
Calaveras	222	4,833	80	1,776	108	2,121
Colusa	89,985	1,949,223	706	16,619	771	12,556
Contra Costa	18,665	731,970	263	6,158	1,112	40,178
Del Norte	32	840	1	12	216	12,078
El Dorado	50	884	38	768	543	10,504
Fresno	32,132	694,234	1,422	37,726	1,554	20,027
Glenn	53,513	1,002,587	671	21,999	1,283	32,620
Humboldt	1,296	65,991	253	7,633	2,823	75,803
Imperial	36,986	908,916	690	14,419	30	372
Inyo	678	19,381	1,883	57,917	573	28,875
Kern	32,492	517,029	466	7,132	82	770
Kings	19,287	402,432	2,274	43,688	109	4,490
Lake	2,825	54,758	981	26,317	843	19,914
Lassen	3,244	63,471	4	93	977	25,647
Los Angeles	32,804	785,129	9,084	249,295	973	38,720
Madera	90,341	1,170,945	1	50	10,569	175,047
Marin	16	231	52	2,061	850	31,430
Mariposa	1,434	19,130	174	2,330	55	1,100
Mendocino	1,904	43,370	533	14,454	3,087	81,959
Merced	88,145	2,009,531	1,877	52,778	19,843	338,041
Modoc	8,650	227,473	6	209	728	22,138
Mono			4	160	42	3,000
Monterey	98,923	2,026,334	845	15,552	8,734	240,760
Napa	3,048	58,300	2,389	59,579	1,366	32,155
Nevada	30	249	5	208	119	1,559
Orange	27,384	671,526	3,054	91,643	995	30,858
Placer	1,318	17,128	27	1,055	3,030	40,397
Plumas	1,260	12,216			2,193	75,606
Riverside	56,946	958,526	372	12,421	3,767	85,540
Sacramento	4,599	75,575	795	34,089	4,174	66,949
San Benito	10,955	307,215	401	5,389	776	13,826
San Bernardino	3,260	85,480	920	14,839	436	16,598
San Diego	17,745	284,677	4,544	71,874	7,690	177,485
San Francisco						
San Joaquin	125,114	3,827,187	2,547	57,028	23,208	396,661
San Luis Obispo	26,370	667,718	1,509	24,015	1,139	35,884
San Mateo	917	26,001	11	164	16,125	462,566
Santa Barbara	26,294	683,605	1,240	25,979	9,494	233,171
Santa Clara	8,903	200,893	411	9,791	247	9,424
Santa Cruz	1,000	34,226	1,136	22,284	2,282	59,812
Shasta	1,298	21,551	163	4,655	723	8,915
Sierra	466	7,362	1	40	526	11,431
Siskiyou	4,282	60,118	89	3,165	3,148	93,076
Solano	41,647	1,263,357	91	935	1,306	25,711
Sonoma	361	8,795	1,681	44,331	468	20,156
Stanislaus	57,529	828,628	662	12,297	38,546	688,542
Sutter	27,457	491,720	761	22,373	3,568	56,823
Tehama	11,402	177,518	100	2,613	1,032	28,138
Trinity	39	1,210	51	1,833	150	2,667
Tulare	27,017	553,481	2,527	61,757	1,281	25,524
Tuolumne	579	5,055	7	156	425	7,447
Ventura	10,077	309,682	2,409	58,995	1,138	27,901
Yolo	49,530	1,236,884	201	5,123	515	12,365
Yuba	2,801	36,806	360	5,645	1,740	31,834
Totals	1,195,158	26,441,954	51,935	1,273,901	192,158	4,143,688

NOTE.—The acreage in buckwheat in 1910 was only 849, producing 14,681 bushels.

TABLE XXIII.

Rye, Wheat, Kaffir Corn, and Milo Maize.

Counties	Rye		Wheat		Kaffir corn and Milo maize	
	Acres	Bushels	Acres	Bushels	Acres	Bushels
Alameda			1,075	21,535		10
Alpine			618	19,464		
Amador			293	5,169		
Butte			20,894	245,743	409	9,529
Calaveras			51	439	5	48
Colusa	77	987	11,168	221,549	2,598	48,418
Contra Costa			2,443	53,332		
Del Norte	2	112				
El Dorado	117	609	193	3,201		
Fresno	100	1,000	7,829	97,391	1,689	37,506
Glenn			17,541	232,911	162	4,972
Humboldt	14	181	134	3,370		
Imperial			125	2,559	9,789	213,781
Inyo			1,715	50,858		
Kern	30	1,500	12,924	139,375	2,813	45,828
Kings	5	100	8,684	141,978	3,931	95,010
Lake	7	140	2,563	46,131		
Lassen	526	6,018	9,938	153,863		
Los Angeles	100	745	6,760	59,866	106	2,145
Madera	100	1,400	39,468	370,499	343	4,948
Marin			57	1,155		
Mariposa	20	240	124	1,298		
Mendocino	3	61	3,906	59,195		
Merced	2,108	19,917	10,399	115,938	2,206	45,770
Modoc	406	6,633	9,362	195,924		
Mono	4	40	167	2,739		
Monterey			22,924	298,080	2	40
Napa			4,134	50,671	2	35
Nevada			95	1,279		
Orange			793	10,797	189	3,557
Placer			5,721	62,167	8	161
Plumas	704	5,250	766	10,313		
Riverside			11,817	159,434	44	580
Sacramento			10,704	103,728	2	43
San Benito	15	125	4,451	57,535		
San Bernardino			100	200	1,216	15,391
San Diego	6	50	7,268	82,012	17	282
San Francisco						
San Joaquin	1,843	17,476	24,786	310,537	2,968	32,786
San Luis Obispo			33,608	428,636	1	24
San Mateo			68	1,473		
Santa Barbara	3	30	2,300	27,892		
Santa Clara			376	10,198		
Santa Cruz			217	3,629		
Shasta			3,783	45,022		
Sierra	238	2,546	383	6,389		
Siskiyou	306	3,653	17,872	224,512		
Solano			20,924	391,753		
Sonoma			56	1,445		
Stanislaus	245	1,560	22,068	258,121	4,448	80,343
Sutter	40	250	14,537	176,750	352	7,750
Tehama			6,090	84,009		
Trinity	7	35	377	5,274		
Tulare	1	25	66,567	761,459	10,987	288,382
Tuolumne			277	5,373		
Ventura			2,896	67,366		
Yolo			13,452	237,393	21	710
Yuba			10,376	74,227		
Totals	7,027	70,683	478,217	6,203,206	44,308	938,049

TABLE XXIV.  
Hay and Forage.

Counties	Hay and forage		Counties	Hay and forage	
	Acres	Tons		Acres	Tons
Alameda -----	80,735	113,534	Placer -----	16,034	13,404
Alpine -----	3,846	5,815	Plumas -----	30,152	34,038
Amador -----	14,449	17,961	Riverside -----	88,430	141,794
Butte -----	55,962	91,832	Sacramento -----	56,936	70,548
Calaveras -----	15,281	15,686	San Benito -----	64,064	84,380
Colusa -----	29,581	45,779	San Bernardino --	42,608	76,359
Contra Costa ---	88,937	129,080	San Diego -----	82,049	86,559
Del Norte -----	3,052	10,131	San Francisco --	103	150
El Dorado -----	12,115	11,685	San Joaquin ----	104,916	174,448
Fresno -----	95,265	214,659	San Luis Obispo --	55,000	70,225
Glenn -----	25,143	37,594	San Mateo -----	19,060	28,982
Humboldt -----	30,018	119,613	Santa Barbara --	50,070	70,146
Imperial -----	57,064	101,763	Santa Clara ----	83,553	127,006
Inyo -----	16,209	43,605	Santa Cruz -----	18,037	25,244
Kern -----	58,955	112,995	Shasta -----	35,341	46,578
Kings -----	57,749	158,306	Sierra -----	20,622	22,234
Lake -----	12,653	19,089	Siskiyou -----	57,976	100,113
Lassen -----	62,758	92,634	Solano -----	39,693	57,028
Los Angeles ----	154,048	316,541	Sonoma -----	62,351	87,949
Madera -----	17,606	29,978	Stanislaus -----	69,432	178,643
Marin -----	17,460	37,972	Sutter -----	32,744	57,017
Mariposa -----	6,521	6,049	Tehama -----	24,343	44,039
Mendocino -----	27,015	38,085	Trinity -----	5,350	8,929
Merced -----	68,917	173,335	Tulare -----	91,595	188,810
Modoc -----	75,479	118,906	Tuolumne -----	8,624	9,584
Mono -----	6,947	12,118	Ventura -----	51,546	78,926
Monterey -----	83,647	109,848	Yolo -----	45,859	104,733
Napa -----	26,061	39,331	Yuba -----	17,010	18,188
Nevada -----	8,725	9,497			
Orange -----	47,651	87,655			
			Totals -----	2,533,347	4,327,130

TABLE XXV.  
Potatoes and Sweet Potatoes.

Counties	Potatoes, acreage		Sweet potatoes, acreage	
	1900	1910	1900	1910
Alameda	1,854	1,655	1	2
Alpine	14	22		
Amador	108	125		1
Butte	152	171	2	21
Calaveras	65	147	2	
Colusa	98	439	10	6
Contra Costa	1,583	12,687	9	
Del Norte	97	69	1	
El Dorado	71	113		
Fresno	253	218	27	57
Glenn	36	24	4	1
Humboldt	1,173	1,108	1	
Imperial		60		9
Inyo	167	326	1	
Kern	672	339	22	31
Kings	46	194	9	19
Lake	141	182	7	
Lassen	286	259		
Los Angeles	2,799	4,140	218	342
Madera	12	75	1	2
Marin	724	435		
Mariposa	76	76		
Mendocino	586	616	3	
Merced	364	246	780	2,114
Modoc	245	346		
Mono	91	97		
Monterey	2,374	5,393	1	
Napa	149	530	2	
Nevada	123	106		1
Orange	1,318	1,770	75	484
Placer	28	72	1	
Plumas	114	100		
Riverside	688	309	20	57
Sacramento	5,036	1,406	117	
San Benito	147	205		
San Bernardino	406	444	25	55
San Diego	355	374	22	27
San Francisco	336	87		2
San Joaquin	9,895	21,313	88	19
San Luis Obispo	406	955	6	3
San Mateo	500	971	5	
Santa Barbara	826	1,524	7	28
Santa Clara	988	1,085		
Santa Cruz	1,007	1,080	1	1
Shasta	305	243	17	16
Sierra	55	46		
Siskiyou	478	655	2	
Solano	114	311		
Sonoma	3,260	2,279	2	
Stanislaus	30	207	31	1,647
Sutter	222	218	48	41
Tehama	150	112	6	30
Trinity	146	143		
Tulare	253	677	15	46
Tuolumne	107	114		2
Ventura	220	264	5	10
Yolo	206	402	12	31
Yuba	100	124	1	6
Totals	42,098	67,688	1,607	5,111



TABLE XXVI.

## Dry Edible Beans and Peas.

Counties	Dry beans		Dry peas	
	Acres	Bushels	Acres	Bushels
Alameda	86	2,933	215	5,794
Alpine		3		
Amador	3	31		
Butte	27	150		
Calaveras	8	238	2	16
Colusa	1,083	20,087	14	180
Contra Costa	2,298	65,748		
Del Norte		10	4	60
El Dorado	1	30		
Fresno	9	155	6	172
Glenn				
Humboldt	18	392	517	9,056
Imperial				
Inyo	70	1,055	1	10
Kern	26	648		
Kings	21	576	15	75
Lake				
Lassen				
Los Angeles	3,874	105,011	14	311
Madera	15	333		
Marin	1	8		
Mariposa	62	409		
Mendocino	5	44	17	345
Merced	523	5,839		
Modoc	88	1,567		4
Mono	5	133	11	63
Monterey	1,504	29,532	154	5,218
Napa	6	61		
Nevada	1	18		
Orange	21,186	402,951	55	605
Placer				
Plumas				
Riverside	50	192		
Sacramento	7,801	166,852	90	1,703
San Benito	59	677		
San Bernardino				
San Diego	3,492	45,661	12	17
San Francisco				
San Joaquin	13,954	352,157	362	10,050
San Luis Obispo	11,169	207,674	85	1,209
San Mateo	466	14,435	186	4,085
Santa Barbara	22,355	267,385	12	67
Santa Clara	706	8,810		2
Santa Cruz	577	12,645	2	15
Shasta	49	685	3	15
Sierra				
Siskiyou	10	272	1	10
Solano	2,553	65,755		
Sonoma	7	83		
Stanislaus	373	4,395	415	5,175
Sutter	2,766	76,201		
Tehama	14	302		
Trinity	4	275		
Tulare	21	267	10	60
Tuolumne	3	61		
Ventura	58,744	1,313,156	756	13,151
Yolo	1,835	51,204		
Yuba	59	1,112		
Totals	157,987	3,328,218	2,959	57,468

TABLE XXVII.

## All Other Vegetables.

(Except Potatoes, Sweet Potatoes, Dry Peas, and Beans.)

Counties	Acres	Counties	Acres
Alameda .....	7,459	Placer .....	408
Alpine .....	14	Plumas .....	97
Amador .....	315	Riverside .....	1,225
Butte .....	513	Sacramento .....	6,367
Calaveras .....	278	San Benito .....	183
Colusa .....	160	San Bernardino .....	813
Contra Costa .....	3,650	San Diego .....	1,131
Del Norte .....	29	San Francisco .....	466
El Dorado .....	197	San Joaquin .....	6,728
Fresno .....	1,391	San Luis Obispo .....	950
Glenn .....	115	San Mateo .....	3,210
Humboldt .....	675	Santa Barbara .....	1,588
Imperial .....	3,672	Santa Clara .....	4,241
Inyo .....	240	Santa Cruz .....	648
Kern .....	589	Shasta .....	577
Kings .....	674	Sierra .....	35
Lake .....	353	Siskiyou .....	673
Lassen .....	184	Solano .....	650
Los Angeles .....	13,385	Sonoma .....	954
Madera .....	256	Stanislaus .....	1,621
Marin .....	117	Sutter .....	303
Mariposa .....	193	Tehama .....	292
Mendocino .....	594	Trinity .....	192
Merced .....	380	Tulare .....	2,550
Modoc .....	549	Tuolumne .....	232
Mono .....	36	Ventura .....	588
Monterey .....	658	Yolo .....	1,086
Napa .....	428	Yuba .....	235
Nevada .....	231		
Orange .....	3,785	Total .....	79,163

TABLE XXVIII.

Sugar Beets in 1900 and 1910, by Counties.

Counties	1900		1910	
	Acres	Tons	Acres	Tons
Alameda	3,680	44,974	2,516	29,201
Alpine				
Amador				
Butte			711	6,977
Calaveras			1	1
Colusa	566	5,320	211	1,824
Contra Costa	524	3,688	40	250
Del Norte				
El Dorado				
Fresno			228	1,196
Glenn			1,264	9,769
Humboldt				
Imperial				4
Inyo				
Kern				
Kings			504	1,304
Lake				
Lassen			2	10
Los Angeles	697	4,856	14,191	162,059
Madera				
Marin				
Mariposa				
Mendocino				
Merced			2	24
Modoc			9	137
Mono				
Monterey	10,333	112,367	9,900	126,397
Napa				
Nevada			39	78
Orange	1,143	7,853	10,275	133,612
Placer				
Plumas				
Riverside			4	33
Sacramento	101	502	7	105
San Benito	1,080	6,587	283	3,826
San Bernardino	1,132	4,077	4,121	42,928
San Diego			21	87
San Francisco				
San Joaquin	423	2,537	132	1,429
San Luis Obispo	285	1,384	284	5,993
San Mateo				
Santa Barbara	2,426	11,388	11,320	90,849
Santa Clara	4,214	12,373	1,135	8,180
Santa Cruz	2,759	41,553	312	3,511
Shasta				
Sierra				
Siskiyou			128	245
Solano	400	4,000	4	16
Sonoma	580	5,600		
Stanislaus				
Sutter			27	250
Tehama				
Trinity				
Tulare			1,239	9,447
Tuolumne				
Ventura	10,899	87,476	14,333	149,715
Yolo			5,714	55,734
Yuba				
Totals	41,242	356,535	78,957	845,191

## PART IV.

## HORTICULTURE.

## ORCHARDS AND VINEYARDS.

**Orchard Fruits, Tropical Fruits, Olives and Olive Oil, Citrus Fruits,  
Raisins and Currants, Almeria Grapes, Almonds and Walnuts.  
Number of Trees and Vines by Counties.**

## CALIFORNIA FRUIT AND NUT CROPS 1890-1914.

## Some of the Leading California Fruits.\*

In value of production among the orchard fruits, the peach ranks second. It has a wider range for possible growth than the apple. The nectarine is so similar to the peach as to be botanically classed as a variety of that fruit. It is even more difficult to grow than the apricot, and is produced almost entirely in California.

There are two distinct branches of the apple industry in California; one is the growing of early varieties, like the Astrachan and Gravenstein, which are grown mostly in the Sacramento Valley and foothills; the other the production of winter apples. The greatest apple district of the State is the Pajaro Valley, including parts of Monterey and Santa Cruz counties, centering at Watsonville.

California has a monopoly of apricot growing, and in canned and dried forms this is one of the leading fruits exported.

The cherry is one of the lesser orchard fruits of California, but the peach is the greatest orchard fruit of the deciduous class produced in the State. Magnificent nectarines are grown, but in comparatively small quantities.

The production of pears declined for many years, owing to the ravages of the pear blight, but is now recovering from the setback the industry received. The varieties grown are comparatively few, and the Bartlett is the chief.

Prunes and plums are largely grown in certain counties, and the production of French prunes has developed into one of the largest fruit industries in the State.

The olive is another of the old Mission fruits which has come to the front again within the last few years. It thrives on a great variety of soils.

## FIGS.

California is the only state that produces figs in commercial quantities, and Fresno County takes the lead in the production of this fruit.

The white Adriatic fig was extensively planted from 1884 to 1890, and in 1887 the Smyrna fig was introduced by George C. Roeding, of Fresno, and since this time the fig industry has kept increasing until it has become one of the most important fruit products of the State.

\*For fuller details regarding various fruits, see the report for 1913, pages 105-130.



## DATES.

During the last year or two, dates have been grown in an experimental way, but the success of some of the tests has encouraged larger cultivation. While date trees can be grown wherever the orange is grown, they will not properly mature in any except the hottest and driest portions of the State. According to Dr. J. Eliot Coit, pomologist, California Experiment Stations, the requisite conditions may be found in many places throughout the Imperial, Coachella, and Colorado valleys, and the country around Palo Verde and Blythe, Riverside County. At other places in the State, such as the vicinity of Riverside, Redlands, Fresno, and Oroville, early dates might be grown in a small way for home consumption, or be sold in the fresh, uncured condition. While the new industry has a very promising future, it should be clearly borne in mind that date culture is a new industry, requiring experience and unusual skill on the part of the grower, and it must be carried out in regions having an extremely hot summer climate, and it must be remembered that to bring date palms into bearing costs very much more per acre than to grow any other orchard crop.

While of many varieties, dates may practically be classed as of three sorts—soft, dry, and semi-dry. The Deglet Noor is probably the best of the latter class. They are grown principally at Mecca, in the Coachella Valley, in Riverside County. The production of dates in 1913 was estimated at 7,500 pounds. In 1914 the average fruit production of the bearing palms was considerably in excess of any preceding year. Some Deglet Noor palms near Indio averaged 150 pounds per palm, compared with 100 pounds the previous year, and the fruit was of first quality. The value of the dates imported in 1914 was \$679,527, and of bananas, which is one of the few fruits not grown in California, the value amounted to \$16,397,884.

The Coachella Valley, it is claimed, will produce finer dates than the Imperial or Colorado valleys, owing to the humidity being less than in the other regions. Fruit of good quality for home use can undoubtedly be produced in a large part of the San Joaquin Valley, some parts of the Sacramento Valley, and a warm coastal region, such as that around San Diego. It is a question of introducing varieties that are at home in such climates, and to this work the Bureau of Plant Industry is devoting a great deal of energy. In 1913, 18,145,341 pounds of dates were imported, valued at \$363,734, the duty being one cent a pound.

## Orchard Fruits, Grapes, Tropical Fruits, Small Fruits, and Nuts—1909-1910.

The acreage in fruits has never been ascertained. In comparing one year with another the number of trees or vines of bearing age is on the whole a better index of the general changes or tendencies than the quantity of product, which may vary largely, owing to favorable or unfavorable climatic conditions.

The total quantity of orchard fruits produced in 1909 was \$31,502,000 bushels, valued at \$18,359,000. Plums and prunes, peaches and nectarines, apples and apricots are the most important of the orchard fruits.

The total value of the tropical fruits produced in 1909 was \$16,752,000, the value of oranges representing more than three fourths of the total, and the value of lemons being next in importance.

The production of grapes in 1909 amounted to 1,979,687,000 pounds, valued at \$10,847,000, and the production of nuts was 28,378,000 pounds, valued at \$2,960,000. Most of the nuts were Persian or English walnuts and almonds.

#### Small Fruits—1899-1909.

Strawberries are by far the most important of the small fruits raised in California, with raspberries and loganberries, and blackberries and dewberries ranking second and third respectively.

The acreage of small fruits in 1909 was 9,687 and in 1899 it was 6,281, an increase of 54.2 per cent. The production in 1909 was 26,824,000 quarts, as compared with 14,582,000 quarts in 1899, and the value was \$1,789,000 in 1909, as compared with \$911,000 in 1899.

Although fruits are grown with few exceptions in every county in the State, certain counties take the lead in producing the principal fruits. The following is a brief summary of some of them:

#### PRINCIPAL ORCHARD FRUITS BY COUNTIES.

##### Best Location for the Leading Fruits Crops.

The following summary is both interesting and valuable, as the figures show which districts are the best for raising the different varieties of fruit. In the earlier years many failures were experienced by growers, owing to the soil or climate not being suitable for the trees they had planted.

According to the number of trees in bearing, the following six counties rank in the order named in the production of various fruits:

##### Apples.

County	Number of bearing trees	County	Number of bearing trees
Santa Cruz -----	647,136	Santa Clara -----	102,841
Sonoma -----	386,740	Los Angeles -----	101,433
Monterey -----	290,404	Humboldt -----	73,010

##### Apricots.

Santa Clara -----	783,585	Ventura -----	219,836
Solano -----	310,262	Fresno -----	186,823
Alameda -----	270,461	Yolo -----	117,228

##### Cherries.

Santa Clara -----	173,002	Sonoma -----	43,927
Alameda -----	89,284	Placer -----	31,209
Solano -----	53,923	San Joaquin -----	21,590

##### Peaches and Nectarines.

Fresno -----	2,277,314	Placer -----	683,824
Kings -----	777,697	Santa Clara -----	437,677
Tulare -----	714,494	Solano -----	341,266

## Pears.\*

County	Number of bearing trees	County	Number of bearing trees
Solano -----	182,194	Santa Clara -----	142,550
Sacramento -----	161,094	Sonoma -----	109,965
Placer -----	142,999	Alameda -----	70,382

\*Owing to the ravages of the pear blight, the number of bearing trees decreased from 2,512,890 in 1900 to 1,410,905 in 1910.

## Prunes and Plums.

Santa Clara -----	3,387,455	Placer -----	279,766
Sonoma -----	569,232	Tulare -----	264,337
Napa -----	299,613	Sacramento -----	206,553

## Total Number of Bearing Orchard Trees.

The following twelve counties have the largest number of orchard fruit trees in bearing, in the order named:

County	Number of bearing trees	County	Number of bearing trees
Santa Clara -----	5,043,766	Kings -----	1,048,506
Fresno -----	2,579,859	Santa Cruz -----	875,642
Sonoma -----	1,364,105	Alameda -----	627,824
Solano -----	1,357,911	Sacramento -----	506,961
Placer -----	1,190,074	Napa -----	497,391
Tulare -----	1,059,830	Butte -----	452,302

## TROPICAL FRUITS.

## Figs.

Fresno -----	120,124	Yolo -----	10,476
Stanislaus -----	37,676	Merced -----	9,837
Tulare -----	15,750	Butte -----	9,518

## Olives.

San Diego -----	109,871	Butte -----	73,453
Los Angeles -----	84,934	Fresno -----	72,788
Riverside -----	80,572	Orange -----	67,046

## Lemons.

Los Angeles -----	219,149	Riverside -----	115,020
San Diego -----	195,318	Ventura -----	95,018
San Bernardino -----	157,731	Orange -----	46,954

## Oranges.

San Bernardino -----	1,951,254	Tulare -----	801,151
Los Angeles -----	1,674,695	Orange -----	478,272
Riverside -----	1,021,957	Butte -----	147,412

## Pomeloos.

County	Number of bearing trees	County	Number of bearing trees
San Bernardino -----	13,134	San Diego -----	5,764
Tulare -----	8,114	Riverside -----	4,477
Los Angeles -----	6,853	Yolo -----	1,325

## Total Number of Bearing Trees of Tropical Fruit.

San Bernardino -----	2,153,501	Ventura -----	253,754
Riverside -----	1,224,217	Butte -----	235,442
Los Angeles -----	1,194,402	Santa Barbara -----	99,023
Tulare -----	872,657	Sacramento -----	84,863
San Diego -----	425,260	Kern -----	82,888
Fresno -----	291,754	Placer -----	59,906

## GRAPEVINES.

Fresno -----	*†40,687,207	Santa Barbara -----	†5,987,127
Sonoma -----	†17,989,972	Santa Clara -----	†5,584,480
San Joaquin -----	†13,371,794	Los Angeles -----	*†4,923,877
Napa -----	†8,595,338	Kings -----	*†4,538,732
Sacramento -----	†7,627,510	Contra Costa -----	†2,972,130
Tulare -----	*†7,227,491	Yolo -----	*†2,568,019

\*Raisin grapes. †Wine grapes. All produce table grapes.

## NUTS.

## Almonds.

County	Number of bearing trees	County	Number of bearing trees
Contra Costa -----	209,056	Butte -----	84,069
Yolo -----	149,019	Los Angeles -----	76,949
Solano -----	98,276	Sacramento -----	66,372
San Joaquin -----	97,024	Sutter -----	61,572

## Walnuts.

Los Angeles -----	281,837	Santa Barbara -----	96,776
Orange -----	276,842	Santa Clara -----	19,070
Ventura -----	98,622	Sonoma -----	11,955

## Pecans.

San Diego -----	1,080	Los Angeles -----	313
Napa -----	996	Ventura -----	301
Kern -----	563	Santa Clara -----	136

## Total Nut Trees in Bearing.

Los Angeles -----	359,349	Solano -----	100,239
Orange -----	278,879	San Joaquin -----	99,499
Contra Costa -----	215,249	Santa Barbara -----	97,091
Yolo -----	150,822	Sacramento -----	67,156
Ventura -----	110,984	Sutter -----	62,289



## SMALL FRUITS.

## Strawberries.

County	Number of acres	County	Number of acres
Los Angeles -----	1,380	Placer -----	433
Santa Cruz -----	489	Monterey -----	263
Santa Clara -----	460	Fresno -----	148
Sacramento -----	450	Sonoma -----	103

## Blackberries.

Sonoma -----	930	Fresno -----	91
Los Angeles -----	280	Tulare -----	70
Santa Clara -----	228	San Bernardino -----	68
Santa Cruz -----	116	Placer -----	62

## Total Small Fruits.

Los Angeles -----	1,975	Monterey -----	407
Sonoma -----	1,471	Alameda -----	401
Santa Clara -----	1,011	Fresno -----	310
Santa Cruz -----	744	Orange -----	205
Placer -----	582	Stanislaus -----	161
Sacramento -----	554	Butte -----	148

## Acreage and Production of Small Fruits, 1899-1909.

	Number of farms, 1909	Acres		Quarts, 1909	Value, 1909
		1899	1909		
Strawberries -----	2,282	2,418	4,585	15,694,326	\$1,149,475
Blackberries and dewberries -----	3,190	1,960	2,576	4,898,524	282,383
Raspberries and loganberries -----	2,524	987	1,992	5,222,117	304,169
Currants -----	364	724	407	852,378	43,508
Gooseberries -----	343	133	74	145,119	9,086
Cranberries -----	12		53	10,656	443
Other berries -----	1	59	*	1,000	150
Totals -----		6,281	9,687	26,824,120	\$1,789,214

\*Less than 1 acre.

Of the small fruits strawberries lead, both in acreage and production, California being the largest producer in the West, the greatest production being in Santa Clara County. The shipments of strawberries in 1914 amounted to 2,312 carloads from the following districts: Los Angeles 373, Sacramento 255, Placer County 76, Fresno 42, Santa Clara and Santa Cruz districts 1,532, and Siskiyou 35. Currants are only grown in about eight states, California being one of them, Alameda County being the largest producer; gooseberries are not much grown anywhere in the United States, Indiana being the largest producer.

Cranberries only acquired commercial importance fifty or sixty years ago. They are principally grown in Massachusetts, New Jersey, and Wisconsin, and are not a success in California.

## Number of Trees and Vines in 1910.

Crop	Bearing trees in 1910	Non-bearing trees in 1910	Total	Quantity, bushels, 1909	Value, 1909
<i>Orchard Fruits.</i>					
Peaches and nectarines	7,829,011	4,409,562	12,238,573	9,267,118	\$4,573,775
Plums and prunes	7,168,705	1,599,939	8,768,644	9,317,979	5,473,539
Apricots	2,992,453	581,524	3,573,977	4,066,823	2,768,921
Apples	2,482,762	1,054,107	3,536,869	6,335,073	2,901,662
Pears	1,410,905	398,093	1,808,998	1,928,097	1,660,963
Cherries	522,304	300,063	822,367	501,013	951,624
Quinces	76,979	65,471	142,450	32,638	26,266
Mulberries	2,076	1,303	3,380	52,766	2,147
Totals	22,485,195	8,410,062	30,895,257	31,501,507	\$18,358,897
<i>Tropical Fruits.</i>					
Oranges	6,615,805	2,093,410	8,709,215	<sup>1</sup> 14,436,180	\$12,951,505
Lemons	941,293	379,676	1,320,969	<sup>2</sup> 756,221	2,976,571
Pomeloes (grapefruit)	43,424	25,589	69,013	<sup>1</sup> 122,515	143,180
Mandarines	351	23	374	<sup>4</sup> 555	607
Tangerines	3,637	34	3,671	<sup>3</sup> 581	4,188
Total citrus fruits	7,604,510	2,498,732	10,103,242	<sup>1</sup> 15,319,052	\$16,076,051
Olives	836,347	121,659	958,006	<sup>1</sup> 16,132,412	\$401,277
Figs	269,001	214,527	483,528	<sup>2</sup> 2,990,353	260,153
Guaves	7,031	443	7,474	<sup>2</sup> 95,053	4,018
Loquats	3,711	1,011	4,722	<sup>4</sup> 516	5,830
Pomegranates	1,771	2,745	4,516	<sup>2</sup> 90,075	968
Japanese persimmons	3,274	8,801	12,075	<sup>2</sup> 696	3,244
Dates	325	19,552	19,877	<sup>3</sup> 332	418
Unclassified	35	200			
Totals	<sup>4</sup> 8,726,005	<sup>4</sup> 2,867,670	11,593,675		<sup>4</sup> \$16,752,101

<sup>1</sup>Boxes. <sup>2</sup>Pounds. <sup>3</sup>Bushels. <sup>4</sup>Includes limes, bananas, and citron.

## Grapes.

	Bearing	Non-bearing	Total	Quantity, pounds	Value
Grapes	144,097,670	39,526,319	183,623,989	1,979,686,525	\$10,846,812

## Nuts.

	Bearing trees in 1910	Non-bearing trees in 1910	Total	Quantity, pounds, 1909	Value 1909
Almonds	1,166,730	365,961	1,532,691	6,692,513	\$700,304
Persian or English walnuts	853,237	546,804	1,400,041	21,432,266	2,247,193
Black walnuts	6,582	7,905	14,487	159,374	2,562
Pecans	4,226	2,793	7,019	44,955	4,632
Chestnuts	1,763	2,948	4,711	37,153	3,474
Franquette	408	617	1,025	4,550	910
Unclassified	1,356				
Totals	*2,034,302	*931,933	2,966,235	*28,378,115	\$2,959,845

\*Including Oou-shue, Chili nuts, Brazil nuts, Japanese chestnuts, beechnuts, hazelnuts, French nuts, Japanese walnuts, pistachio, butternuts, mazette, hickory nuts, filberts, and other nuts.

## Summary.

	Bearing trees	Non-bearing trees	Total
Orchard fruits -----	22,485,195	8,410,062	30,895,257
Tropical fruits—citrus -----	7,604,510	2,498,732	10,103,242
Other tropical fruits -----	1,121,495	368,938	1,490,433
Total tropical fruits -----	8,726,005	2,867,670	11,593,675
Nuts -----	2,034,302	931,933	2,966,235
Total trees -----	33,245,502	12,209,665	45,455,167
Grapevines -----	141,097,670	39,526,319	183,623,989

The following table shows the quantities of the more advanced products manufactured by farmers from orchard and tropical fruits and grapes:

Product	Number of farms	Unit	Quantity, 1899	Produced 1909
Cider -----	481	gallons	75,443	118,456
Vinegar -----	973	gallons	199,678	244,683
Wine and grape juice -----	2,163	gallons	5,492,216	16,005,519
Olive oil -----	78	gallons	8,445	95,955
Raisins and dried grapes -----	4,551	pounds }	117,935,727	169,210,679
Other dried fruit -----	8,373	pounds }		

NOTE.—These figures do not include wine, grape juice, and vinegar made in regular wineries, nor olive oil made in regular factories.

## Leading Counties in Fruits and Nuts.

(Value of one million and upward.)

County	Value	County	Value
Los Angeles -----	\$6,731,000	Sonoma -----	\$2,034,000
San Bernardino -----	5,357,000	Ventura -----	1,795,000
Fresno -----	5,279,000	Santa Cruz -----	1,656,000
Santa Clara -----	4,234,000	Solano -----	1,495,000
Riverside -----	2,393,000	Placer -----	1,318,000
Orange -----	2,497,000	San Joaquin -----	1,307,000
Sacramento -----	2,265,000	Kings -----	1,219,000
Tulare -----	2,053,000		

## FRESH DECIDUOUS FRUITS.

Statement Showing Number of Cars of Each Variety Shipped, 1903-1914.

Year	Apricots	Cherries	Grapes	Peaches	Pears	Plums	Apples	Miscellaneous	Totals
1903 -----	241	211	1,804	1,857	1,720	1,145	671	22	7,671
1904 -----	97	209	1,451	559	2,186	1,053	43	28	5,626
1905 -----	279	79	1,602	1,946	1,013	1,391	1,913	16	8,239
1906 -----	16	150	2,052	584	1,513	1,220	748	22	6,305
1907 -----	71	133	3,460	699	1,039	1,039	1,067	18	7,526
1908 -----	232	208	3,819	1,980	2,702	1,763	2,201	15	12,920
1909 -----	210	250	5,880	2,599	2,638	1,526	2,158	19	15,280
1910 -----	290	250	4,948	2,518	2,361	1,552	2,136	17	14,072
1911 -----	215	216	6,374	2,027	2,325	1,366	-----	16	12,539
1912 -----	196	244	6,357	1,621	3,135	1,776	-----	15	13,344
1913 -----	158	231	6,363	2,359	2,496	1,706	-----	19	13,332
1914 -----	382	166	8,773	2,144	2,725	1,907	-----	49	16,146

In no case do the above figures cover the entire shipment of apples, as they continue to be shipped long after the deciduous fruit season is closed.

## Total Value of All Crops, by Counties.

(Value of four million dollars and upward in 1909.)

(Compiled from the Reports of the Bureau of the Census.)

County	Value	County	Value
Los Angeles -----	\$14,720,000	Tulare -----	\$5,353,000
San Joaquín -----	9,082,000	Riverside -----	5,133,000
Fresno -----	7,991,000	Sacramento -----	4,720,000
Santa Clara -----	6,968,000	Sonoma -----	4,451,000
San Bernardino -----	6,818,000	Monterey -----	4,325,000
Ventura -----	6,751,000	Alameda -----	4,276,000
Orange -----	6,176,000	Contra Costa -----	4,032,000

NOTE.—These figures are for the value of crops only, and do not include wine and other products.

## OLIVES AND OLIVE OIL.\*

There were very few new orchards planted in olive trees during the years 1905–1909, consequently the production of olive oil during the last few years has changed but slightly. The few orchards that are coming into bearing are mostly varieties that are used for pickling purposes, and the production of pickling olives is increasing considerably from year to year. Since 1909 a large area has been planted. The production of olives during the last few years has increased by improved methods of irrigation and fertilization, and the industry is growing in importance, and new planting is on a considerable scale. The production is about equally divided between southern California and the territory north of the Tehachapi. The harvests in California generally alternate between heavy and light, although the last few years the crops have been more uniform, due to the increased care and attention to orchards.

Not more than 35 gallons of oil are produced from a ton of olives, although some manufacturers, who have heavy presses, claim to obtain 40 gallons of oil to the ton. It takes about 5½ pounds of olives to make one gallon of pickles. The output of pickled olives is increasing much more rapidly than the production of olive oil, as California manufacturers can not compete with foreign oil as to price.

The leading varieties now being planted in California are the Mission and Manzanillo, all other olives generally being treated as oil olives, as they are unfit for pickles.

It is estimated that at the present time there is a total of 18,000 acres in olives, producing in 1911 about 8,000 tons of oil olives, and 4,000 tons for pickling. Four years ago the average net income was only \$17 an acre, in 1912 the average had increased to \$36.88 an acre. In 1908 the olive industry represented capital invested amounting to \$4,500,000, increased in 1912 to \$7,500,000. Formerly the by-products were more or less wasted; now oil, described as “mechanical oil,” is extracted from the pomace and used to a large extent by soap and other factories. The average yield per acre in California is about 1½ tons, and the average price received by the growers for the three years, 1909–1912, for oil olives on the tree was \$22 per ton. Forty per cent of the olives produced are pickling olives, and 60 per cent oil olives. The average price received by growers 1909 to 1912 for pickling olives

\*For further information regarding olives and olive oil, see the Report for 1913, pages 114–115.



on trees was \$62 per ton. The net average receipts by growers for pickling olives was \$53.50 per ton, and the net average receipts for both oil and pickling olives \$36.88 per acre. The amount paid to growers in 1911, for approximately 12,000 tons, was \$442,000; of this tonnage 4,000 were pickles, representing 1,200,000 gallons, and 8,000 tons of olive oil, representing 280,000 gallons of oil.

The price for oil olives during the last two years increased greatly, and in the southern part of the State has ranged from \$45 to \$50, and sometimes a few dollars higher per ton, while in pickling olives the price has ranged from \$75 to \$175 per ton, the higher prices being for the very best quality and the largest size. The price for oil olives on the trees the last year or two was from \$25 to \$35 per ton, pickling olives \$50 to \$60 on the tree and upward, depending on the quality of the fruit. Very fancy fruit commands prices of \$80, \$90 and \$100 on the trees.

In 1913 it is estimated that there were about 750,000 gallons of ripe olives, equal to 125,000 cases of 24 quart cans each. The estimated quantity of ripe olives in 1914 was about the same as last year. The quantity imported was 5,316,364 gallons, compared with 3,946,076 gallons the previous year. The quantity of olive oil manufactured was about 150,000 gallons and for 1914 the output is estimated at about 200,000 to 220,000 gallons. The quantity of olive oil imported for manufacturing purposes was 763,924 gallons, against 619,356 the previous year, and 6,217,560 gallons of edible oil, compared with 5,221,001 in 1913.

The largest factory for producing olive oil and pickled olives is in Los Angeles County. The leading counties in the production of olives are: San Diego, Los Angeles, Riverside, and Orange in the south, and Butte and Fresno in central California.

#### THE CITRUS FRUIT INDUSTRY.

The citrus fruit industry has reached its present development in southern California, which is made up largely of San Bernardino, San Gabriel, and San Fernando valleys, and in the coast region in Orange and Los Angeles counties. There are smaller but less favorable regions in Santa Barbara and Ventura counties, close to the mountains, and in San Diego County oranges have also been cultivated from an early period, and as far as Butte County in the north, and Tulare, Fresno, and Kern counties in central California. Three fourths of the oranges in California are now of the Washington variety, the remainder comprising the Valencia Late as the most important variety, with fewer of the St. Michael, Mediterranean Sweet, Thompsons, Ruby, Blood, Jaffa, Seedlings, and Tangerines.

The orange crop of northern California matures from four to six weeks earlier than it does in the southern part of the State, notwithstanding the fact that it is from 200 to 500 miles farther north. This unusual condition is due to the topography of the Pacific coast. The two large San Joaquin and Sacramento valleys in central and northern California lie between two great mountain ranges extending north and south. The Coast Range mountains shut off the modifying influences of the sea, causing relatively higher night temperatures during the summer months than prevail in the southern part of the State.

In southern California San Bernardino is the largest producer of

oranges, with 1,951,254 bearing trees; Los Angeles has 1,674,695, Riverside 1,021,957, and Orange County 478,272. In northern and central California, Tulare leads with 801,151, Butte 147,412, Fresno 85,781, Kern 80,940, and Sacramento 46,256.

Pomeloes are also grown to a considerable extent, the two leading counties being San Bernardino with 13,134 bearing trees, and Tulare with 8,114.

#### California Fruit Growers' Exchange.

Some idea of the size and value of the crop, and of the immense benefit derived by growers by a well-organized association, is shown by the results obtained by the California Fruit Growers' Exchange, the largest and most successful of all the co-operative institutions formed by the fruit growers. The following tabular statement shows the total number of boxes shipped each year, the next amount received, the average f. o. b. California price per box, and the loss, if any, from failure to collect or in the transmission of funds:

Year	Boxes shipped	F. O. B. returns	Average per box	Losses
1904-05	5,188,511	\$7,124,377 00	\$1 37	\$458 04
1905-06	4,705,515	9,936,497 00	2 11	
1906-07	6,149,708	12,268,752 00	2 00	
1907-08	6,628,644	11,753,544 00	1 77	81 85
1908-09	8,710,828	13,958,990 00	1 60	4,297 57
1909-10	7,578,801	14,831,975 00	1 96	732 32
1910-11	10,842,790	20,708,355 21	1 91	
1911-12	9,232,357	17,235,822 98	1 87	
1912-13	4,940,068	13,640,091 32	2 74	390 71
1913-14	11,264,865	18,990,725 54	1 69	355 00

The great damage that was inflicted on California orange growers by the heavy frost which occurred the last week in December, 1911, and the first week in January, 1912, is shown in a striking manner by the returns of the California Fruit Growers' Exchange, the shipments being only 4,940,068 carloads, compared with 9,232,357 the previous season. This large decrease was in some measure made up for by better prices, the average being \$2.74 per box, against \$1.87 for the previous year. The total receipts were only \$13,640,000, compared with \$17,235,000, or a loss of over \$3,595,000.

Over \$100,000,000 has been brought to California by the Exchange in the eight years, 1904-5 to 1911-12, inclusive, with a loss from failure to collect or in the transmission of funds of less than \$6,000.

The orange industry in California represents an investment of about \$150,000,000.

The average annual yield on about 20 acres of orange groves from 1906 to 1911 was 157.6 boxes per acre. The average cost of labor and material in growing the oranges in 274 selected orchards was \$136.06 per acre, of which \$52.82 was for labor.

A careful estimate recently made places the production of oranges in California at 129 to 191 boxes to the acre, but there is considerable difference in the crop in various orchards. A recent publication of the United States Department of Agriculture places the average for the last five years at 157.6 boxes to the acre, and the cost of oranges delivered in the markets of the United States exactly 18 cents a dozen.

## Increase in the California Citrus Crop in Ten Years.

From the figures of the Bureau of the Census, it appears that the orange crop of California made a gain of 145.4 per cent during the decade between 1899 and 1909, increasing from 5,882,000 boxes in 1899 to 14,436,000 boxes in 1909. During the same period of time, the number of trees of bearing have increased from 5,649,000 to 6,616,000, or 17.1 per cent. In 1910 there were also 2,093,000 trees of non-bearing age. In 1909, the average product per tree was 2.2 boxes. With respect to quantity of fruit, San Bernardino County rose from third rank in 1899 to first in 1909. In 1899 Los Angeles County ranked first and Riverside County second.

The value of the oranges produced in 1909 was \$12,952,000, an average of 90 cents per box.

The California citrus crop for the season 1913-1914 was a record one, amounting to 48,338 cars, compared with 18,331 the previous season, when the production was greatly reduced by a killing frost, being the lowest in twelve years. Of the above carloads 45,306 were oranges, and 3,032 lemons. Previous to last season the highest was in 1910-11, when 46,399 cars were shipped.

## LEMONS.

Although lemons have been grown in California for half a century, it is only during the last twenty years that they have risen to considerable commercial importance. The lemon is less hardy than the orange and comprises from 10 to 15 per cent of the citrus crop.

The principal varieties of lemons grown in California are the Eureka; the Lisbon, imported from Portugal; Genoa, imported from Genoa; Villa Franca, imported from Europe; and the Bonnie Brae, grown mostly in San Diego County.

## California Lemon Crop, 1899-1909.

The lemon crop increased from 874,000 boxes in 1899 to 2,716,000 boxes in 1909, a gain of 1,842,000 boxes, or 210.7 per cent, although for the same period the reported number of trees of bearing age decreased from 1,493,000 to 927,000, or 38 per cent. The number of trees of non-bearing age in 1910 was 377,000. The number of boxes per tree in 1909 was 2.9; in 1899, it was just under three fifths of one box. The value in 1909 was \$2,926,000, or \$1.08 per box.

The California lemon industry has been developed by small land-owners. There are a few groves which contain from 150 to 1,000 acres, but the average grove contains less than 10 acres. In San Diego County 100 growers own approximately 1,000 acres. In the San Dimas district 300 growers own 1,180 acres; in the Pomona district 75 growers own 344 acres; in the Santa Barbara district 70 growers own 407 acres. The newer planting of the last three years usually contain 5, 10 or 15 acres and seldom more than 20 acres. In a recent survey, including every important district, 11,185 acres were owned by 1,179 growers; 39 growers owned between 20 and 50 acres; 6 growers, 50 to 100 acres; 8 growers, 100 to 250 acres; 1 grower, 250 to 500 acres; and 2 growers owned more than 500 acres.

The average annual yield on about 4,500 acres of lemon orchards from 1906 to 1911 was 196.2 boxes per acre. The average value of land and water adapted to lemon culture in California is \$450 per acre, and the cost of bringing a grove into bearing at six years of age, varies from



\$800 to \$1,500 per acre, a fair average being \$1,000. In 1909 there were approximately 22,000 acres of lemons in California; in 1912 there were 31,478 acres.

Practically all imported lemons come from Sicily, where the production is very large, the exports being estimated in 1911 as 57,030,543 pounds, or the equivalent of about 23,763 California earloads.

#### Pomelo or Grapefruit.

The pomelo or grapefruit was formerly almost exclusively grown in Florida, but its cultivation has increased in recent years, and considerable quantities are produced in Riverside, Tulare, San Diego, and other citrus counties. The leading varieties are the Nectar, Imperial, Marsh, Seedless, and Triumph.

#### Citron of Commerce.

The citron of commerce was grown by the Missions in the early days, but now is cultivated only to a very small extent in Riverside County. At one time there was a grove of 21 acres in Los Angeles County, but it was neglected and five years ago was replaced by oranges, avocado, and other trees.

#### THE FLORIDA CITRUS CROP.

Florida is at present the only competitor with California in the United States in the production of oranges and lemons, although in recent years citrus fruits are being produced on a small scale in Arizona, Louisiana, and Texas.

Florida Citrus Trees in Bearing, 1890, 1900, and 1910.

	1890	1900	1910
Orange -----	2,725,272	2,552,542	2,766,618
Lemon -----	85,052	22,691	11,740
Lime -----	17,089	41,741	45,369
Pomelo -----	3,135	117,336	656,213
Citron -----	2,480	-----	23,234

Florida first took the lead in the production of citrus fruits in this country, but "the great freeze" of December, 1894, and February, 1895, when the temperature at some places fell to 14 and 18 degrees, was a disaster from which they are only now fully recovering. From 6,000,000 boxes shipped before the frost, the number fell the following year to 75,000.

#### Florida Orange Crop, 1899-1909.

The production of oranges in Florida increased from 273,000 boxes in 1899 to 4,853,000 boxes in 1909, a sixteenfold gain. The number of trees of bearing age was 2,553,000 in 1900 and 2,766,618 in 1910, an increase of 7.8 per cent. The number of trees of non-bearing age in 1910 was 1,098,000. The value in 1909 was \$4,305,000, or \$1.11 per box.

#### Florida Lemon Crop, 1899-1909.

The lemon crop increased from 2,359 boxes in 1899 to 12,367 boxes in 1909, a gain of 10,008 boxes, a fourfold gain. The number of trees of bearing age reported decreased from 22,691 in 1900 to 11,740 in 1910, or almost one half. The number of trees of non-bearing age in 1910 was 7,329. The value of the lemon crop in 1909 was \$13,753.



## Orange and Lemon Crops of California and Florida, 1909-1910.

(From the Bureau of the Census.)

Orange and lemon trees of bearing and non-bearing age in 1910, and number of boxes of oranges and lemons produced in 1909, together with the value thereof, 1910:

	California	Florida
Oranges—		
Number of trees of bearing age, 1910.....	6,615,929	2,766,618
Number of trees of non-bearing age, 1910.....	2,093,101	1,097,896
Number of boxes produced in 1909.....	14,436,424	4,852,967
Value, 1909 .....	\$12,952,291	\$4,304,987
Lemons—		
Number of trees of bearing age, 1910.....	927,130	11,740
Number of trees of non-bearing age, 1910.....	376,859	7,329
Number of boxes produced in 1909.....	2,715,974	12,367
Value, 1909 .....	\$2,925,759	\$13,753
Pomelos—		
Number of trees of bearing age.....	43,427	656,213

## Florida Citrus Fruit Crop.

Season	Oranges, boxes	Lemons, boxes
1884-85 .....	600,000	-----
1885-86 .....	900,000	-----
1886-87 .....	1,260,000	-----
1887-88 .....	1,450,000	-----
1888-89 .....	1,950,000	-----
1889-90 .....	2,150,000	-----
1890-91 .....	2,450,000	-----
1891-92 .....	2,664,791	18,389
1892-93 .....	3,357,507	29,756
1893-94 .....	4,163,849	57,219
1894-95 .....	2,808,474	*713
1895-96 .....	147,000	*
1896-97 .....	216,579	1,800
1897-98 .....	357,960	1,006
1898-99 .....	1,250,000	2,200
1899-1900 .....	972,589	1,447
1900-01 .....	1,350,700	1,900
1901-02 .....	972,589	1,447
1902-03 .....	1,465,306	5,185
1903-04 .....	1,950,823	4,131
1904-05 .....	2,363,058	14,433
1905-06 .....	2,961,195	8,299
1906-07 .....	2,899,390	10,065
1907-08 .....	3,793,126	6,718
1908-09† .....	5,250,000	-----
1909-10† .....	6,100,000	-----
1910-11† .....	4,600,000	-----
1911-12 .....	4,708,350	-----
1912-13 .....	8,125,349	-----
1913-14 .....	6,751,080	-----

\*The year of "the great freeze," when the temperature fell to 14 degrees at Jacksonville and 18 degrees at Tampa on December 29, 1894, followed by one equally severe in February, 1895, which killed most of the citrus trees in the state.

†The figures for the last four years include lemons, the quantity being so small that separate records are not kept. Limes, grapefruit, and tangerines are also included. In the season 1909-10, there were about 7,100 boxes of lemons, 12,600 of limes, and 553,000 boxes of grapefruit. The total for the season 1911-12 includes 810,000 boxes of grapefruit, and 156,000 boxes of tangerines; also limes and lemons, the quantities of which are comparatively small.

The prices received by Florida growers during the last season are of interest as compared with the prices received in California.

Averages Received by the Florida Citrus Exchange, f. o. b. Packing-House,  
Season 1912-1913.

Fruits	Boxes, 1912-13	Average per box 1912-13	Boxes, 1913-14	Average per box 1913-14
Oranges .....	928,755	\$1 92	796,480	\$1 65
Grapefruit .....	393,964	1 98	224,244	2 31
Tangerines .....	31,787	1 92	17,921	2 51
Mixed and miscellaneous.....	383,539	1 84	247,885	1 95
Grand totals .....	1,738,045	\$1 91	1,286,531	\$1 83

Lemons and limes are not reported separately, as the shipments are very small, but recently a considerable acreage has been set out in limes.

THE CALIFORNIA RAISIN INDUSTRY.\*

One of the largest and most important branches of fruit growing is the cultivation of the raisin grape, the acreage in which is now by far the largest in the world.

Raisins were first produced on a considerable scale in the southern part of the State, but Orange and Riverside counties no longer produce raisins; Los Angeles County very few; Yolo County, which at one time produced Sultanas and Thompson's Seedless in considerable quantities, now finds it more profitable to ship a large portion of the crop as table grapes, while the large vineyards in Riverside and San Bernardino counties are nearly all in wine grapes.

Counties Where Raisins Are Produced.

Of the fifty-eight counties in California, less than a dozen produce raisins in commercial quantities. At the present time the proportion of an average crop raised by each county is estimated to be approximately as follows:

County	Pounds
Fresno .....	94,000,000
Tulare .....	26,000,000
Kings .....	20,000,000
Sutter .....	7,000,000
San Bernardino .....	3,600,000
San Diego .....	3,200,000
Madera .....	2,400,000
Yolo .....	2,000,000
Kern .....	1,100,000

Sutter County produces a considerable quantity of Thompson's Seedless and Yolo County mostly Sultanas.

\*For the early history of the raisin industry in California, see Reports for 1912, pages 134-139, and 1914, pages 123-126.

A normal raisin crop amounts to about 160,000,000 to 170,000,000 pounds; that for 1913 was about 130,000,000; the 1914 crop was very large, amounting to 182,000,000 pounds, classified as follows:

Varieties	Crop, 1913	Estimated crop, 1914
Muscats -----	98,588,798	120,000,000
Thompson's Seedless -----	18,390,922	36,000,000
Sultanas -----	12,252,430	18,000,000
Malagas -----		
Feher Szagos -----	529,707	} 8,000,000
Other varieties -----	238,143	
Totals -----	130,000,000	182,000,000

The average price received by growers will be somewhat better than the previous year, Muscats being about \$77.50 per ton, Thompson's Seedless about \$95 per ton and Sultanas about \$85 per ton. The quality was exceptionally good, better than the average.

When raisins were first shipped East in any quantity it is impossible to say. In 1875, New York reported that up to November 1st, 6,000 22-pound boxes of California raisins had been received. About 1888, Fresno appears to have shipped a considerable quantity for the first time.

#### Raisin Grape Varieties.

The varieties of raisin grapes are few in number, the White Muscat of Alexandria and the Muscatel Gordo Blanca hold the first place, while Malaga and Feher Szagos are used to a small extent; the seedless varieties are Thompson's Seedless and Sultanas.

#### Consumption of Raisins.

Efforts have been made especially in the last two years to increase the consumption of raisins, and there is no reason why they should not prove successful, as there is ample room for a greatly extended use of this wholesome fruit. The United Kingdom, with a population of less than half that of the United States, consumes annually about 73,000,000 pounds of raisins and 142,000,000 pounds of currants, or a total of about 215,000,000 pounds, equal to five pounds per capita. In the United States the consumption is less than one pound and a half per capita. In other words, if the American public appreciated raisins as they have been for centuries in Europe, the acreage in raisin grapes might be more than doubled without causing overproduction.

It was in 1892 that the California raisin crop first equaled that of Spain, and it has been increasing the difference ever since. Fresno County alone produces nearly double the quantity of raisins produced in Spain, which held the lead for centuries.

## The Raisin Crop of the World.

Year	Short tons of 2,000 pounds	In long tons of 2,240 pounds			Australia—pounds	
	California	Spain	Turkish Sultanas	Greek currants	Raisins	Currants
1904	40,000	25,000	34,100	151,000	7,449,116	2,604,427
1905	37,000	28,200	58,300	160,000	4,367,181	2,093,076
1906	45,000	15,800	27,500	135,000	6,148,168	2,346,980
1907	70,000	27,000	47,000	156,000	12,796,000	2,922,192
1908	65,000	26,000	45,000	185,000	10,427,760	3,404,464
1909	70,000	24,000	50,000	185,000	10,924,816	4,074,336
1910	56,000	19,000	15,000	123,000	12,191,424	7,107,520
1911	51,000	15,000	25,000	157,000	12,775,056	7,465,360
1912	85,000	12,000	50,000	167,000	15,408,400	10,470,208
1913	65,000	18,500	30,000	161,000	16,231,600	11,261,040
1914	91,000	13,500		150,000		

## Raisins and Currants in Australia.

The raisins and currants produced in Australia are mostly consumed at home. The quantity at present, though not large, is increasing. Victoria and South Australia are the two states with the largest production.

## California Seeded Raisin Industry.

Fresno County is the center of the seeded raisin industry, where it originated. The following figures show the wonderful increase in this popular form of raisin during the last eighteen years:

Year	Tons	Year	Tons
1896	700	1906	24,000
1897	3,500	1907	26,000
1898	7,000	1908	24,000
1899	12,000	1909	28,000
1900	14,000	1910	31,500
1901	14,000	1911	33,000
1902	16,000	1912	43,000
1903	18,000	1913	49,000
1904	18,000	1914	35,000
1905	21,000		

Loose raisins are packed in 50-pound boxes; Thompson's Seedless in 12-ounce cartons, 45 to the case; seeded raisins in one-pound cartons, 36 to the case; also in 12-ounce, 45 to the case and a few in bulk in 25-pound boxes. Raisin clusters are packed in 5, 10 and 20-pound boxes.

## THE GREEK CURRANT.

The Greek or Zante currant has been produced on a very large scale for centuries. They are the seedless variety of a peculiar dwarf grape-vine producing a small black grape, or currant, of a peculiar flavor; it is the most important crop in Greece, as it forms nearly one half of



the total exports. The vineyards cover 150,000 acres, and produce the enormous total of from 300,000,000 pounds to 340,000,000 pounds in a favorable season.\* About 33,000,000 pounds are imported annually.

#### IMPORTED ALMERIA GRAPES.

These table grapes come from the province of that name in Spain, and during the last six years their value has amounted to between \$1,500,000 and \$2,000,000 a year. They come into competition with late-season shipments of California Tokays, Cornichon and Emperor grapes. Cuttings of the Almeria grape have been imported into California, but the result so far has not been satisfactory.

#### Almeria Grapes Imported.

(Duty, 25 cents per cubic foot capacity of barrel or packages.)

Year	Cubic feet	Value
1907 -----	1,298,469	\$1,575,521
1908 -----	2,234,508	2,743,356
1909 -----	1,203,419	1,575,620
1910 -----	1,365,310	1,682,994
1911 -----	1,485,159	1,723,022
1912 -----	2,000,841	2,331,504
1913 -----	1,135,942	1,359,415
1914 -----	1,334,163	1,599,969

#### FRUIT CANNING AND PRESERVING.

California made a pack of hermetically sealed fruits in tin cans in 1861. For many years after that, canned goods were a luxury, relatively expensive, and used only in emergencies, on board ship or at remote places where other food was not obtainable.

The real importance and development of the canning industry did not commence until about the year 1875. The value of its products, which in 1889 was \$6,621,931, more than doubled during each of the two following decades, amounting in 1909 to \$32,914,829.

The case, which is used as the unit of measure for canned fruits and vegetables in the table below, consists of 24 standard-size cans No. 2 (also called 2-pound cans) for berries, cherries and plums, and No. 3 (also called 3-pound cans) for all fruits and vegetables.

California ranks first among the states in the production of canned apricots, peaches and pears, and of dried peaches and prunes; the State had a complete monopoly of the production of dried apricots and of raisins in the United States in 1909, neither of these being produced in any other state.

The most important of the dried fruit products, both in point of quantity and of value, were raisins and prunes. The fruit most largely canned in 1909 was peaches, the value of which constituted 9.2 per cent of the total for the canning and preserving industries.

\*For details regarding the Greek currants and the "Privileged Company" which controls and markets the crop, see Report for 1912, page 140.

## CANNED AND DRIED FRUITS, 1899-1909.

(Compiled from the Census Reports.)

## Canned Fruits.

Product	1899		1904		1909	
	Cases	Value	Cases	Value	Cases	Value
Apples -----	25,287	\$71,427	31,286	\$67,591	67,697	\$136,855
Apricots -----	531,568	1,582,927	532,038	1,619,757	560,186	1,819,558
Berries -----	87,564	218,733	67,467	168,640	108,672	200,094
Cherries -----	49,375	155,813	171,298	457,169	213,518	463,476
Peaches -----	903,676	3,103,775	744,715	2,640,524	1,166,627	3,013,203
Pears -----	444,343	1,610,900	524,197	1,577,823	436,272	1,316,022
Plums -----	358,298	596,484	196,379	349,307	138,477	230,384
All other -----			54,215	97,272	19,900	68,750
Totals -----		\$7,340,059		\$6,978,083		\$7,248,342

## Dried Fruits, 1909.

(From the Census Reports.)

Dried fruits	Pounds	Value	Pounds	Value	Pounds	Value
Apples -----	3,087,220	\$155,893	811,254	\$40,659	6,860,170	\$481,173
Apricots -----	5,310,217	442,544	19,559,573	1,410,838	29,205,569	2,277,177
Peaches -----	5,502,390	301,495	25,845,364	1,701,105	46,827,391	2,422,043
Prunes -----	24,102,329	907,041	114,580,431	3,169,878	118,917,876	4,394,922
Raisins -----	10,734,221	720,268	121,409,881	6,349,381	195,774,767	6,912,533
All other -----	601,506	42,279	18,102,416	1,128,740	26,140,777	1,724,468
Totals -----	49,337,883	\$2,569,520	300,308,919	\$13,800,601	423,726,550	\$18,212,316

Fresno city is one of the principal centers of the canning and preserving industry of the State, in 1909 reporting nearly one fourth of the total value of products for this industry in California and a much larger proportion of the total value of dried fruits.

## CANNED FRUIT PACKED, BY VARIETIES, 1911-1914.

Varieties	Cases, 1911	Cases, 1912	Cases, 1913	Cases, 1914
Apples -----	65,300	72,500	79,000	96,407
Apricots -----	858,325	863,000	650,000	1,147,781
Blackberries -----	77,825	826,000	70,000	101,777
Cherries -----	198,805	351,250	287,700	123,839
Grapes -----	70,915	66,600	30,000	49,685
Peaches -----	2,091,148	2,200,000	1,995,300	*3,514,519
Pears -----	618,920	1,062,000	700,000	805,740
Plums -----	165,840	241,000	145,000	113,208
Figs -----	1,500	1,500		
Loganberries -----	19,117	20,000	17,500	22,977
Raspberries -----	3,625	2,000	6,000	9,685
Strawberries -----	7,715	4,500	20,000	96,582
Quinces -----	18,000	20,000		
Currants -----	14,500	15,000		
Oranges -----	3,500	4,000		
Other fruits -----	15,000		15,000	43,869
Totals -----	4,095,035	5,005,950	4,015,500	6,126,069

\*Of these, 2,626,394 were clingstones and 888,125 freestones.

The leading varieties of fruits used for canning are as follows:

<i>Apricots</i> —	<i>Figs</i> —	<i>Plums</i> —	<i>Peaches</i> —
Moorpark.	Endish.	Reine Claude.	Clingstones:
Hemskirke.	<i>Grapes</i> —	Green Gage.	Phillip.
Blenheim.	Muscat.	Washington.	Tuscan.
Royal.	<i>Pears</i> —	Damson.	Golden Cling.
<i>Cherries</i> —	Bartlett.	Jefferson.	Freestones:
Royal Anne.	<i>Nectarines</i> —	Egg.	Lovell.
Centennial.	Stanwich.	Golden Drop.	Muir.
Rockport.			Crawford.
Black Tartarian.			Foster.

Dried Fruit Packed, 1911-1914.

Varieties	Tons, 1911	Tons, 1912	Tons, 1913	Tons, 1914
Prunes -----	95,000	100,000	45,000	60,000
Raisins -----	60,000	92,500	65,000	91,000
Peaches -----	13,500	28,000	20,000	35,000
Apricots -----	11,000	19,000	9,000	20,000
Pears -----	2,000	5,000	2,000	4,000
Figs -----	5,000	4,500	3,500	5,000
Apples -----	4,000	3,500	2,500	5,000
Miscellaneous -----	3,800	1,000	2,000	5,000
Totals -----	194,300	253,500	149,000	224,000

The varieties of fruit cured by drying are as follows:

<i>Apricots</i> —	<i>Peaches</i> —	<i>Nectarines</i> —	<i>Plums</i> —
Royal.	Lovell.	Stanwich.	Washington.
Blenheim.	Muir.	<i>Pears</i> —	Jefferson.
<i>Figs</i> —	Crawford.	Bartlett.	Egg.
Adriatic.	Foster.		<i>Prunes</i> —
			Petites.

Dried fruit is packed in boxes of 25 and 50 pounds, and 12½ kilos for abroad.

#### NUTS.

About three fourths of the nuts produced in the United States are grown in California, walnuts and almonds being the principal crops.

Walnuts in the United States are produced almost exclusively in California, Orange and Los Angeles counties taking the lead.

California produces practically the whole of the almond crop in the United States.

Peanuts thrive well in southern California, chiefly on the lower lands of the coast region, while in central and northern California, peanuts are mostly grown in the river bottoms of the Sacramento and San Joaquin valleys.

The pecans grow well in the lower lands of the interior valleys, but are raised in only limited quantities.

#### Walnuts.

The English walnut is the greatest nut grown in the State, judged by the size and value of the crop. It is almost entirely grown in the four southern counties of Santa Barbara, Los Angeles, Orange, and Ventura.

The production of walnuts has doubled in the last ten years, until the domestic supply produces half the quantity consumed in the United States. In 1913 the crop was about 22,378,354 pounds, of which amount

1,224,302 pounds were so badly damaged by the hot wave which visited southern California in September that they were marked as off-grade, at a considerably lower price than the standard grade of walnuts.

The price for the last two years is as follows:

Grade	Price, cents, 1913	Price, cents, 1914
No. 1 soft shells.....	16	16½
Fancy budded.....	19	20
No. 2.....	11	12
Jumbos.....	17½	*18½

\*Later reduced to 17 cents. The 1914 crop has been entirely sold.

The bulk of imported nuts are of the Marbot and Cornes varieties, which correspond in size and quality to the second grade of the Pacific coast production. There are about four million pounds of Naples walnuts imported from Italy annually, and these are the greatest competitors of the California product, as they are of high quality and bring a high price on the market. The total quantity of walnuts imported in 1914 was 37,195,728 pounds.

#### Almonds.

The production of almonds in California in 1914 was 5,000,000 pounds, compared with 3,200,000 the previous year. The prices quoted below for 1914 are only approximate, and subject to revision. The net prices paid to growers, after all expenses of warehousing and selling had been paid, by the Almond Growers' Exchange, which controls about 60 per cent of the crop, is as follows:

Grade	Price, cents, 1911	Price, cents, 1912	Price, cents, 1913	Price, cents, 1914
Nonpareil.....	16½	13	17½	18
I X L.....	15½	12½	17	16½
Ne Plus Ultra.....	14½	11½	16	15½
Drake Seedling.....	12	9½	13	13
Hardshell.....	8	7	8½	8



## CALIFORNIA FRUIT AND NUT CROPS.

1890-1914.

Imports and Exports of Apples, Apricots, Figs, Oranges, Lemons, Olives, Nectarines, Pears, Peaches, Prunes, Plums, Raisins, Dried Grapes, and Greek Currants.\*

## CANNED FRUITS, NUTS, ALMONDS, AND WALNUTS.

## APPLES (DRIED), 1890-1914.

(None imported.)

Year	California crop, pounds	Exported	
		Pounds	Value
1890	1,000,000	20,861,462	\$1,038,682
1891	1,800,000	6,973,168	409,605
1892	2,750,000	26,042,003	1,288,102
1893	3,800,000	7,966,819	482,085
1894	5,850,000	2,846,645	168,054
1895	4,560,000	7,085,946	461,214
1896	2,350,000	26,691,963	1,340,507
1897	5,250,000	30,775,401	1,340,159
1898	3,520,000	31,031,254	1,897,725
1899	5,900,000	19,305,739	1,245,733
1900	6,360,000	34,964,010	2,247,851
1901	6,450,000	28,309,023	1,510,581
1902	9,750,000	15,664,468	1,190,593
1903	3,600,000	39,646,297	2,378,635
1904	3,000,000	48,301,665	2,791,421
1905	6,500,000	39,272,890	2,208,414
1906	5,500,000	27,852,831	2,044,820
1907	3,600,000	45,697,948	3,166,946
1908	6,800,000	24,237,873	1,946,810
1909	5,800,000	33,474,634	2,339,936
1910	6,200,000	25,076,618	2,056,692
1911	9,000,000	21,804,086	1,944,209
1912	6,500,000	53,664,639	4,545,971
1913	3,600,000	41,574,562	2,898,211
1914	8,000,000	33,564,160	2,628,445

## Dried Apples Exported in 1914.

Country	Pounds	Value
Germany	17,645,697	\$1,377,730
Netherlands	9,147,104	702,279
Other countries	6,773,359	548,436
Total	33,566,160	\$2,628,445

\*For figures previous to 1890, see the Report for 1913, pages 131-143.

## APRICOTS (DRIED), 1890-1914.

(None imported).

Year	California crop, pounds	Exported	
		Pounds	Value
1890	8,500,000		
1891	13,500,000		
1892	12,500,000		
1893	9,500,000		
1894	28,750,000		
1895	10,650,000		
1896	6,740,000		
1897	30,125,000		
1898	8,240,000		
1899	11,600,000		
1900	28,080,000		
1901	15,750,000		
1902	37,525,000	1,928,367	\$178,143
1903	21,000,000	9,190,081	713,887
1904	17,000,000	7,205,686	608,511
1905	38,500,000	6,854,154	606,777
1906	6,500,000	13,760,281	1,325,422
1907	3,000,000	2,760,432	336,812
1908	36,000,000	1,224,602	229,467
1909	32,000,000	16,597,871	1,512,417
1910	33,500,000	12,028,834	1,218,423
1911	14,000,000	19,329,358	2,085,437
1912	35,500,000	13,413,430	1,885,855
1913	18,000,000	35,016,730	3,513,473
1914	40,000,000	17,401,692	1,937,771

## Dried Apricots Exported in 1914.

Country	Quantity	Value
United Kingdom	4,473,534	\$452,312
Germany	3,841,032	460,635
France	3,074,146	353,764
Netherlands	2,064,471	238,611
Other countries	3,948,509	432,449
Total	17,401,692	\$1,937,771

## FIGS, 1890-1914.

(Duty, 2 cents per pound.)

Year	California crop, pounds	Imported	
		Pounds	Value
1890	360,000	10,284,998	\$456,567
1891	365,000	9,201,565	697,562
1892	500,000	8,338,759	511,142
1893	890,000	10,503,928	548,995
1894	1,540,000	7,985,959	392,040
1895	2,750,000	11,855,890	587,420
1896	2,160,000	11,900,710	639,512
1897	3,250,000	8,940,762	535,380
1898	4,780,000	9,628,426	509,002
1899	5,800,000	7,284,058	356,762
1900	4,000,000	8,812,487	513,895
1901	6,500,000	9,933,871	458,513
1902	7,250,000	11,087,131	487,733
1903	6,000,000	16,482,142	775,917
1904	5,700,000	13,178,061	660,360
1905	7,250,000	13,364,107	617,027
1906	7,750,000	17,562,358	722,967
1907	6,000,000	24,346,173	1,136,924
1908	6,000,000	18,836,574	867,523
1909	7,500,000	15,235,513	691,981
1910	6,250,000	17,362,197	775,319
1911	8,000,000	23,459,728	1,059,340
1912	10,000,000	18,765,408	934,763
1913	11,100,000	16,837,819	944,317
1914	10,000,000	19,284,868	941,207

Nearly all the figs are imported from Smyrna, in Turkey in Asia, about two million pounds from Greece and smaller quantities from Italy and Spain.

Exports of domestic figs are not shown separately in the customs returns, but are included in "All other green, ripe, or dried fruits."

## OLIVES, 1907-1914.

(Duty, 15 cents per gallon.)

Year	Imported	
	Gallons	Value
1907	2,298,480	\$1,277,973
1908	3,121,788	1,358,897
1909	2,969,329	1,349,023
1910	4,555,975	1,659,801
1911	3,044,947	1,567,546
1912	5,076,857	2,303,277
1913	3,946,076	1,896,982
1914	5,316,364	2,292,837

NOTE.—Olives in California, although cultivated on a considerable scale, have generally been considered one of the minor crops, and no regular records of the crop have been kept until the last few years. A large acreage has been planted in the last two or three years. Previous to 1907 the imports of olive oil were not given separately in the custom returns.

Most of the olives imported into this country come from Italy, France ranking second.

Exports of domestic olives and olive oil are not shown separately in the customs returns, but included in "All other fruits, or oils."

## OLIVE OIL, 1890-1914.

## Imports.

(Duty, in cask, 20 cents per gallon; in bottles, 30 cents per gallon. Olive oil unfit for food, free.)

Year	For manufacturing or mechanical purposes		For table use	
	Gallons	Value	Gallons	Value
1890	*	*	893,984	†\$918,110
1891	*	*	605,509	†733,489
1892	*	*	706,486	†876,613
1893	*	*	686,852	†891,424
1894	*	*	757,478	†909,897
1895	*	*	775,046	†952,405
1896	*	*	942,568	†1,107,049
1897	*	*	928,567	†1,134,077
1898	*	*	736,877	†923,804
1899	*	*	980,042	†1,090,250
1900	*	*	967,702	†1,170,871
1901	*	*	983,059	†1,266,293
1902	*	*	1,339,097	†1,579,409
1903	*	*	1,494,132	†1,736,648
1904	*	*	1,713,590	†1,875,825
1905	*	*	1,923,174	†2,108,893
1906	2,538,366	\$1,105,876	2,447,131	2,566,994
1907	1,471,766	682,656	3,449,517	3,523,725
1908	1,565,253	703,829	3,799,112	3,876,901
1909	369,979	183,983	4,129,454	5,069,655
1910	842,926	477,679	3,702,210	4,869,114
1911	578,477	378,819	4,405,827	6,014,191
1912	636,013	389,539	4,836,515	6,170,882
1913	619,356	407,074	5,221,001	6,739,172
1914	763,924	477,210	6,217,560	7,916,980

NOTE.—No record has been kept of the annual output of California olive oil, until recently, although the amount has been considerable for some years.

\*Included in "Olive oil for table use."

†1885-1905 includes olive oil for manufacturing purposes.



## CALIFORNIA ORANGE AND LEMON CROP, 1890-1914.

(Carloads.)

Season	Southern California		Total carloads	Northern California*		Grand total carloads
	Lemons	Oranges		Oranges	Lemons	
1889-90	34	3,476	3,510			
1890-91	40	4,016	4,056			
1891-92	52	4,400	4,452			
1892-93	65	5,871	5,936			
1893-94	145	5,726	5,871			
1894-95	335	4,687	5,022			
1895-96	565	7,010	7,575			
1896-97	1,378	5,972	7,350			
1897-98	1,166	13,987	15,153			
1898-99	903	9,448	10,351			
1899-1900	1,447	16,362	17,809			
1900-01	2,924	21,173	24,097			
1901-02	2,816	17,571	20,387			
1902-03	2,649	19,776	22,425	†1,304		23,729
1903-04	2,782	25,117	27,899	†1,567		29,466
1904-05	4,274	25,608	29,882	†1,734		31,616
1905-06	3,789	22,175	25,964	†1,564		27,528
1906-07	3,507	23,986	27,493	†2,333		29,826
1907-08	4,959	24,538	29,497	†3,150		32,647
1908-09	6,196	31,875	38,071	†2,501		40,572
1909-10	4,782	25,331	30,113	2,921	109	33,143
1910-11	6,764	36,821	43,585	2,687	127	46,399
1911-12	5,961	30,327	36,288	4,220	172	40,680
1912-13	2,192	13,574	15,766	2,453	112	18,331
1913-14	2,954	39,024	41,978	6,282	78	48,338

\*Lemons and oranges not reported prior to 1902-03 and not shown separately until 1909. The number of boxes per car of oranges and lemons has varied considerably, as the size of cars in recent years has increased. In 1904-05, and prior to that date, oranges averaged about 374 boxes and lemons 313 boxes to the car. At the present time the numbers are about 396 for oranges and 336 for lemons.

†Including lemons.

## Imports and Exports of Oranges, 1890-1914.

(Duty, in packages exceeding 5 cubic feet, or in bulk,  $\frac{1}{2}$  of 1 cent per pound.)

Year	Exports		Imports	
	Boxes	Value	Pounds	Value
1890				\$1,916,652
1891				2,339,987
1892				1,210,338
1893				1,695,469
1894				1,127,005
1895				1,997,266
1896				2,694,131
1897				2,324,907
1898		\$339,396		886,722
1899		282,313		1,097,596
1900		271,468	68,618,938	1,087,041
1901		436,560	50,332,914	716,457
1902		420,835	52,742,476	784,640
1903		465,397	56,872,070	818,780
1904		739,593	35,896,260	525,468
1905		929,151	28,880,575	374,083
1906		1,110,993	31,134,341	456,726
1907		1,255,104	21,267,346	354,495
1908		654,251	18,397,429	275,060
1909		866,753	2,131,724	8,435,873
1910		932,118	2,213,905	4,676,118
1911		1,179,273	2,983,322	7,672,186
1912		1,197,363	3,022,859	7,628,662
1913		1,063,233	2,976,520	12,252,960
1914		1,558,921	3,824,889	*

NOTE.—In years for which no figures are given, oranges were included in "Other fresh or dried fruits." Oranges are mostly imported from Mexico, West Indies, and Italy. The bulk of California oranges exported go to Canada.

\*Quantity of oranges and lemons imported not given since 1913.

## Imports of Lemons and Limes, 1890-1914.

(Duty, in packages exceeding 5 cubic feet, or in bulk,  $\frac{1}{2}$  of 1 cent per pound.)

Year	Pounds	Value	Year	Pounds	Value
1890	-----	\$3,374,032	1903	152,004,213	\$3,079,221
1891	-----	4,351,970	1904	171,923,221	3,659,598
1892	-----	4,548,263	1905	139,084,321	2,905,082
1893	-----	4,994,328	1906	138,717,252	2,933,990
1894	-----	4,285,278	1907	157,859,906	4,253,296
1895	-----	3,917,326	1908	178,490,003	4,388,530
1896	-----	5,040,344	1909	135,183,550	2,623,399
1897	-----	4,043,822	1910	160,214,785	3,176,933
1898	-----	2,848,130	1911	134,968,924	2,985,561
1899	-----	4,398,004	1912	145,639,396	3,368,863
1900	160,198,056	3,666,881	1913	151,416,412	4,300,266
1901	148,514,614	3,516,856	1914	-----	5,981,635
1902	164,075,309	3,320,359			

NOTE.—Of the imported lemons in 1912, 145,275,122 pounds came from Italy, and the balance of 364,274 from other countries. The exports of domestic lemons were not shown separately in the customs returns until 1913, but were included under "All other" fruit.

The export of lemons in 1913 amounted to 81,949 boxes, value \$399,409, and in 1914 to 70,075 boxes, value \$303,707.

## PEACHES AND NECTARINES (DRIED), 1890-1914.

(None imported.)

Year	California crop, pounds			Exported	
	Peaches	Nectarines	Total	Pounds	Value
1890	12,250,000	525,000	12,775,000	-----	-----
1891	12,250,000	625,000	13,875,000	-----	-----
1892	13,500,000	720,000	14,220,000	-----	-----
1893	16,800,000	780,000	17,580,000	-----	-----
1894	30,540,000	1,250,000	31,790,000	-----	-----
1895	24,500,000	1,325,000	25,825,000	-----	-----
1896	16,460,000	625,000	17,085,000	-----	-----
1897	27,150,000	285,000	27,435,000	-----	-----
1898	10,960,000	190,000	11,150,000	-----	-----
1899	34,800,000	840,000	35,640,000	-----	-----
1900	34,340,000	870,000	35,210,000	-----	-----
1901	29,510,000	650,000	30,160,000	-----	-----
1902	50,420,000	910,000	51,330,000	-----	-----
1903	36,000,000	635,000	36,635,000	-----	-----
1904	23,000,000	420,000	23,420,000	-----	-----
1905	35,000,000	370,000	35,370,000	-----	-----
1906	22,500,000	340,000	22,840,000	1,181,649	\$110,407
1907	24,000,000	275,000	24,275,000	1,757,650	186,043
1908	48,000,000	525,000	48,525,000	1,148,598	144,318
1909	40,000,000	750,000	40,750,000	2,403,430	151,334
1910	50,000,000	500,000	50,500,000	2,617,069	151,520
1911	22,000,000	800,000	22,800,000	7,125,014	499,530
1912	53,000,000	500,000	53,500,000	4,425,803	422,766
1913	40,000,000	400,000	40,400,000	6,529,633	444,879
1914	69,400,000	600,000	70,000,000	6,712,296	449,549

NOTE.—Included in "All other green, ripe, or dried fruits" in the years where no figures are given.

## PEARS, 1890-1914.

(None imported.)

Year	California crop, dried pears, pounds	Exported, green or ripe, value
1890	600,000	-----
1891	11,000,000	-----
1892	2,250,000	-----
1893	2,640,000	-----
1894	6,530,000	-----
1895	5,400,000	-----
1896	3,650,000	-----
1897	6,350,000	-----
1898	6,620,000	-----
1899	5,760,000	-----
1900	14,550,000	-----
1901	6,510,000	-----
1902	5,250,000	-----
1903	4,650,000	-----
1904	3,500,000	-----
1905	3,500,000	-----
1906	7,000,000	\$631,972
1907	1,000,000	675,944
1908	5,000,000	288,918
1909	2,500,000	546,198
1910	2,000,000	302,958
1911	4,000,000	578,067
1912	3,500,000	784,627
1913	2,000,000	796,913
1914	8,000,000	1,402,924

NOTE.—Included under "All other green, ripe, or dried fruit" in the years where no figures are given. Dried pears are not shown separately. Pears are mostly exported to the United Kingdom and Canada.

## DRIED PRUNES, 1890-1914.

(Duty, 1 cent per pound.)

Year	California crop, pounds	Exports	
		Pounds	Value
1890	16,200,000	-----	-----
1891	13,875,000	-----	-----
1892	22,500,000	-----	-----
1893	52,180,000	-----	-----
1894	44,750,000	-----	-----
1895	64,500,000	-----	-----
1896	55,200,000	-----	-----
1897	97,780,000	-----	-----
1898	90,420,000	15,940,791	\$1,021,888
1899	112,900,000	5,615,565	380,847
1900	174,000,000	25,922,371	1,646,332
1901	81,600,000	10,021,564	589,113
1902	195,000,000	23,358,849	1,404,422
1903	165,000,000	66,385,215	3,512,507
1904	135,000,000	73,146,214	3,410,497
1905	70,000,000	54,993,849	2,455,056
1906	180,000,000	24,869,744	1,410,636
1907	105,000,000	44,400,104	2,400,960
1908	57,000,000	28,148,450	1,642,114
1909	150,000,000	22,602,288	1,078,210
1910	75,000,000	89,014,880	4,016,554
1911	140,000,000	51,030,711	3,271,971
1912	200,000,000	74,328,074	4,969,053
1913	90,000,000	117,950,875	6,655,870
1914	120,000,000	69,813,711	4,662,546

The largest quantity of prunes exported go to Germany and Canada; the imports of prunes are included with plums.

**PLUMS, 1890-1914.**  
(Duty, 1 cent per pound.)

Year	California plum crop, pounds	Imports of plums and prunes	
		Pounds	Value
1890	1,000,000	58,093,410	\$1,789,176
1891	1,250,000	34,281,322	2,054,486
1892	2,000,000	10,869,797	437,271
1893	1,500,000	26,414,112	1,162,318
1894	2,760,000	9,908,122	416,342
1895	4,500,000	14,352,057	527,625
1896	2,100,000	483,658	68,862
1897	3,250,000	710,028	73,303
1898	2,460,000	303,992	39,690
1899	3,360,000	600,360	63,574
1900	3,900,000	443,457	47,700
1901	3,450,000	745,974	62,880
1902	2,560,000	522,478	44,077
1903	2,870,000	633,819	63,218
1904	2,300,000	494,105	46,976
1905	1,860,000	671,604	63,617
1906	2,000,000	497,494	53,348
1907	1,500,000	323,377	45,386
1908	1,000,000	335,089	49,322
1909	1,200,000	296,123	41,696
1910	750,000	*	*
1911	1,200,000	*	*
1912	750,000	*	*
1913	1,200,000	*	*
1914	1,500,000	*	*

\*Included in "All other fruits" after 1909, the quantity being so small.

**CALIFORNIA RAISIN CROP, AND EXPORTS AND IMPORTS, 1890-1914.**  
(Duty on raisins and dried grapes, 2 cents per pound.)

Year	California crop, pounds	Exports		Imports	
		Pounds	Value	Pounds	Value
1890	38,000,000			36,914,330	\$1,997,103
1891	52,000,000			39,572,655	2,018,879
1892	57,000,000			20,687,640	964,309
1893	85,000,000			27,543,563	1,266,342
1894	103,000,000			13,751,050	554,081
1895	91,000,000			15,921,278	651,420
1896	68,000,000			10,826,094	460,200
1897	93,000,000			12,650,598	567,039
1898	80,000,000	3,109,639	\$167,062	6,593,833	381,889
1899	71,000,000	4,659,807	242,620	4,933,201	282,400
1900	90,000,000	2,415,456	139,689	10,309,498	531,124
1901	74,000,000	3,512,164	218,715	3,860,836	297,631
1902	106,000,000	2,323,274	149,216	6,683,545	399,973
1903	120,000,000	4,280,028	284,530	6,715,675	476,844
1904	75,000,000	4,020,418	281,402	6,867,617	355,542
1905	87,000,000	7,054,824	372,087	4,041,689	273,031
1906	95,000,000	4,528,502	305,768	12,414,855	524,590
1907	140,000,000	9,128,827	599,395	3,967,151	364,403
1908	130,000,000	5,684,541	427,583	9,132,353	554,633
1909	140,000,000	7,880,161	455,657	5,794,320	327,644
1910	115,000,000	8,526,114	417,403	5,042,683	296,047
1911	120,000,000	18,659,992	1,069,300	2,479,220	237,422
1912	185,000,000	19,949,046	1,351,986	3,255,861	295,466
1913	130,000,000	28,120,507	1,512,642	2,579,705	241,630
1914	*182,000,000	14,766,416	997,575	4,554,549	309,511

NOTE.—Imported raisins come almost entirely from Spain, and sultanas, which are included in the above figures, from Smyrna in Turkey in Asia. These latter have also greatly decreased in recent years from upward of 7,000,000 pounds in 1906 to about 500,000 pounds, but in 1913 the quantity increased to 1,287,296 pounds, and 2,730,338 pounds in 1914. Canada is our best customer for raisins, taking 18,000,000 pounds in 1913 and 10,000,000 in 1914.

\*Including dried grapes.



## DRIED GRAPES.

The quantity of "dried grapes" (which are wine grapes) is now small, and is discouraged as they make inferior raisins.

## IMPORTS OF GREEK CURRANTS, 1891-1914.

(Duty, 1½ cents per pound.)

Year	Pounds	Value
1891*	33,128,140	\$1,246,074
1892*	36,665,828	1,209,119
1893*	33,166,546	1,185,537
1894*	52,664,843	774,802
1895*	16,450,706	258,659
1896*	33,040,846	551,072
1897	29,265,761	596,084
1898	25,186,210	837,987
1899	30,849,253	798,357
1900	36,251,779	916,908
1901	16,049,198	916,994
1902	36,238,976	1,238,756
1903	33,878,209	743,644
1904	38,347,649	997,430
1905	31,742,919	764,289
1906	37,078,311	1,119,146
1907	38,392,779	1,746,941
1908	38,652,656	1,592,018
1909	32,482,111	1,185,106
1910	33,326,030	1,190,020
1911	33,439,565	1,486,263
1912	33,151,396	1,561,350
1913	30,843,735	1,306,410
1914	32,033,177	1,233,223

\*From 1891 to 1894, currants were duty free, and in 1895, 1896 and 1897, currants not from Zante were admitted free. Currants practically all come from Greece.

## CALIFORNIA CANNED FRUIT, AND EXPORTS, 1890-1914.

(None imported.)

Year	California pack, cases	Exports, value
1890	1,495,300	\$698,321
1891	1,571,200	703,880
1892	1,602,370	1,558,820
1893	1,001,640	1,137,660
1894	1,528,815	660,723
1895	1,639,807	871,465
1896	1,602,446	1,376,281
1897	1,942,982	1,686,723
1898	2,085,166	1,624,741
1899	3,003,100	2,330,715
1900	2,775,800	3,127,278
1901	2,677,000	3,006,109
1902	2,252,000	1,195,635
1903	2,783,500	1,739,571
1904	2,840,600	2,637,002
1905	3,252,500	2,541,025
1906	3,125,000	2,348,064
1907	2,983,000	1,581,047
1908	4,734,000	1,549,826
1909	3,047,000	2,899,374
1910	3,600,000	2,656,019
1911	4,095,035	2,686,445
1912	5,005,950	4,012,463
1913	4,015,500	5,599,373
1914	6,126,069	4,863,946

Exported domestic canned fruit in 1914, to the United Kingdom, \$3,182,051; to all other countries, \$1,681,895.

## IMPORTS OF MISCELLANEOUS FRUITS, 1890-1914.

## Duty on Imported Preserved Fruits.

Preserved in sugar or their own juices, 1 cent a pound; if containing over 10 per cent of alcohol, 20 per cent ad valorem and in addition \$2.50 per proof gallon of alcohol in excess of 10 per cent. Jellies, 20 per cent ad valorem; pineapples preserved in their own juice, 20 per cent ad valorem.

Year	Prepared or preserved fruits, value	All other fresh or dried fruits, value	Total fruits, value
1890	\$954,331	\$3,168,367	\$18,310,007
1891	1,289,137	2,552,245	23,018,937
1892	1,234,828	2,508,940	18,176,471
1893	864,166	3,372,666	20,944,918
1894	526,561	2,980,584	16,566,782
1895	570,568	1,725,342	15,227,079
1896	598,928	2,128,056	16,957,307
1897	605,053	1,810,807	14,926,771
1898	922,357	1,294,855	12,329,012
1899	1,020,644	1,579,652	15,586,664
1900	1,243,479	1,989,546	16,284,758
1901	1,366,801	2,059,130	16,317,848
1902	1,454,788	2,053,588	17,436,184
1903	1,521,443	2,353,864	18,860,238
1904	1,796,209	2,749,670	18,964,688
1905	1,599,488	2,924,187	19,779,113
1906	2,437,766	2,484,345	21,542,322
1907	1,272,445	1,363,167	26,124,277
1908	1,550,246	2,250,815	27,710,799
1909	1,062,775	1,912,949	22,446,430
1910	956,368	920,362	24,177,160
1911	893,633	971,572	27,017,632
1912	936,008	1,693,516	29,549,281
1913	795,399	1,115,330	28,657,084
1914	1,111,193	1,710,009	2,821,202

## EXPORTS OF DOMESTIC FRUITS, 1890-1914.

Year	Preserved other than canned	Other fresh or dried fruits	Total fruits
1890	\$59,401	\$1,003,846	\$4,031,686
1891	93,996	699,798	2,384,176
1892	214,738	1,095,845	6,565,461
1893	224,381	881,804	3,823,897
1894	211,215	1,016,397	2,299,006
1895	47,420	1,522,100	4,856,517
1896	70,353	1,868,353	5,585,783
1897	43,276	2,172,199	7,613,500
1898	82,504	2,033,845	8,851,787
1899	66,899	1,997,649	7,757,235
1900	63,448	2,545,451	11,486,172
1901	71,597	2,716,269	10,607,908
1902	94,323	2,153,050	8,415,103
1903	66,757	4,215,034	17,558,119
1904	115,490	4,317,910	20,348,299
1905	71,868	2,253,638	15,297,391
1906	89,872	1,727,943	14,857,272
1907	104,663	2,246,384	17,206,267
1908	137,929	2,360,360	13,965,840
1909	77,746	2,104,624	16,079,227
1910	176,474	2,119,210	18,504,591
1911	205,643	2,792,281	23,893,663
1912	136,870	3,812,304	30,354,700
1913	181,749	2,893,395	36,345,517
1914	224,841	2,922,740	3,147,581

## ALMONDS, 1890-1914.

(Duty, 3 cents per pound; shelled, 4 cents per pound.)

Year	California crop, pounds	Imported	
		Pounds	Value
1890	250,000	5,715,858	\$813,278
1891	500,000	6,812,061	931,007
1892	1,066,000	7,629,392	1,028,671
1893	720,000	6,679,147	938,054
1894	2,125,000	7,436,784	769,453
1895	1,850,000	7,903,375	810,439
1896	3,210,000	7,789,681	763,594
1897	4,750,000	9,644,338	880,263
1898	900,000	5,746,362	659,659
1899	4,640,000	9,957,427	1,222,587
1900	5,480,000	6,317,633	949,083
1901	3,000,000	5,140,232	946,138
1902	6,540,000	9,868,982	1,240,886
1903	6,400,000	8,142,164	1,337,717
1904	1,600,000	9,838,852	1,246,474
1905	4,250,000	11,745,081	1,520,063
1906	1,800,000	15,009,326	1,825,475
1907	1,850,000	14,233,613	2,331,816
1908	6,000,000	17,144,968	2,410,648
1909	3,500,000	11,029,421	1,852,523
1910	6,800,000	18,556,356	3,153,645
1911	3,400,000	15,552,712	2,896,573
1912	6,000,000	17,231,458	3,253,495
1913	2,300,000	15,670,558	3,344,658
1914	5,000,000	19,038,405	4,679,289

Practically all almonds are imported from Spain, Italy and France.

\*Of the above quantity imported in 1914, 13,307,631 pounds were shelled and 5,730,774 pounds unshelled.

## WALNUTS, 1890-1914.

(Duty on imported walnuts, unshelled, 2 cents per pound; shelled, 4 cents.)

Year	California crop, pounds	Imported	
		Pounds	Value
1890	2,000,000		
1891	2,124,000		
1892	2,950,000		
1893	2,866,000		
1894	5,805,000		
1895	4,620,000		
1896	8,230,000		
1897	7,970,000		
1898	11,300,000		
1899	11,160,000		
1900	10,860,000		
1901	13,800,000		
1902	17,140,000		
1903	11,000,000	12,362,567	\$1,106,033
1904	15,180,000	23,670,761	1,729,378
1905	11,500,000	21,684,104	1,469,463
1906	12,250,000	24,917,028	2,193,653
1907	14,600,000	32,597,592	2,969,649
1908	18,000,000	28,887,110	2,765,486
1909	17,000,000	26,157,703	2,409,644
1910	15,000,000	33,641,466	3,538,264
1911	22,000,000	33,619,434	4,471,227
1912	19,500,000	37,213,674	4,069,515
1913	22,378,354	26,662,441	3,499,981
1914	17,780,000	37,195,728	4,339,481

Years for which no figures are given are included in "Other nuts."

\*Of the above number imported in 1914, 28,267,699 pounds were unshelled, and 8,928,029 shelled.

## IMPORTED NUTS, 1890-1914.

(Duty on imported peanuts, unshelled,  $\frac{3}{4}$  of 1 per cent per pound; shelled,  $\frac{3}{4}$  of 1 per cent per pound; all others (except almonds, peanuts and walnuts) 1 cent per pound.)

Year	Peanuts and other ground nuts		Miscellaneous nuts, value	Total all nuts, crop
	Pounds	Value		
1890			\$800,376	\$2,437,767
1891			1,115,978	2,997,456
1892			822,255	2,792,846
1893			951,941	2,744,741
1894			631,759	2,187,989
1895			730,411	2,012,844
1896			868,799	2,075,132
1897			848,511	2,200,161
1898			1,002,344	2,237,938
1899			879,166	2,727,542
1900			1,326,804	2,978,834
1901			1,518,484	3,268,855
1902			1,971,072	4,044,341
1903			1,514,406	4,866,398
1904			1,523,462	5,471,166
1905			2,082,344	6,158,343
1906			2,055,557	7,373,425
1907			2,100,274	9,742,883
1908			1,790,375	9,643,943
1909			1,717,374	8,664,253
1910	29,276,235	\$1,234,088	1,218,052	13,246,742
1911	18,834,441	765,033	1,254,943	14,498,413
1912	15,558,038	575,282	858,837	15,827,988
1913	18,756,422	769,666	977,161	13,965,569
1914	44,549,789	1,899,237	1,357,520	19,782,924

In 1913 the unshelled peanuts imported amounted to 12,281,580 pounds, and the shelled to 6,474,842 pounds, and in 1914 the unshelled 17,472,631, and the shelled 27,077,158.

## EXPORTS OF DOMESTIC NUTS, 1890-1914.

Year	Peanuts		Other nuts, value	Total nuts, value
	Pounds	Value		
1890				\$27,861
1891				50,617
1892				60,684
1893				94,902
1894				125,233
1895				115,274
1896				93,283
1897				125,805
1898				161,432
1899				140,250
1900				156,490
1901				218,743
1902				304,241
1903				299,558
1904				330,366
1905				309,195
1906*	7,180,163	\$275,927	\$140,959	416,886
1907	6,386,012	278,236	103,929	382,165
1908	5,503,685	283,819	89,205	373,024
1909	5,501,107	242,569	246,284	488,853
1910	4,484,613	224,779	156,284	381,063
1911	5,447,185	276,651	328,151	604,802
1912	5,920,711	305,465	303,473	608,938
1913	7,301,381	366,016	367,569	733,585
1914	8,054,817	421,367	398,312	819,679

\*Prior to 1906 peanuts were not shown separately in the customs returns.



## TABLE XXIX.

## ORCHARD FRUITS BY COUNTIES.\*

Number of Bearing Trees in 1910, and Production.

Counties	Apples		Apricots		Cherries	
	Number of trees	Bushels	Number of trees	Bushels	Number of trees	Bushels
Alameda	26,045	38,346	270,461	399,035	89,284	89,662
Alpine	1,140	642	7		63	2
Amador	8,592	11,990	1,197	949	1,143	1,588
Butte	34,425	42,671	9,900	11,126	4,317	4,403
Calaveras	13,341	21,583	672	465	459	329
Colusa	3,067	4,507	4,420	3,323	223	228
Contra Costa	13,429	18,494	38,812	19,906	7,258	5,139
Del Norte	3,234	3,110			48	38
El Dorado	31,929	26,529	503	786	3,259	3,051
Fresno	32,097	34,505	186,823	206,536	2,729	104
Glenn	4,617	4,909	6,830	2,310	78	48
Humboldt	73,010	1,552,585	235	267	3,733	5,040
Imperial	86	3	1,922	673		
Inyo	19,611	35,430	342	416	539	331
Kern	7,725	10,006	33,573	48,955	163	64
Kings	4,196	8,507	124,007	234,147	11	205
Lake	22,254	18,537	1,463	536	590	764
Lassen	12,679	10,349	70	17	439	61
Los Angeles	101,433	118,528	122,769	181,079	795	168
Madera	20,576	11,227	9,408	6,188	40	20
Marin	15,995	6,907	1,689	633	165	111
Mariposa	16,001	29,141	233	415	120	216
Mendocino	63,263	112,856	187	305	1,181	1,576
Merced	8,941	7,267	7,381	4,263	343	64
Modoc	28,969	60,202	652	788	963	1,033
Mono	1,088	850	6	1	197	190
Monterey	290,404	501,847	27,996	36,067	1,729	723
Napa	41,301	47,216	16,953	16,273	16,955	20,895
Nevada	20,223	25,800	193	133	1,727	1,810
Orange	11,992	12,218	129,352	328,931	23	9
Placer	42,704	26,848	4,092	1,023	31,209	67,429
Plumas	3,534	1,391	18		65	10
Riverside	10,577	9,977	83,069	145,159	982	765
Sacramento	10,948	18,235	10,480	9,951	17,173	33,729
San Benito	26,593	31,385	61,694	106,806	3,421	1,761
San Bernardino	55,150	79,077	111,125	171,763	3,057	2,928
San Diego	37,662	45,687	20,858	33,001	1,792	1,729
San Francisco	40	230				
San Joaquin	5,053	7,019	53,007	27,474	21,590	13,669
San Luis Obispo	35,006	56,047	20,123	25,929	702	463
San Mateo	18,634	31,317	3,694	1,259	671	228
Santa Barbara	2,744	38,511	15,512	29,237	659	238
Santa Clara	102,841	118,603	783,585	958,163	173,002	90,198
Santa Cruz	647,136	2,090,968	63,021	95,042	17,608	25,368
Shasta	35,440	47,556	839	2,141	2,785	2,311
Sierra	3,398	4,895			67	114
Siskiyou	31,055	19,521	366	363	1,850	1,478
Solano	4,862	6,857	310,262	180,011	53,923	52,512
Sonoma	386,740	818,725	9,087	10,374	43,927	58,710
Stanislaus	3,680	1,693	20,451	14,122	1,182	380
Sutter	5,433	7,806	5,986	3,443	1,249	967
Tehama	15,633	16,256	30,446	26,128	624	321
Trinity	4,272	4,951	41	33	247	205
Tulare	25,261	28,241	48,834	56,042	316	290
Tuolumne	13,544	16,558	162	120	144	118
Ventura	15,179	19,170	219,836	562,978	392	1,047
Yolo	2,512	3,654	117,228	101,396	4,534	5,908
Yuba	5,468	7,133	1,481	342	559	265
Totals	2,482,762	6,335,073	2,992,453	4,066,823	522,304	501,013

\*For the number of bearing trees in orchard fruits in 1890 and 1900, see Report for 1912, pages 162-164.

TABLE XXIX—Continued.

## ORCHARD FRUITS BY COUNTIES.\*

Number of Bearing Trees in 1910, and Production.

Counties	Peaches and nectarines		Pears	
	Number of trees	Bushels	Number of trees	Bushels
Alameda	12,555	14,561	70,382	99,994
Alpine	28	40	79	36
Amador	16,349	20,606	5,112	4,430
Butte	255,047	356,683	22,159	25,318
Calaveras	5,954	6,794	2,178	5,358
Colusa	4,075	3,372	2,432	1,906
Contra Costa	39,461	38,525	68,088	75,803
Del Norte	42	32	129	154
El Dorado	61,800	58,738	49,672	36,848
Fresno	2,277,314	2,727,978	13,356	7,548
Glenn	6,420	3,175	1,655	1,500
Humboldt	9,471	10,552	3,804	8,196
Imperial	432	228	347	11
Inyo	4,602	5,037	2,668	2,676
Kern	35,149	30,278	1,057	1,065
Kings	777,697	803,637	4,379	8,007
Lake	9,288	8,336	39,075	39,871
Lassen	1,455	1,753	632	479
Los Angeles	160,197	234,581	16,149	21,161
Madera	40,989	20,996	1,185	1,164
Marin	6,313	3,092	4,151	8,979
Mariposa	1,618	1,803	701	1,528
Mendocino	6,928	10,031	15,829	23,666
Merced	134,991	90,954	5,704	2,624
Modoc	2,113	1,866	1,888	3,334
Mono	91	61	123	122
Monterey	7,381	8,693	5,194	8,061
Napa	71,080	65,843	50,210	81,812
Nevada	17,873	22,488	36,800	26,279
Orange	12,461	13,104	2,100	2,973
Placer	683,824	1,084,566	142,999	115,950
Plumas	184	35	261	112
Riverside	72,933	77,138	18,447	13,424
Sacramento	99,635	129,981	161,094	308,352
San Benito	12,301	25,132	12,409	22,903
San Bernardino	197,763	246,049	2,302	3,421
San Diego	29,800	29,530	6,023	7,585
San Francisco	120	125		
San Joaquin	185,073	229,175	13,664	13,096
San Luis Obispo	10,614	10,325	5,097	8,869
San Mateo	572	643	1,688	1,923
Santa Barbara	9,560	11,337	2,612	5,148
Santa Clara	437,677	574,514	142,550	206,214
Santa Cruz	11,868	10,873	23,100	33,456
Shasta	98,950	110,712	33,952	64,803
Sierra	157	83	148	414
Siskiyou	4,371	3,779	2,300	2,164
Solano	341,266	474,444	182,194	319,303
Sonoma	237,220	165,396	109,965	128,421
Stanislaus	154,553	89,385	4,158	1,804
Sutter	149,057	287,894	17,911	32,754
Tehama	260,204	276,049	141,584	26,992
Trinity	886	873	738	1,468
Tulare	714,494	622,373	6,483	4,948
Tuolumne	3,065	2,063	1,056	2,004
Ventura	8,943	15,630	2,597	3,776
Yolo	116,003	219,660	38,115	71,897
Yuba	8,744	5,517	10,220	25,993
Totals	7,829,011	9,267,118	1,410,905	1,928,097

\*For the number of bearing trees in orchard fruits in 1890 and 1900, see Report for 1912, pages 162-164.

TABLE XXIX—Continued.

## ORCHARD FRUITS BY COUNTIES.\*

Number of Bearing Trees in 1910, and Production.

Counties	Plums and prunes		Total	
	Number of trees	Bushels	Number of trees	Bushels
Alameda	157,981	157,270	627,824	799,976
Alpine	214	42	1,531	762
Amador	10,685	11,880	43,332	51,757
Butte	104,474	252,141	452,302	693,210
Calaveras	8,265	9,901	31,276	44,963
Colusa	57,468	111,658	71,796	125,122
Contra Costa	58,177	54,831	225,939	213,351
Del Norte	96	222	3,549	3,556
El Dorado	32,764	23,327	180,017	149,543
Fresno	66,926	139,252	2,579,859	3,116,325
Glenn	24,860	8,559	44,565	20,613
Humboldt	26,950	12,161	117,368	1,589,053
Imperial	347	3	3,170	926
Inyo	2,349	1,845	30,164	45,760
Kern	58,075	74,053	136,088	164,626
Kings	132,192	258,851	1,048,506	1,315,117
Lake	47,244	54,807	126,037	122,945
Lassen	2,223	1,069	17,511	13,731
Los Angeles	43,592	34,295	446,698	590,929
Madera	7,570	435	80,156	40,077
Marin	3,775	2,625	32,263	22,420
Mariposa	762	1,168	19,461	34,283
Mendocino	37,197	63,356	125,282	212,320
Merced	5,401	3,437	163,013	108,843
Modoc	3,182	4,660	37,776	71,883
Mono	86	10	1,595	1,234
Monterey	6,189	4,122	339,105	559,680
Napa	299,613	407,023	497,391	639,976
Nevada	6,955	7,055	84,259	84,046
Orange	4,569	5,295	160,667	362,981
Placer	279,766	323,731	1,190,074	1,673,123
Plumas	510	161	4,574	1,709
Riverside	34,357	54,873	220,723	301,493
Sacramento	206,553	269,547	506,961	772,257
San Benito	91,066	223,443	207,537	411,477
San Bernardino	8,779	6,473	379,533	509,989
San Diego	16,022	8,204	112,993	126,427
San Francisco	945	575	1,105	930
San Joaquin	83,641	102,991	364,290	395,038
San Luis Obispo	21,383	15,236	93,217	117,126
San Mateo	18,279	14,686	43,655	50,130
Santa Barbara	2,730	4,822	34,200	89,858
Santa Clara	3,387,455	3,854,070	5,043,766	5,807,595
Santa Cruz	112,269	109,959	875,642	2,366,344
Shasta	87,959	159,696	262,136	387,566
Sierra	232	262	4,002	5,768
Siskiyou	5,683	4,405	45,708	31,735
Solano	465,341	714,730	1,357,911	1,747,916
Sonoma	569,232	596,953	1,364,105	1,784,301
Stanislaus	6,095	3,492	190,515	111,304
Sutter	65,723	136,082	244,587	469,829
Tehama	92,459	133,024	441,070	478,915
Trinity	1,083	1,329	7,313	8,906
Tulare	264,337	639,586	1,059,830	1,351,573
Tuolumne	1,404	1,302	19,554	22,254
Ventura	12,541	15,755	259,682	618,490
Yolo	119,193	214,792	397,748	617,448
Yuba	3,487	2,447	30,264	41,998
Totals	7,168,705	9,317,979	22,485,195	31,501,507

\*For the number of bearing trees in orchard fruits in 1890 and 1900, see Report for 1912, pages 162-164.

TABLE XXX.  
TROPICAL FRUITS BY COUNTIES.\*  
Number of Bearing Trees in 1910, and Production.

Counties	Figs		Olives		Lemons	
	Number of trees	Pounds	Number of trees	Pounds	Number of trees	Boxes
Alameda	482	9,990	10,963	45,285	660	2,144
Alpine			4	50		
Amador	347	24,315	274	2,600	8	12
Butte	9,518	337,725	73,453	2,242,445	2,223	1,222
Calaveras	1,839	142,990	4,065	10,465	19	37
Colusa	1,391	60,577	336	5,716	199	148
Contra Costa	293	16,235	9,744	340,410	148	92
Del Norte	1					
El Dorado	587	74,060	37	4,020		
Fresno	120,124	15,898,146	72,788	655,302	12,389	10,083
Glenn	879	63,235	445	14,290	593	432
Humboldt	82	2,430				
Imperial	606	10,450	41		36	4
Inyo	14	400				
Kern	1,475	92,990	393	2,950	54	37
Kings	391	26,720	5	400		
Lake	1,062	41,896	3,198	7,390	8	
Lassen						
Los Angeles	5,736	397,376	84,934	1,549,419	219,149	704,301
Madera	4,321	82,290	18,010	38,035	15	16
Marin	201	1,065	48	150	26	25
Mariposa	461	135,455	2,711	2,452	35	50
Mendocino	358	25,125	7	100		
Merced	9,837	793,495	6,981	90,916	209	217
Modoc						
Mono						
Monterey	217	9,146	657	2,622	7	
Napa	1,234	20,889	20,176	36,885	258	86
Nevada	1,468	67,225	419	4,273	6	
Orange	1,066	25,123	67,046	828,204	46,954	74,227
Placer	4,463	105,802	26,396	417,415	714	683
Plumas	6		6			
Riverside	2,054	73,796	80,572	1,281,970	115,020	304,683
Sacramento	1,145	54,450	34,077	969,962	2,500	1,636
San Benito	128	4,615	4		5	4
San Bernardino	1,144	33,790	30,190	486,478	157,731	630,108
San Diego	2,459	94,323	109,871	2,559,792	195,318	473,543
San Francisco			1			
San Joaquin	4,037	292,063	19,998	506,268	75	58
San Luis Obispo	819	43,317	1,597	28,877	955	1,475
San Mateo	36	525	7,187	141,006	1	1
Santa Barbara	858	40,255	44,258	1,275,022	46,181	134,168
Santa Clara	985	31,500	13,945	639,227	996	1,201
Santa Cruz	333	12,845	1,243	2,500	349	233
Shasta	2,306	53,270	9,616	7,541	7	1
Sierra						
Siskiyou	3	10			2	
Solano	4,598	497,159	1,221	34,874	126	163
Sonoma	3,850	98,105	10,863	54,490	396	235
Stanislaus	37,676	397,675	5,458	129,384	576	262
Sutter	4,675	447,470	3,018	170,581	602	641
Tehama	3,176	115,472	17,373	394,449	356	354
Trinity	20	255			2	
Tulare	15,750	1,037,350	5,605	89,921	41,069	65,466
Tuolumne	237	17,435	10		6	
Ventura	618	29,653	25,961	686,171	95,018	347,804
Yolo	10,476	1,128,670	4,482	307,395	183	222
Yuba	3,159	81,200	6,660	64,710	109	147
Totals	269,001	22,990,353	836,347	16,132,412	941,293	2,756,221

\*For the number of bearing trees of tropical fruits in 1890 and 1900, see Report for 1912, pages 165-167.

NOTE.—The production being in pounds and citrus fruits in boxes, the total production for each county can not be given.



TABLE XXX—Continued.

## TROPICAL FRUITS BY COUNTIES

Number of Bearing Trees in 1910, and Production.

Counties	Oranges		Pomelos		Total trees
	Number of trees	Boxes	Number of trees	Boxes	
Alameda	3,782	6,074	4	2	15,900
Alpine					4
Amador	151	283			780
Butte	147,412	128,108	122	171	235,442
Calaveras	388	544	3	2	6,315
Colusa	1,537	2,970	70	147	3,537
Contra Costa	402	453			10,597
Del Norte					1
El Dorado	53	195			677
Fresno	85,781	92,640	346	431	291,754
Glenn	4,860	1,704	5	13	6,783
Humboldt	1				83
Imperial	1,410	3,012	18	1	2,411
Inyo					14
Kern	80,940	32,232	16	7	82,888
Kings	24	31			425
Lake	72	13			4,340
Lassen					
Los Angeles	1,674,695	4,124,161	6,853	11,810	1,994,402
Madera	184	114	2		22,532
Marin	79	147	5	9	387
Mariposa	1,169	1,691	1	1	4,378
Mendocino	4	3			370
Merced	1,572	1,097	11	2	18,613
Modoc					
Mono					
Monterey	29	25			913
Napa	1,192	535	9	21	23,251
Nevada	364	320	2		2,311
Orange	478,272	1,247,905	677	2,612	597,383
Placer	26,921	14,103	289	411	59,906
Plumas					12
Riverside	1,021,957	2,006,902	4,477	16,408	1,224,217
Sacramento	46,256	61,517	864	1,278	84,863
San Benito	42	10			179
San Bernardino	1,951,254	5,425,759	13,134	60,149	2,153,501
San Diego	107,457	167,201	5,764	12,950	425,260
San Francisco					1
San Joaquin	1,950	1,854	2		26,070
San Luis Obispo	794	1,225	75	49	4,253
San Mateo	25	9			7,249
Santa Barbara	4,246	12,272	716	931	99,023
Santa Clara	1,905	1,354	57	9	18,023
Santa Cruz	330	151	7	6	2,279
Shasta	55	39			11,986
Sierra					
Siskiyou					6
Solano	2,950	2,737	15		8,911
Sonoma	5,047	4,209	8	4	20,226
Stanislaus	10,492	8,087	18	1	54,291
Sutter	2,427	3,335	18	14	10,741
Tehama	10,744	7,975	5	4	31,654
Trinity					22
Tulare	801,151	758,465	8,114	13,551	872,657
Tuolumne	114	122			367
Ventura	131,681	310,239	392	909	253,754
Yolo	2,371	2,949	1,325	612	18,858
Yuba	1,263	1,409			11,205
Totals	6,615,805	14,436,180	43,424	122,515	8,726,005

NOTE.—The production being in pounds and citrus fruits in boxes, the total production for each county can not be given.

TABLE XXXI.

## GRAPES AND NUTS BY COUNTIES.\*

Number of Vines and Bearing Trees in 1910, and Production.

Counties	Grapes		Almonds		Pecans	
	Number of vines bearing	Production, pounds	Number of trees	Pounds	Number of trees	Pounds
Alameda	2,390,959	20,671,600	21,190	155,871	5	80
Alpine	9,000	56,000	12	75		
Amador	314,604	2,743,320	628	3,931	1	50
Butte	258,742	1,499,000	84,069	799,351	158	5,450
Calaveras	212,300	1,457,030	14,624	27,080	6	
Colusa	482,417	5,010,240	16,078	90,479	10	340
Contra Costa	2,972,130	32,217,131	209,056	830,112	25	200
Del Norte					3	
El Dorado	581,342	4,891,740	438	3,850		
Fresno	40,687,207	611,253,961	7,390	56,472	56	225
Glenn	20,416	145,300	25,739	61,055	15	350
Humboldt	4,095	76,405	304	580		
Imperial	298,813	1,210,475	29			
Inyo	39,478	292,730	28	1,080	9	150
Kern	419,582	1,715,540	3,101	23,505	563	1,290
Kings	4,588,732	91,434,166	1,721	37,040	2	40
Lake	296,752	1,750,522	8,281	47,316	6	350
Lassen	31	800	8			
Los Angeles	4,923,877	44,846,307	76,949	57,770	313	6,400
Madera	1,530,630	21,105,970	2,778	7,975	5	
Marin	115,198	1,982,560	151	1,112		
Mariposa	28,647	285,740	159	1,918		
Mendocino	924,191	6,471,050	229	4,260		
Merced	1,281,342	12,085,751	17,132	114,499	31	200
Modoc	795	7,100				
Mono	2,000	20,000				
Monterey	79,935	754,340	2,196	24,050	3	100
Napa	8,595,338	66,876,897	18,731	90,783	996	
Nevada	94,338	757,865	1,325	11,980	10	40
Orange	282,682	2,684,855	1,248	70	26	1,350
Placer	1,340,132	11,231,830	11,539	64,431	2	
Plumas						
Riverside	1,570,794	12,133,389	21,789	168,570	98	3,520
Sacramento	7,627,510	399,386,705	66,372	335,257	3	100
San Benito	177,976	1,620,030	6,958	73,922	6	100
San Bernardino	5,987,127	38,608,263	634	15,479		
San Diego	1,228,858	15,204,430	9,279	40,521	1,080	19,205
San Francisco	3,000	10,000				
San Joaquin	13,371,794	175,879,915	97,024	547,300	6	250
San Luis Obispo	265,481	1,937,110	9,281	46,990	1	
San Mateo	124,990	695,440	94	425		
Santa Barbara	208,595	590,485	239	3,150	70	130
Santa Clara	5,584,480	41,129,250	25,862	198,186	136	1,000
Santa Cruz	1,365,414	7,315,935	240	1,855	5	
Shasta	117,481	643,463	8,056	43,210	7	100
Sierra						
Siskiyou	2,473	44,507	83	2,611	2	
Solano	1,213,265	16,276,990	98,276	650,933	134	2,175
Sonoma	17,939,972	137,556,285	2,893	11,279	43	220
Stanislaus	1,932,302	18,595,445	33,726	118,198	25	760
Sutter	1,249,923	25,162,300	61,572	343,084	11	
Tehama	1,307,218	16,416,690	32,919	219,396	10	
Trinity	2,842	57,950	30	5	1	
Tulare	7,227,491	95,037,424	1,977	59,822	26	505
Tuolumne	95,811	580,502	54	200	1	
Ventura	36,398	505,892	12,057	166,180	301	
Yolo	2,568,019	26,109,390	149,019	1,109,760	9	245
Yuba	162,751	2,652,510	3,163	19,535	6	30
Totals	144,097,670	1,979,686,525	1,166,730	6,692,513	4,226	44,955

\*For the number of grapevines and bearing trees in nuts in 1890 and 1900, see Report of 1912, pages 167-169.

TABLE XXXI—Continued.

## NUTS BY COUNTIES.\*

Number of Bearing Trees in 1910, and Production.

Counties	Walnuts		Total nuts	
	Number of trees	Pounds	Number of trees	Pounds
Alameda	3,726	46,183	25,250	210,142
Alpine			12	75
Amador	185	3,266	830	7,602
Butte	1,063	22,906	85,445	832,019
Calaveras	832	22,117	15,619	51,932
Colusa	1,306	13,463	17,409	105,782
Contra Costa	6,148	110,088	215,249	941,400
Del Norte	3		6	
El Dorado	880	10,855	1,512	27,130
Fresno	634	7,991	8,203	70,097
Glenn	220	3,617	26,336	67,767
Humboldt	498	8,220	827	8,975
Imperial	24	400	53	400
Inyo	35	940	72	2,170
Kern	127	1,565	3,819	26,615
Kings	24	1,215	1,747	38,295
Lake	564	5,232	8,920	55,198
Lassen	8	250	16	250
Los Angeles	281,837	6,138,033	359,349	6,204,703
Madera	14	560	2,797	8,535
Marin	61	385	212	1,497
Mariposa	91	2,019	262	4,270
Mendocino	360	9,990	762	33,040
Merced	633	11,538	17,845	127,357
Modoc	3	80	27	535
Mono				
Monterey	306	3,287	2,505	27,437
Napa	7,767	44,164	27,622	135,747
Nevada	1,105	13,811	2,768	32,048
Orange	276,842	7,478,955	278,879	7,492,175
Placer	535	3,276	12,122	69,065
Plumas	4		4	
Riverside	3,040	67,491	24,940	239,581
Sacramento	755	21,682	67,156	357,539
San Benito	1,369	29,800	8,333	103,822
San Bernardino	2,228	43,777	2,900	60,742
San Diego	9,159	194,829	19,651	259,730
San Francisco				
San Joaquin	2,455	6,548	99,499	554,098
San Luis Obispo	7,871	223,493	17,264	277,783
San Mateo	223	2,010	331	2,435
Santa Barbara	96,776	2,678,039	97,091	2,681,694
Santa Clara	19,070	227,955	48,398	469,926
Santa Cruz	4,015	25,880	4,757	40,640
Shasta	1,168	14,380	9,339	64,760
Sierra	24	1,260	24	1,260
Siskiyou	30	275	185	5,046
Solano	1,806	27,636	100,239	681,194
Sonoma	11,955	144,040	16,631	168,151
Stanislaus	864	10,995	34,701	134,103
Sutter	671	7,130	62,289	350,214
Tehama	1,569	13,500	34,555	237,596
Trinity	58	1,510	91	1,560
Tulare	1,942	28,612	3,945	88,939
Tuolumne	175	6,465	240	6,840
Ventura	98,622	3,665,935	110,984	3,832,116
Yolo	1,270	19,953	150,822	1,151,868
Yuba	287	4,665	3,458	24,280
Totals	853,237	21,432,266	2,034,302	28,378,115

\*For the number of grapevines and bearing trees in nuts in 1890 and 1900, see Report of 1912, pages 167-169.

TABLE XXXII.

## SMALL FRUITS BY COUNTIES.

Number of Acres in 1910, and Production.

Counties	Strawberries		Blackberries and dewberries		Total*	
	Acres	Quarts	Acres	Quarts	Acres	Quarts
Alameda	18	41,770	12	20,225	401	890,867
Alpine						1,510
Amador	6	9,259	13	18,655	29	46,124
Butte	48	54,513	57	76,793	148	207,794
Calaveras	5	11,210	14	13,366	34	37,948
Colusa	1	2,120	5	7,039	7	12,564
Contra Costa	1	2,880	3	2,774	6	13,654
Del Norte	1	1,050		300	1	1,760
El Dorado	5	8,215	11	12,480	23	31,427
Fresno	148	750,708	91	247,186	310	1,196,643
Glenn	2	2,945	4	8,980	8	15,005
Humboldt	58	152,758	4	5,757	87	219,489
Imperial			1	1,426	1	1,726
Inyo	5	5,591	8	9,835	21	18,621
Kern	2	2,112	26	24,800	34	32,087
Kings	15	53,810	13	33,260	31	94,940
Lake	6	12,227	15	15,261	25	33,910
Lassen	3	3,380	2	2,254	20	14,889
Los Angeles	1,380	5,135,203	280	1,019,735	1,975	7,837,987
Madera	2	1,750	3	1,380	7	4,270
Marin	1	1,750		380	3	5,130
Mariposa	1	1,217	2	4,470	7	8,705
Mendocino	22	35,296	14	11,900	57	69,492
Merced	5	8,377	21	25,230	34	47,293
Modoc	9	10,113	9	11,515	37	44,168
Mono		1,220		48	1	5,011
Monterey	263	2,449,084	56	268,180	407	3,663,576
Napa	22	45,316	26	18,903	59	72,503
Nevada	4	7,047	15	29,245	55	78,369
Orange	76	192,365	43	71,907	205	401,218
Placer	433	1,062,214	62	198,039	582	1,581,263
Plumas	6	6,828	1	584	13	11,881
Riverside	27	59,305	28	49,554	64	123,772
Sacramento	450	1,676,826	52	143,729	554	1,974,178
San Benito	35	34,367	1	4,310	54	68,426
San Bernardino	34	52,917	68	112,255	130	190,564
San Diego	43	275,744	22	45,635	87	369,546
San Francisco						
San Joaquin	33	93,367	31	51,650	92	226,154
San Luis Obispo	45	61,895	30	42,845	137	131,117
San Mateo	56	210,850	10	15,030	69	232,655
Santa Barbara	24	125,766	32	99,084	63	233,123
Santa Clara	460	989,600	228	304,022	1,011	1,785,865
Santa Cruz	489	1,384,784	116	163,757	744	1,707,208
Shasta	44	51,975	22	35,067	95	112,667
Sierra	2	2,623	1	964	6	5,997
Siskiyou	7	15,011	10	11,057	31	41,053
Solano	5	11,060	5	5,560	12	19,110
Sonoma	103	195,330	930	1,413,936	1,471	2,106,103
Stanislaus	95	184,399	53	84,073	161	290,431
Sutter	1	1,550	7	8,008	16	24,186
Tehama	36	57,921	7	11,163	49	83,593
Trinity	5	4,668	5	4,307	15	14,039
Tulare	19	44,078	70	87,262	119	181,574
Tuolumne	5	10,652	8	9,729	19	29,153
Ventura	14	72,350	7	18,566	31	138,600
Yolo	1	210	6	6,162	10	10,774
Yuba	4	4,750	6	8,692	19	22,408
Totals	4,585	15,694,326	2,576	4,898,524	9,687	26,824,120

\*The totals include other fruits not specified. See also pages 95 and 97.



## PART V.

## CALIFORNIA WINE INDUSTRY

**Sweet Wines and Brandy in Other States, California Vineyards, Sparkling Wines, Grape Juice, Price of Wine Grapes, Vintages 1891-1914, Imports and Exports of Wine and Brandy, California Brandies.**

The California wine industry, with its extensive vineyards of wine grapes and enormous investments of capital, has attained such proportions as to demand special notice. In sweet wines the production has more than doubled within the last ten years, and the output is much greater than that of all other states combined.\*

The State Board of Viticultural Commissioners estimates that more than half the acreage of vineyards in the State is planted to wine grapes, the area being about 170,000 acres. It also estimates the amount paid to growers by the wineries in 1913 at \$6,000,000.

**Production of Sweet Wines in the United States in 1913-1914.**

State	Gallons, 1913	Gallons, 1914
New Jersey, port.....	8,045	19,562
New York, port and sweet catawba.....	637,789	572,224
North Carolina, Scuppernong.....	92,031	47,752
Virginia, Scuppernong .....	581,675	215,550
Totals .....	1,319,540	855,088
California .....	17,927,812	17,473,353
Totals .....	19,247,352	18,328,441

The amount of brandy produced in California was 6,765,119 gallons, and in all the other states only 542,778 gallons, the total for the United States being 7,307,897 gallons.

In the production of wine previous to 1891, it is not possible to arrive at the totals for each year as given in the census reports, owing to different classification. The wines made in wineries are included in separate returns under the head of "manufactures," and the value of the product, instead of the quantity, is stated. The figures are as follows:

**Wine Made in Wineries.**

Year	Establish- ments	Capital	Cost of material	Value of product
1860 .....	11	\$173,000	\$53,030	\$160,300
1870 .....	139	658,420	203,631	602,553
1880 .....	45	639,600	292,075	622,087
1890 .....	128	3,729,413	840,222	1,738,863
1900 .....	187	4,658,625	2,526,768	3,937,871
1910 .....	181	.....	.....	8,936,848

\*For the early history of wine production in California, see Report of 1912, pages 170-172 and Report of 1913, pages 152-157.

## Great Wine Grape Vineyards.

Some of the California vineyards are now the largest and best cultivated in the world. In the southern part of the State there is the large vineyard of the Italian Vineyard Company, in San Bernardino County, comprising 3,547 acres of all the best varieties, including Alicante Bouchet, Zinfandels, Burger, Folle Blanche, and a dozen others. In central California there is the Wahtoke vineyard, near Reedley, in Fresno County, of 3,631 acres, with 2,500 acres already planted and in bearing and containing some twenty of the leading varieties; and in northern California there is the Vina vineyard, in Tehama County, with 1,500 acres, mostly in Zinfandel and Burger. These are the most important vineyards in the State.

There is no reliable data available regarding the production of the various kinds of dry wine, but since 1890 the exact figures for sweet wines and brandy have been recorded, and are here given, so that a comparison can be made. The quantity of sweet wine has increased during the last twenty years from 1,083,000 gallons in 1891 to 23,467,000 in 1912 (Aug.-Dec., 1911), which is the heaviest in the history of the industry.

Port and sherry are the two leading wines, the former leading as a rule, but in some years the output of sherry comes to the front, as in 1903 and 1912, when it was upwards of 8,000,000 gallons. In the three years 1910-1912 the output of port was upwards of 9,000,000 gallons. Muscatel and Angelica are the next favorites, followed by Malaga and Tokay.

The imports of foreign wines have remained steady during the last few years, the value being about \$10,000,000 annually.

It is acknowledged that the best wines of California and of South America are equal to those produced in Europe. California grows the principal wine grapes of France, Italy, Spain, Portugal and Germany, and the variety of types of wines produced is unequalled by any country in the world. Conditions suitable for the growth of any variety, including the American varieties of the eastern states, are found here.

Surplus table and shipping grapes are used for the manufacture of wine, but the qualities desirable in a shipping grape differ from those of a good wine grape and the product is inferior. They are more suitable for making brandy, which is their principal use. Surplus raisin grapes are used for the same purposes, but the quality is somewhat better. Large quantities of sweet wine and brandy are made from the Muscat of Alexandria and form a special type of their own.

The great bulk of all the dry and sweet wines and of brandy is made from a special wine grape which is unsuited for other purposes.

## Wine Grapes Used in California.\*

Practically all the principal wine grapes of Europe have been introduced into California and tested. About four-fifths of the wine, both dry and sweet, however, is made from about a dozen varieties, and between forty and fifty will include over 95 per cent of the wine grapes.

The Zinfandel is the typical red wine grape of California and is grown in larger quantities than any other. From it the bulk of dry and sweet red wines is made. The proportion of Zinfandel, however,

\*Professor Frederic T. Bioletti, of the University of California.

tends to diminish in newer plantings. Other red wine varieties largely planted are Carignane, Petite Sirah, Mataro, Petit Bouschet, Alicante Bouchet, Grenache, Blue Elbling and Charbono. The commonest white wine grapes are Burger, Colombar, Palomino, Green Hungarian, Feher Szagos and Muscat of Alexandria. Of table and raisin grapes, used largely for wine making, the principal are, besides the Muscat, Flame Tokay, Malaga, Sultanina (Thompson's Seedless) and Verdal.

The fine wines are made principally of Petite Sirah, Colombar and Semillon, though a large number of other fine varieties are used in varying amounts.

The yield of average vineyards varies from one or two tons per acre to eight or ten tons. This difference depends principally on the soil and climate and on the methods of the grape grower. Some varieties have the reputation of being heavy bearers and some of being light. The differences, however, are more those of proper adaptation to conditions and the use of proper viticultural methods.

#### Wine Grapes Recommended for California.

##### FOR COOLER REGIONS.

*Fine wines of Rhine types:* Franken Riesling, Johannisberger, Traminer.

*Fine wines of Sauterne type:* Semillon, Colombar, Sauvignon blanc.

*Fine wines of Chablis type:* Marsanne, Chardonay, Peverella.

*Bulk white wines:* Palomino, Green Hungarian.

*Fine wines of Medoc type:* Cabernet Sauvignon, Beelan, Blue Portuguese, Verdot, Merlot.

*Fine wines of Hermitage type:* Petite Sirah, Mondeuse, Tannat.

*Bulk red wines:* Zinfandel, Carignane.

##### FOR WARMER REGIONS.

*Fine white wines:* Franken Riesling, Johannisberger, Vernaccia Sarda, Marsanne.

*Bulk white wines:* Burger, Folle Blanche, West's White Prolific.

*Fine red wines:* Valdepeñas, St. Macaire, Lagrain, Gros Mansenc, Barbera, Refosco.

*Bulk red wines:* Zinfandel, Alicante Bouchet.

##### FOR SWEET WINES.

*Fine white:* Furmint, Beba, Boal.

*Bulk white:* Palomino, Perruno, Mourisco, Branco.

*Fine red:* Trousseau, Tinta Madeira.

*Bulk red:* Grenache, Mission, Monica, California Black Malvoisie, Tinta Amerella, Alicante Bouchet.

*Muscat:* Muscat of Alexandria Frontignan.

Some varieties, such as the Riesling, give fine wines, though of different character, wherever they are planted. Others produce a fine wine in one locality and a poor wine in another. The Cabernet Sauvignon produces a fine wine in the cooler regions and a harsh, disagreeable wine in the hot regions. The Valdepeñas produces a better wine in the hot interior than in the coast regions.

Most of the varieties recommended for bulk wines are capable of yielding fine wines under favorable conditions, when blended with a sufficient quantity of finer varieties.

The production of wine and brandy is given for the fiscal year ending June 30th, but as almost all the wine is made in the fall of the year, the vintage is really that of the previous year.

The production of sweet wines for last season (August to December, 1914) is as follows:

	Gallons
Port .....	9,238,050.98
Sherry .....	4,879,591.74
Muscat .....	1,073,391.19
Angelica .....	1,305,192.55
Madeira .....	81,636.56
Tokay .....	50,262.41
Malaga .....	75,818.60
Total .....	16,703,944.03

The production of brandy for the same period was 8,945,345 gallons, of which 4,366,066 gallons were used for fortification.

The total amount of brandy produced in the fiscal year 1914 was 6,765,119 gallons, and the quantity used for fortification 4,643,812 gallons, and the quantity of dry wines is estimated at 26,300,000 gallons.

#### Sparkling Wines.

The manufacture of sparkling wines is now engaging the attention of the wine makers in California and promises to be successful. The production of naturally fermented champagne in the bottle during the last three years has steadily increased, the total being estimated as follows:

Year	Bottles
1911 .....	580,000
1912 .....	800,000
1913 .....	1,000,000
1914 .....	1,100,000

The bottling is done in the months of June and July of the following year.

#### Grape Juice.

The manufacture of grape juice in this State continues to decrease. The best authorities place the quantity at about 50,000 to 75,000 gallons, and it is claimed that so far, there is no profit in its manufacture.

Many judges consider that some of the eastern varieties of grapes, such as the Concord, are better suited for the making of grape juice.

#### Prices of Wine Grapes.

The prices paid for grapes vary considerably, according to the varieties and districts. The average price for standard wine grapes, such as Zinfandel, in the bay counties were, in 1911. \$14 per ton, and in



1912, \$15 per ton, but for special varieties, such as Petite Sirah, Serene, Mondense, Cabernet, etc., as high as \$20 was paid.

In Fresno County, in 1911, the price paid for average sweet wine grapes (not including Muscats) was \$10 per ton, and in 1912 from \$5 to \$6 per ton.

In other parts of the San Joaquin Valley and the Sacramento Valley \$9 per ton was paid for average wine grapes in 1911, and as high as \$11 for special varieties. In 1912 standard grapes were \$6 per ton, and for special varieties, or under contract, as high as \$10 per ton. During the year 1913 the average price was \$10 per ton, and \$27.50 per ton in dry wine districts in the coast counties. In 1914 the price paid to growers ranged from \$6 a ton for culls to \$14 for prime varieties. The price paid for grapes for dry wines ranged from \$10 to \$18 per ton, according to districts; in some localities as high as \$25 per ton was paid for choice varieties.

#### California Brandy.

The following summary shows that almost all the brandy made in the United States is produced by California. In 1914 California produced 6,765,119 gallons, and all other states only 542,778 gallons.

#### Total Fruit Brandy Produced in the United States, 1891-1914.

For the fiscal year ending June 30th—		Production of fruit brandy, including apple, peach, and grape, gallons
1891	-----	1,804,712
1892	-----	3,667,465
1893	-----	2,358,548
1894	-----	2,948,159
1895	-----	1,960,176
1896	-----	3,403,852
1897	-----	1,813,427
1898	-----	2,906,198
1899	-----	3,097,769
1900	-----	3,760,487
1901	-----	4,047,602
1902	-----	4,220,400
1903	-----	6,430,673
1904	-----	5,193,262
1905	-----	5,448,584
1906	-----	4,444,072
1907	-----	6,138,304
1908	-----	6,899,823
1909	-----	6,440,857
1910	-----	7,656,433
1911	-----	7,953,131
1912	-----	9,321,823
1913	-----	8,252,874
1914	-----	7,307,897

Under the provisions of "An act to reduce revenue and equalize duties on imports, and for other purposes," approved October 1, 1890, provision was made for the fortification with grape brandy, free of tax, of pure sweet wine, and of wine intended for exportation. Since that year exact returns have been kept by the Internal Revenue Department of the quantity of the various kinds of wines produced and the amount of brandy used for fortification.

## Brandy From Other Fruits.

Brandy is also produced from other fruits, and until 1908 was shown separately from grape brandy in the internal revenue returns: since then all brandy is included under the head of "fruit brandy." The quantity, however, is not large; in 1908, the last year the varieties are shown separately, fruit brandy, other than grape brandy, was only 94,558 gallons, while grape amounted to 5,367,489 gallons.

Variety and Quantity of Fruit Brandy.

Varieties	Gallons
Prune -----	60,594
Peach -----	21,210
Pear -----	9,339
Apricot -----	2,178
Apple -----	897
Orange -----	280
Fig -----	30
Berry -----	30
Total -----	94,558

The production of brandy has also greatly increased; in 1891 the quantity amounted to 1,804,712 gallons. Considerably more than one-half of this is used for fortifying the sweet wines, the amount used for this purpose in 1914 amounting to 4,643,812 gallons of the 6,765,119 gallons produced.

## SUMMARY OF CALIFORNIA VINTAGES,\* 1890-1914.

(For the fiscal year ending June 30th.)

Year	Sweet wine, gallons	Dry wine, gallons	Total wine, gallons	Brandy used for fortifications
1890 -----			14,626,000	
1891 -----	1,083,274	18,900,000	19,983,274	193,557
1892 -----	2,746,655	12,200,000	14,946,655	695,844
1893 -----	2,652,480	22,000,000	24,652,480	617,593
1894 -----	4,724,595	9,200,000	13,924,595	1,112,794
1895 -----	4,242,600	13,700,000	17,942,600	1,018,483
1896 -----	6,084,009	10,900,000	16,984,009	1,484,887
1897 -----	4,968,339	11,400,000	16,368,339	1,174,466
1898 -----	7,024,372	24,400,000	31,424,372	1,688,949
1899 -----	7,779,031	11,200,000	18,979,031	1,860,721
1900 -----	8,433,383	15,000,000	23,433,383	2,063,033
1901 -----	9,177,560	13,000,000	22,177,560	2,220,659
1902 -----	9,301,353	33,600,000	42,901,353	2,292,721
1903 -----	16,059,747	18,500,000	34,559,747	4,011,865
1904 -----	13,571,845	16,000,000	29,571,845	3,329,804
1905 -----	13,161,198	18,000,000	31,161,198	3,260,421
1906 -----	11,502,309	29,000,000	40,502,309	2,998,998
1907 -----	15,657,572	26,800,000	42,457,572	3,962,352
1908 -----	16,491,169	27,700,000	44,191,169	4,233,977
1909 -----	14,368,025	33,900,000	48,268,025	3,678,376
1910 -----	18,086,868	27,400,000	45,486,868	4,702,863
1911 -----	18,850,167	26,000,000	44,850,167	4,951,640
1912 -----	23,467,444	25,000,000	48,467,444	6,153,131
1913 -----	17,927,812	22,000,000	39,927,812	4,671,415
1914 -----	17,473,353	26,300,000	43,773,353	4,643,812

\*The above figures for sweet wine and brandy are exact; the amount of dry wine can only be estimated, as no complete records are kept. Wines being made in the fall, the vintages belong to the previous year, thus the vintage for the year ending June 30, 1914, was mostly made from August to December, 1913.

## Total Production of Sweet Wines by Vintages—1909-1914.\*

(For the fiscal year ending June 30th.)

(Gallons.)

Varieties	1909	1910
Angelica .....	919,540	1,361,290
Lenoir .....		
Malaga .....	73,518	81,175
Moselle .....		
Muscatel .....	2,242,412	1,767,387
Madeira .....	51,716	2,785
Port .....	5,859,630	9,051,017
Sherry .....	5,189,598	5,690,080
Tokay .....	31,607	133,132
Fractional gallons .....	4	2
Totals .....	14,368,025	18,086,868

Varieties	1911	1912	1913	1914
Angelica .....	1,241,431	2,609,518	1,640,738	1,195,641
Malaga .....	223,739	327,172	184,308	288,170
Muscatel .....	1,087,411	2,247,219	2,070,827	1,512,727
Madeira .....	363,455	119,781	48,714	40,914
Port .....	9,780,864	9,522,237	8,334,993	9,160,980
Sherry .....	5,955,886	8,559,868	5,619,502	5,235,102
Sweet Catawba .....	9,497			
Tokay .....	187,882	81,645	28,725	39,816
Fractional gallons .....	2	4	5	3
Totals .....	18,850,167	23,467,444	17,927,812	17,473,353

\*For vintages, from 1891-1908, see Report for 1912, pages 181-182.

## SUMMARY OF WINES PRODUCED, BY VARIETIES, 1891-1914.

(Gallons.)

(For the fiscal year ending June 30th.)

Year	Angelica	Frontignan	Lenoir	Madeira	Malaga
1891 .....	182,208				3,248
1892 .....	379,964				62,000
1893 .....	339,590				
1894 .....	386,860				42,929
1895 .....	364,297	6,133	949		2,795
1896 .....	466,156	6,327	6,081		2,906
1897 .....	330,032	9,020		2,269	
1898 .....	748,686				11,614
1899 .....	438,419	3,048			14,267
1900 .....	870,195				975
1901 .....	548,095			901	
1902 .....	465,104				
1903 .....	887,238				
1904 .....	1,029,404				81,136
1905 .....	1,187,683				18,847
1906 .....	566,604				8,098
1907 .....	1,009,600				11,899
1908 .....	1,513,534		452	13,316	216,390
1909 .....	919,540			51,716	73,518
1910 .....	1,361,290			2,785	81,175
1911 .....	1,241,431			363,455	223,739
1912 .....	2,609,518			119,781	327,172
1913 .....	1,640,738			48,714	184,308
1914 .....	1,195,641			40,914	288,170

## SUMMARY OF SWEET WINE PRODUCED, BY VARIETIES, 1891-1914.

(Gallons.)

(For fiscal year ending June 30th.)

Year	Muscatel	Port	Sherry	Sweet Catawba	Tokay
1891	106,922	663,668	124,837		2,391
1892	145,735	1,723,744	423,383	555	5,686
1893	353,299	1,535,227	424,138	226	
1894	400,064	2,808,832	1,084,714		1,193
1895	188,437	2,309,702	1,370,284		
1896	863,227	2,613,734	2,118,942		6,634
1897	960,897	1,670,495	1,994,649		974
1898	721,556	3,158,545	2,372,197		11,772
1899	819,105	3,441,592	3,053,163		9,433
1900	868,388	3,949,631	2,697,682		46,508
1901	1,611,116	4,407,250	2,597,377		12,819
1902	1,909,485	2,854,477	4,069,538		2,749
1903	1,741,952	5,171,103	8,233,871		25,580
1904	721,033	7,630,881	4,109,075		316
1905	1,398,532	5,530,310	5,011,744		14,080
1906	933,647	5,322,203	4,648,305		23,448
1907	1,484,447	7,708,226	5,443,397		
1908	2,449,211	6,015,052	6,267,323		12,400
1909	2,242,412	5,859,630	5,189,598		31,607
1910	1,767,387	9,051,017	5,690,080		133,132
1911	1,087,411	9,780,864	5,955,886		187,882
1912	2,247,219	9,522,237	8,559,868		81,645
1913	2,070,827	8,334,993	5,619,502		28,725
1914	1,512,727	9,160,980	5,235,102		39,816

NOTE.—The wine is made in the fall of the previous year, which is the real date of the vintage, but the returns are made for the fiscal year ending June 30th.

In 1892, 5,588 gallons of Sauterne were reported, and in 1908, 3,488 gallons of Moselle, but this is probably an error, as neither can be classed as sweet wines.

## CALIFORNIA BRANDY, 1890-1914.

(For fiscal year ending June 30th.)

Year	Produced	Number of fruit distilleries		
		Used for fortification of sweet wines	Registered	Operated
1890	1,072,306			
1891	1,474,876	193,557	288	284
1892	2,197,613	695,844	298	295
1893	1,642,284	617,593	292	286
1894	2,256,607	1,112,794	272	267
1895	1,677,082	1,018,483	270	268
1896	2,066,404	1,484,887	235	229
1897	1,439,285	1,174,466	239	237
1898	2,382,241	1,688,949	267	267
1899	2,775,164	1,860,721	238	232
1900	3,060,078	2,063,033	208	194
1901	3,194,544	2,220,659	222	212
1902	3,464,391	2,292,721	213	209
1903	5,614,215	4,011,865	230	223
1904	4,451,928	3,329,804	225	216
1905	4,602,133	3,260,421	224	218
1906	3,864,080	2,998,998	224	201
1907	5,367,489	3,962,352	209	193
1908	*6,388,076	4,233,977	216	202
1909	*5,971,171	3,678,376	206	201
1910	*7,170,212	4,702,863	203	195
1911	*7,316,488	4,951,640	211	202
1912	*8,721,693	6,153,131	192	181
1913	*7,472,561	4,671,415	184	179
1914	*6,765,119	4,643,812	189	183

\*Including fruit brandy other than grape but the quantity is very small.



## IMPORTS AND EXPORTS OF WINE AND BRANDY, 1890-1914.

## Wines Imported.

Year	Champagne and other sparkling		Still wines in casks		Still wines in bottles		Total value of wines
	Doz. qts.	Value	Gallons	Value	Doz. qts.	Value	
1890	354,350	\$4,752,572	3,485,792	\$2,450,174	329,604	\$1,657,210	\$8,859,956
1891	400,084	5,615,872	3,860,503	2,641,816	348,666	1,749,372	10,007,060
1892	319,592	4,571,816	3,477,989	2,464,484	365,140	1,908,203	8,944,503
1893	374,124	5,579,054	3,525,625	2,505,024	413,860	2,121,275	10,205,353
1894	237,360	3,498,522	2,599,693	1,817,813	296,097	1,423,143	6,739,478
1895	257,757	3,807,961	2,789,153	1,945,347	296,779	1,430,229	7,183,537
1896	246,393	3,628,319	2,834,898	1,950,770	314,190	1,527,916	7,107,005
1897	228,628	3,348,004	2,997,952	2,039,250	309,281	1,475,211	6,862,465
1898	223,827	3,264,323	1,930,870	1,392,710	268,921	1,312,147	5,969,180
1899	262,371	3,668,791	2,253,226	1,573,573	274,873	1,347,842	6,590,206
1900	310,149	4,114,908	2,533,828	1,744,736	315,920	1,560,851	7,421,495
1901	311,078	4,589,494	2,785,850	1,942,322	373,832	1,687,420	8,219,236
1902	335,256	4,930,768	3,300,026	2,143,433	397,818	1,846,937	8,921,138
1903	407,944	5,861,639	3,753,211	2,292,297	440,869	2,095,360	10,249,296
1904	336,245	4,969,635	4,007,691	2,387,018	471,153	2,035,217	9,391,870
1905	371,811	5,723,764	3,973,919	2,352,485	488,773	2,165,672	10,241,921
1906	415,394	6,127,062	4,482,499	2,567,712	546,688	2,299,194	10,993,968
1907	419,403	6,228,281	5,213,458	2,966,154	636,938	2,614,346	11,808,781
1908	366,669	5,221,070	5,443,782	3,008,996	628,428	2,516,461	10,746,527
1909	436,628	6,863,785	5,747,056	2,838,232	650,861	2,574,596	12,276,613
1910	391,003	6,302,377	7,100,661	3,527,896	822,243	3,177,020	13,007,293
1911	218,495	3,566,824	4,812,787	2,638,039	596,521	2,326,750	8,531,613
1912	281,134	4,688,090	3,864,071	2,488,744	577,244	2,414,621	9,591,451
1913	280,828	4,636,191	4,417,130	2,718,045	677,111	2,724,471	10,078,707
1914	270,002	4,418,958	5,220,380	2,757,434	728,303	2,940,277	10,116,669

## Brandy Imported, 1890-1914.

(Duty, brandy and other spirits, \$2.60 per proof gallon.)

Year	Proof gallons	Value
1890	461,257	\$1,217,913
1891	443,278	1,139,315
1892	333,234	889,883
1893	326,303	918,165
1894	201,433	568,458
1895	313,327	813,882
1896	250,704	690,761
1897	337,595	911,721
1898	137,902	395,758
1899	219,968	626,875
1900	244,100	696,540
1901	290,301	843,318
1902	316,222	911,419
1903	348,878	1,000,997
1904	390,988	1,104,410
1905	403,386	1,139,129
1906	470,433	1,286,270
1907	629,333	1,687,473
1908	592,382	1,523,842
1909	764,244	1,961,170
1910	716,259	1,899,021
1911	409,242	1,018,382
1912	509,286	1,316,031
1913	610,358	1,647,277
1914	602,563	1,617,483

## Duty on Imported Wines, etc.

Wine containing more than 24 per cent of alcohol is classed as spirits and charged accordingly. Champagne and sparkling wines \$9.60 per dozen quarts, \$4.80 per dozen pints. Half pints \$2.40 per dozen. Bottles containing more than one quart to pay at the rate of \$3.00 per gallon on the excess. Still wines in casks, if containing 14 per cent or less of alcohol, 45 cents per gallon; above 14 per cent, 60 cents per gallon. In bottles, per case of one dozen quarts, or two dozen pint bottles, \$1.85 per case. Bottles containing more than the above, 6 cents per pint on the excess. Duty on brandy and other spirits, \$2.60 per proof gallon.

## Domestic Wines and Brandy, 1890-1914.

(Exported.)

Year	Casks		Bottled		Total value of wines	Brandy proof gallons	Value
	Gallons	Value	Dozen bottles	Value			
1890	393,323	\$238,580	7,281	\$32,350	\$270,930		
1891	543,292	319,085	11,409	52,392	371,477	136,529	\$111,657
1892	655,795	371,344	14,834	67,686	439,030	216,696	178,294
1893	708,558	369,893	11,128	51,654	421,547	123,518	90,731
1894	802,192	380,588	13,813	63,860	444,448	361,653	291,022
1895	1,125,297	545,708	13,919	56,202	601,910	100,719	94,924
1896	1,339,090	581,827	17,147	69,460	651,287	89,259	87,294
1897	1,389,375	629,270	16,794	69,444	698,714	11,815	12,640
1898	1,623,103	682,028	9,672	46,721	728,749	24,886	39,455
			Doz. qts.				
1899	1,498,078	624,315	10,973	52,015	676,330	20,944	29,289
1900	1,408,859	575,665	9,854	49,927	625,592	80,259	83,698
1901	1,117,858	461,560	9,901	43,013	504,573	15,323	28,176
1902	929,900	407,345	10,952	42,980	450,325	24,077	30,174
1903	678,150	296,552	5,232	24,624	315,176	18,117	19,213
1904	896,643	403,557	6,066	33,136	436,693	70,193	44,119
1905	839,386	355,215	5,800	28,242	383,457	21,171	18,217
1906	789,526	326,335	5,596	25,215	351,550	5,145	8,553
1907	560,147	251,353	4,404	20,128	271,481	14,172	22,496
1908	438,676	195,160	6,273	30,830	225,990	2,750	4,900
1909	415,891	181,516	3,839	19,902	201,418	14,718	12,262
1910	501,348	193,597	5,962	31,314	224,911		
1911*	1,394,994				518,536		
1912*	957,120				366,260		
1913†	1,075,151				418,668		
1914	941,357				373,412		

Brandy was included under "Alcohol" prior to 1891, and included in "All other spirits" after 1910.

\*Not stated in detail after 1910. The quantity includes wines both in casks and bottles.

## PART VI.

## IRRIGATION.

**Description of Irrigation Enterprises; Source of Water Supply; Cost of Irrigation; Irrigated Crops, and Orchards; Dry Farming; Irrigation Districts; Colorado River and Salton Sea; Tulare and Other Lakes; Summary of Agricultural and Irrigated Areas; Irrigation from Underground Waters; California Rivers and Creeks; Acreage of Irrigated Farms by Counties.**

**Farms and Irrigation.**

In most sections of California there is usually sufficient rainfall for the maturing of some crops, although there are other sections where no crops can be grown without irrigation. The normal annual precipitation ranges from about 2 inches in the Imperial Valley, in the southeastern part of the State, to about 60 inches along the coast in the northwestern part.

Irrigation is practiced to some extent throughout the State, but the largest part of the irrigated land lies in the southern part of the Sacramento and the San Joaquin valleys and in the northern part of the State.

In 24 of the 58 counties in the State more than half the farms are irrigated. Imperial County has the largest percentage of farms irrigated, 94.6, and Inyo County the next largest, 93.2 per cent. In both 1900 and 1910 the county for which the largest area of irrigated land was reported was Fresno, with an irrigated acreage of 402,318, compared with 283,737 in 1900. In Tulare County 265,404 acres were irrigated in 1910, and in five other counties the area irrigated exceeded 100,000 acres. The summary on page 29 shows that in 1910 existing enterprises were ready to supply water to 3,619,378 acres, or 955,274 acres more than were irrigated in 1909. The acreage included in projects exceeds the acreage irrigated in 1909 by 2,826,256 acres, which is more than twice the acreage brought under irrigation in the last decade. This acreage represents the area which will be available for the extension of irrigation in the next few years, upon the completion of projects now under way and without new undertakings.

**Description of Enterprises.**

Name	Acreage irrigated	Per cent distribution
United States Reclamation Service.....	400	*
United States Indian Service.....	3,490	0.1
Irrigation districts .....	173,793	6.5
Co-operative enterprises .....	779,020	29.2
Commercial enterprises .....	746,265	28.0
Individual and partnership enterprises.....	961,136	36.1
<b>Totals .....</b>	<b>2,664,104</b>	<b>100.0</b>

\*Less than one-tenth of one per cent.

Irrigation districts, co-operative enterprises and individual and partnership enterprises, which together supply about 72 per cent of the acreage irrigated, are all controlled by the water users. Commercial enterprises, the only other class in the State that irrigates any extensive acreage, supplies 28 per cent.

The United States Reclamation Service operates under the Federal law of June 17, 1902, providing for the construction of irrigation works with the receipts from the sale of public lands.

The United States Indian Service operates under various acts of Congress, providing for the construction by that service of works for the irrigation of land in the Indian reservations.

The Carey act, or Federal law of August 18, 1894, granted to each of the states in the arid region 1,000,000 acres of land on condition that the state provide for its irrigation.

Irrigation districts are public corporations that operate under state laws providing for their organization and management, and empowering them to issue bonds and levy and collect taxes, with the object of obtaining funds for the purchase or construction, and for the operation and maintenance of irrigation works.

*Co-operative Enterprises.* These are controlled by the water users under some organized form of co-operation. The most common form is a stock company, the stock of which is owned by the water users.

Commercial enterprises supply water to parties who own no interest in the works. Persons obtaining water from such enterprises are usually required to pay for the right to receive water and to pay, in addition, annual charges based in some instances on the acreage irrigated and in others on the quantity of water received.

Individual and partnership enterprises belong to individual farmers or to neighboring farmers, who control them without formal organization. It is not always possible to distinguish between partnership and co-operative enterprises, as the difference is slight.

#### Source of Water Supply.

As in other states, streams are the principal source of supply of water for irrigating, but in California wells supply much more land than in any other state. Much land receives water from both sources, but most of this is credited to streams.

Source	Acreage irrigated	Per cent distribution
Streams -----	2,246,722	84.3
Lakes -----	18,470	0.7
Wells -----	350,723	13.2
Springs -----	31,779	1.2
Reservoirs -----	16,410	0.6
Totals -----	2,664,104	100.0

The preceding figures show the extent to which underground water is utilized for irrigation in California. The flowing wells, of which there were 2,361, with a total capacity of 477,343 gallons per minute, irrigated 74,128 acres. The great majority of these wells are in southern California and the San Joaquin Valley, and the land thus irrigated is



situated in Kern, Kings, Los Angeles, Orange, Riverside, San Bernardino, Santa Clara, and Tulare counties. Of the 10,724 pumped wells, 5,248 were in the counties named and 4,503 in Fresno, Merced, Monterey, Sacramento, San Benito, San Diego, San Joaquin, and Ventura counties. The pumped wells in these two groups of counties irrigated 258,687 of the 276,595 acres irrigated by such wells in the entire State. Pumping from lakes and streams has also been practiced extensively in many sections of the State, 32,539 acres having been irrigated in this way in 1909.

#### The Cost of Irrigation.

The following summary shows the total cost of irrigation enterprises up to July 1, 1910, including construction of works and acquisition of rights, but not operation and maintenance, with the average cost per acre, based on the acreage the enterprises were capable of irrigating in 1910.

	1900	1910	Increase, per cent
Cost of irrigation enterprises.....	*\$19,181,610 00	\$72,580,030 00	278.3
Average per acre.....	†13 27	20 05	-----
Estimated final cost of existing enterprises .....		84,392,344 00	-----
Average per acre included in projects.....		15 37	-----

\*Exclusive of those on Indian reservations.

†Exclusive of 242 acres in Indian reservations.

The cost of irrigation systems shows the largest increase of any item, amounting to 278.3 per cent. In the average cost per acre there was also a considerable increase, compared with 1900. The large increased cost of irrigation enterprises is due in a considerable measure to the expensive equipment installed to secure a water supply and protect it from loss by seepage and evaporation, in sections where water is scarce and crop values are high. A number of large enterprises are under construction upon which considerable expenditures have been made, but which are irrigating little land as yet, making the average cost higher than the true average. The average, based on the estimated final cost and the acreage included in projects, \$15.37 per acre, probably more truly represents the average cost per acre of irrigation in California.

In the county showing the lowest average cost, Mono, where much of the irrigated land consists of flooded pastures, enterprises were capable of irrigating in 1910 at \$1.29 per acre. The highest average cost per acre, \$368.40, is in Nevada County, where the unusual cost is due to the fact that many of the ditches now used for irrigation were originally constructed at heavy expense for mining purposes.

#### Irrigated Crops.

(From the Reports of the Bureau of the Census.)

The information relating to irrigated crops is to some extent incomplete; it shows, however, the relative importance of the different irrigated crops, and is sufficiently complete to afford reliable averages of yields and for comparison with totals for the State.

## Acreage Yield.

Crop	Total for State	Irrigated		Total for State	On irrigated land
		Amount	Per cent of total		
<b>Cereals—</b>				Bushels	Bushels
Corn .....	51,935	17,802	34.3	1,273,901	491,978
Oats .....	192,158	5,903	3.1	4,143,688	205,727
Wheat .....	478,217	22,603	4.7	6,203,206	408,706
Barley .....	1,195,158	77,785	6.5	26,441,954	1,844,971
Rye .....	7,027	107	1.5	70,683	1,265
<b>Other grains and seeds—</b>					
Alfalfa seed .....	8,761	2,570	29.3	23,791	5,911
Dry edible beans .....	157,987	11,384	7.2	3,328,218	244,624
Dry peas .....	2,959	290	9.8	57,468	9,902
<b>Hay and forage—</b>				Tons	Tons
Timothy alone .....	13,725	8,026	58.5	20,061	11,236
Timothy and clover mixed .....	46,661	20,880	44.7	73,183	34,177
Clover alone .....	8,519	1,176	13.8	20,380	2,689
Alfalfa .....	484,134	366,692	75.7	1,639,707	1,280,105
Other tame or cultivated grasses .....	92,556	6,504	7.0	122,103	10,656
Wild, salt or prairie grasses .....	253,127	153,672	60.7	281,033	189,964
Grains cut green .....	1,604,745	101,187	6.3	2,019,526	146,013
Coarse forage .....	25,868	7,593	29.4	60,611	19,151
<b>Sundry crops—</b>				Bushels	Bushels
Potatoes .....	67,688	32,735	48.4	9,824,005	5,180,006
Sugar beets .....	78,671	14,657	18.6	843,269	171,494
Orchard fruits .....	*	73,491	*		
Small fruits .....	9,687	6,876	71.0		
Tropical fruits .....	*	98,969	*		
Nuts .....	*	22,429	*		
Grapes .....	*	74,984	*		

\*Agricultural returns only give number of trees, not acreage.

## Acreage of Irrigated Crops.

Of the entire acreage of the crops in the preceding table, slightly less than one-fifth is irrigated, the proportion irrigated varying widely for the different crops.

The cereals are very generally grown without irrigation, only 6.5 per cent of the total acreage of the cereal crop above given being irrigated. The hay and forage crops are more generally irrigated than the cereals, the irrigated acreage forming 26.3 per cent of the total for these crops, alfalfa being the highest, 75.7 per cent. Of the entire acreage for potatoes 48.4 per cent was irrigated, and that in small fruits 71 per cent.

Sugar beets are grown for the most part without irrigation in California, only 18.6 per cent of the total acreage of the crop being irrigated. While many of the crops irrigated are well distributed geographically, there is a tendency toward the concentration of certain crops in particular localities.

## Irrigation Acreage in Orchards.

The following summary gives the counties having the largest acreage of the principal irrigated crops, with the proportions which each contains of the total irrigated acreage of these crops in the State:

Of the orchard fruits irrigated: Fresno County has 31.9 per cent; Placer, 14.8 per cent; Tulare, 8.4 per cent; Santa Clara, 6.5 per cent.

Of small fruits: Los Angeles County, 30.4 per cent; Santa Clara, 13.9 per cent; Sacramento, 10.9 per cent; Santa Cruz, 7.2 per cent.

Tropical fruits: San Bernardino County, 25.6 per cent; Los Angeles, 24.8 per cent; Riverside, 14.2 per cent; Tulare, 11.6 per cent.

Nuts: Orange County, 46 per cent; Los Angeles, 34.7 per cent; Ventura, 12.1 per cent.

Grapes: Fresno County, 62.6 per cent; Tulare, 12.2 per cent; Kings, 6.2 per cent; Sacramento, 5.7 per cent.

Of the total irrigated acreage of fruit trees and vines not bearing in 1909 (amounting to 59,031), 36.1 per cent was in Fresno County, 14 per cent in Tulare County, 8 per cent in Orange County, and 7.2 per cent in Los Angeles County.

SUMMARY OF IRRIGATED FARMS AND IRRIGATION ENTERPRISES IN  
1900 AND 1910.

	1900	1910	Increase	Per cent
Number of farms in State.....	72,542	88,197	15,655	21.6
Number of farms irrigated.....	25,675	39,352	13,677	53.3
Acreage irrigated.....	1,446,114	2,664,104	1,217,990	84.2
Acreage enterprises were capable of irrigating in 1910.....	*	3,619,378		
Acreage included in projects.....	*	5,490,360		
Percentage of number of farms irri- gated.....	35.4	44.6	9.2	
Percentage of improved lands in farms irrigated.....	12.1	23.4	11.3	
Irrigation enterprises—				
Number of independent enterprises.....	*	13,970		
Total length of ditches (miles).....	*	21,129		
Number of main ditches.....	*	8,590		
Length of main ditches (miles).....	*	12,620		
Capacity of cubic feet per second.....	*	89,597		
Number of lateral ditches.....	*	6,143		
Length of lateral ditches (miles).....	*	8,509		
Number of reservoirs.....	*	1,583		
Capacity (acre feet).....	*	743,269		
Number of flowing wells.....	*	2,361		
Capacity, gallons per minute.....	*	477,343		
Number of pumped wells.....	*	10,724		
Capacity, gallons per minute.....	*	4,119,575		
Acreage irrigated with pumped wells.....	*	276,595		
Acreage irrigated with flowing wells.....	*	74,128		
Acres irrigated with pumped water from all sources, including lakes and streams.....	*	309,134		
Number of pumping plants.....	*	9,297		
Engine capacity, horsepower.....	*	128,143		
Pumping capacity, gallons per minute.....	*	5,276,298		
Total cost of irrigation systems.....	\$19,181,610	\$72,580,030	\$53,398,420	278.3
Average cost per acre.....	\$13.27	\$20.05	\$6.76	51.0

NOTE.—Reservoirs are those filled by collecting storm water, or from water courses that are usually dry. When reservoirs are filled from streams or wells the primary source is considered the source of supply. The "acre-foot" is the volume of water required to cover one acre to a depth of one foot or 43,560 cubic feet.

\*Not reported in 1900.

Irrigation in 1910 Compared with the Year 1900.

The increase in irrigation during the last decade has been very large. The total number of farms irrigated was 39,352, against 25,657 in 1900, an increase of 13,677, or 53.3 per cent. The per cent irrigated of the whole number of farms was 44.6, compared with 35.4 per cent in 1900, showing an increase of 9.2 per cent during the ten years.

The total acreage irrigated in 1910 was 2,664,104 acres, against 1,446,114 acres in 1900, an increase of 1,217,990 acres, or 84.2 per cent.



The total acreage which all enterprises were capable of irrigating in 1910 was 3,619,378, an excess of 955,274 acres over the area irrigated in 1909. The area included in projects either contemplated or under construction in 1910 was 5,490,360 acres. This indicates in a general way the area which will be available within the next few years for the extension of irrigation, and shows that the area irrigated in 1910 can be more than doubled without the construction of additional works.

The number of independent enterprises in 1910 was 13,970. The total length of all ditches was 21,129 miles, of which there were 8,590 main ditches, extending 12,620 miles, and 6,143 lateral ditches, with 8,509 miles. The length of main ditches in 1900 was 5,106 miles, showing an increase in the ten years of 7,493 miles, or 146.7 per cent.

The number of reservoirs reported was 1,583, having a capacity of 743,269 acre feet.

The number of wells pumped for irrigation was 10,724, with a capacity of 4,119,575 gallons per minute. The number of pumping plants was 9,297, with an engine capacity of 128,143 horsepower and a pumping capacity of 5,276,298 gallons per minute. The flowing wells numbered 2,361, with a capacity of 477,343 gallons a minute.

The total cost of irrigation systems in 1910 was \$72,580,030, against \$19,181,610 in 1900, an increase of \$53,398,420, or 278.3 per cent.

The average cost per acre was \$20.05 in 1910, against \$13.27 in 1900.

#### Dry Farming.

The United States Government is not only interested in settling its irrigated lands, but also in developing all parts of its territory, and for this reason the various bureaus of the Department of Agriculture have been studying the soils of the West and also scouring the world to find crops suited for these regions. Dry farming is meeting with a certain amount of success in various parts of the country, and the combined efforts of all of these endeavors to make fertile and productive these lands will result in an era of unprecedented prosperity for the entire West.

#### Irrigation Projects.\*

*The Orland Project.* This project is in the Sacramento Valley and includes about 14,000 acres in Glenn and Tehama counties, principally in the former.

*Yuma or Laguna Project.* This project is principally in Arizona, but will cover about 17,000 acres of the Colorado desert, in Imperial County. The Laguna dam is situated on the Colorado River, about twelve miles above Yuma, and diversions will be made to both sides. The land on the California side is included in the Yuma Indian reservations, and all but 4,000 acres, reserved for the Indians, is open to bona fide settlers. The dam was completed in April, 1909, and water is now being carried through the canals.

*Klamath Project.* This covers land in Oregon and California, and is largely a drainage proposition in California, being the reclamation of swamp land surrounding Lower Klamath Lake, and the lowering of the water level in Tule Lake, in Siskiyou and Modoc counties.

\*For details regarding the Orland Project, Yuma or Laguna Project, Klamath Project, also of the irrigation districts and private irrigation systems, the names of which follow, see Report for 1913, pages 171-175.



**Receipts from the Sale of Public Lands in California for Irrigation Work to  
June 30, 1914.**

	Value
Receipts from sale of land-----	\$5,620,943 00
Allotments to June 30, 1914-----	3,048,162 00
Net investment to June 30, 1914-----	2,424,064 00

Project	Per cent chargeable to State	Allotments to June 30, 1914	Net invest- ments to June 30, 1914
Yuma -----	17	\$1,286,320 64	\$1,160,024 95
Orland -----		918,000 00	631,218 81
Klamath -----	25	748,250 00	551,451 99
Colorado River -----	17	7,430 70	7,430 70
Colorado River basin-----	17	8,500 00	5 65
Iron Canyon -----		10,000 00	6,766 03
Owens Valley -----		12,061 92	12,061 92
Pit River -----		2,500 00	
Sacramento Valley -----		43,620 72	43,620 72
San Joaquin -----		3,531 20	3,531 20
Preliminary investigation -----		7,952 48	7,952 48
Totals -----		\$3,048,167 66	\$2,424,064 45

**Irrigation Districts.**

*Modesto District.* This district lies entirely in Stanislaus County, between the Tuolumne and Stanislaus rivers and contains 81.143 acres of valley land.

*Turlock District.* This district lies just across the Tuolumne River from the Modesto district, and extends southwest to the Merced River.

*Alta District.* This district is located in Fresno, Tulare, and Kings counties, and covers 130,000 acres, extending from the east and south bank of the Kings River to the Sierra foothills.

*Tulare District.* This district was organized in June, 1889. It obtains water from the Kaweah and St. John rivers, in Tulare County, and includes 37,400 acres, of which 12,000 were irrigated in 1909. Water rights are similar to those in the Alta district, and pumping is resorted to during the summer to augment the supply.

*South San Joaquin and Oakdale Districts.* These districts were organized in 1909. The South San Joaquin district includes about 71,000 acres on the north side of the Stanislaus River, and the Oakdale district includes 65,000 acres, lying on both sides of the river.

**Private Irrigation Systems.**

The following are a few of the most important of the very large number of private systems in various parts of the State:

*California Development Company.* This company diverts water from the west bank of the Colorado River close to the Mexican border. Its main canal passes through a portion of the Mexican territory of Lower California, where about 100,000 acres are served. It enters the State again at about sea level, and covers about 400,000 acres, mostly below sea level, in the Imperial Valley, of which upward of 225,000 acres are irrigated. The company does not own any of the land, most of which has been taken up under the Desert Land Act.

*San Diego Flume Company.* This system, which is typical of the coast region of southern California, irrigates about 7,000 acres to the north and east of the city of San Diego from the San Diego River and the storage reservoirs.

*Riverside Water Company and Gage Canal Company.* These two systems serve the valuable lands between the south bank of the Santa Ana River and the hills from the section east of Colton, through the Riverside district, in San Bernardino and Riverside counties, but are in no way connected with each other. The value of the entire system, which includes the municipal supply of Riverside, is estimated at \$2,500,000, the irrigating portion alone being valued at nearly \$1,000,000.

The Gage Canal Company diverts water from the Santa Ana River; its flow is largely augmented during the summer by numerous artesian wells and pumping plants.

*Kern County Land Company.* The Kern County Land Company is interested in numerous canal projects and corporations, taking water from both sides of Kern River, irrigating lands in what is called the Kern delta, lying south, west, and southwest of Bakersfield. Of these lands there are about 80,000 acres in alfalfa, 12,000 acres in grain, 10,000 acres in pasture, wild grass, and 15,124 acres in orchards, vines, gardens, etc.

*Kern Valley Irrigation Company.* The Kern Valley Water Company's canal, belonging to Miller & Lux, irrigates the riparian lands lying between Buena Vista Lake and Tulare Lake. About 63,000 acres of this land are in cultivation, mostly in alfalfa.

*Fresno and Consolidated Canals Company.* These two systems, although kept separate, are operated by the same people and cover practically all the irrigated lands in Fresno County, amounting to about 360,000 acres. The points of diversion for the various canals are all along the west bank of the Kings River, close to where it enters the valley.

The Consolidated includes the Fowler Switch and the Centerville and Kingsburg canals, as well as a majority of the stock of the Emigrant canal. The latter is on the lower Kings River, and diverts water from the river six miles west of Kingsburg to irrigate lands on the Laguna de Tache Rancho, which belongs largely to this company.

The Consolidated has later priorities on the river, and its flow is cut off from the middle of June to August 1st, so that its rights are not so valuable as the Fresno canal rights. An annual charge is made for the maintenance of the main canals, amounting to 62½ cents per acre under the Fresno and 75 cents per acre under the Consolidated. The lateral ditches are owned and controlled by the irrigators. No measurements are made to users, each irrigator taking what he needs in accordance with the rights held by him. Considering its area, it is the most highly developed district in the State.

*The San Joaquin and Kings River Canal and Irrigation Company.* This system diverts water from the west bank of the San Joaquin River about 1½ miles north of the town of Mendota, in Fresno County. It is the oldest large canal in the valley, having been organized in February, 1871. The area tributary to it extends for seventy miles along the west bank of the river, in Fresno, Merced, and Stanislaus counties. The

company belongs to Miller & Lux, who have riparian rights on the river, and their own lands are very largely included.

*The Crocker-Huffman Land and Water Company.* The Merced River furnishes the supply for the 220,000 acres irrigable from its canals. These lands extend from the foothills, near where the river enters the valley, to the country surrounding the city of Merced and between that city and Livingston.

*The Butte County and the Sutter County Canals.* These two canals are controlled by the same people, using the same main canal, but are separately incorporated. The Butte canal serves the area in Butte County and the Sutter canal serves that in Sutter County. This combined system covers about 80,000 acres, 30,000 in Butte and 50,000 in Sutter County, composed of lands between the Feather River, the Marysville Buttes, and the swamp lands along the Sacramento River south to where the slough which leaves the Feather River near Marysville joins the Sutter basin.

*Sacramento Valley Irrigation Company.* This is a recent enterprise, backed by large eastern financial interests, which have secured the rights of the Central Irrigation District by the purchase of all outstanding district bonds for 35 per cent of their par value. They have secured control, also, of 100,000 acres in the above district, and are carrying on extensive work in preparing for the irrigation and drainage of the 225,000 acres which will be included in their system.\*

#### Imperial Valley and the Salton Sea.

The Colorado River is the division line between California and Arizona. It empties into the Gulf of California about sixty miles below Yuma, Arizona. The Colorado has been called the Nile of America, as it is subject to a large rise annually. Its waters have turned the desert lands of Imperial Valley into fertile lands, and more will be reclaimed by the Yuma project of the United States Reclamation Service.

The Salton Sea, or sink, originally formed a part of the Colorado desert, which comprises an area of nearly 2,000 square miles. The desert comprises two fertile valleys, one in Riverside County, known as the Coachella Valley, the other as Imperial Valley, in Imperial County. Salton Sea, which partly fills the sink, lies between the two valleys. On December 31, 1908, its surface was 206 feet below mean sea level, and was nearly 45 miles long and from 9 to 15 miles wide, its maximum depth 67 feet and its area about 443 square miles.

In 1891 the Colorado overflowed into Salton Sink; in 1905 the flood repeated on a much larger scale. The old channel of the Alamo River was transformed into a deep, wide gorge, and another channel, now called New River, was formed. Practically all the water received by Salton Sea enters through Alamo and New rivers, but chiefly through the former. These rivers run through Imperial Valley and are drainage channels for waste water from irrigation systems and power plants.

#### Lakes.

There are several good sized lakes in the northeastern part of the State, namely, Lower Klamath Lake, near Brownell, which has an area of about 21,000 acres; Tule, Clear, Goose, and Upper, Middle and Lower

\*See "Irrigation in California," by F. W. Roeding, United States Department of Agriculture.



Alkali lakes. All of these are shallow and more or less alkaline. Farther south there are the Eagle and Honey lakes, the water of the latter sweet, and the former rather alkaline.

South of these is Lake Tahoe, at an elevation of 6,000 feet, with a surface area of about 250 square miles, partly in California and partly in Nevada. It has an average depth of about 1,000 feet, and is the source of the Truckee River.

Mono and Owens lakes, like many others, have no outlet, and are strongly alkaline.

Tulare Lake is a shallow body of water, about thirty miles south of Fresno and forty miles northwest of Bakersfield. In 1852-1854 the area was nearly 1,000 square miles, the lake being full, and about 35 feet deep. The flood of 1867 was the last to fill the lake to overflowing and about 1870 it began to recede, until in 1898 the lake bed became practically dry, brought about by the water being diverted for irrigation and light precipitation for a number of years. After partly refilling in 1901 it became completely dry in 1905, and in the early spring of 1906 was entirely under cultivation. On March 15, 1906, the first water reached the lake bed at the mouth of the Kings River and spread over a large area. A few days later water from Kaweah and Tule rivers reached the lake. On June 1st the water was 7 feet deep and covered about 200 square miles. On June 23d overflow water from Kern Basin cut through the sand ridge to the south and flowed into the lake. On August 4th the water reached its greatest height for the year 1906, and the lake had an area of about 300 square miles and a maximum depth of 12.7 feet. The total rise of the lake that year was 10.8 feet. In November, 1907, the lake had an area of about 274 square miles, a depth of about 12.4 feet, and an average length of 20 miles, and a width of 13.5 miles. The lake reached its greatest height in July of 1907, when it had maximum depth in the summer of nearly 14 feet. Since then it has been subsiding, and is about 11 feet deep. It is probable that the lake will continue to fluctuate very much as in the past, but whether it is to fill and subside alternately are questions of great importance.

The sudden reappearance of the lake resulted in the loss of millions of dollars, but permanent reclamation is ultimately hoped for.\*

Buena Vista Lake is the outlet of Kern River, and is connected with Tulare Lake by sloughs.

Clear Lake, in Lake County, is the only natural body of sweet water in the Coast Range worthy of consideration. It has a surface area of 64 square miles, and is the source of Cache Creek, which enters the Sacramento River near Woodland.

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\*For further valuable details, see Water Supply Paper, Part XI, by W. B. Clapp and F. F. Henshaw, United States Geological Survey.



# IRRIGATION RESOURCES OF CALIFORNIA.

(Compiled from the Report of the Conservation Commission of California.)

## Summary of Agricultural and Irrigated Areas in Northern California.

Division	Valley agricultural land, acres	Valley plains, acres	Foothill agricultural land, acres	Areas irrigated, acres
Northern coastal counties-----	503,000	-----	-----	2,290
North central mountain valleys-----	435,000	-----	-----	99,910
Northeastern plateaus and valleys-----	867,000	-----	-----	161,850
Feather River valleys-----	158,000	-----	-----	50,600
Sierra foothills-----	-----	-----	789,000	45,250
Sacramento Valley-----	2,659,000	790,000	-----	123,800
Totals-----	4,622,000	790,000	789,000	483,700

## Summary of Agricultural and Irrigated Areas in Central California.

Division	Valley agricultural land, acres	Valley plains, acres	Foothill agricultural land, acres	Area irrigated, acres
Coastal valleys-----	887,000	-----	-----	87,000
San Joaquin Valley-----	6,530,000	1,046,000	-----	1,728,975
Sierra foothills above San Joaquin Valley-----	-----	-----	730,000	10,620
Lands east of the Sierra Nevada-----	472,000	-----	-----	137,760
Totals-----	7,889,000	1,046,000	730,000	1,959,355

## Summary of Agricultural, Irrigated, and Estimated Irrigable Lands in Southern California.

Area	Agricultural land, acres	Irrigated land, acres	Estimated area that ultimately will be irri- gated, acres
Santa Barbara and Ventura counties-----	509,250	49,656	322,500
Los Angeles and San Gabriel River lands-----	441,986	167,454	381,500
Santa Ana River lands-----	876,671	213,407	279,000
San Diego County-----	363,668	19,880	87,100
Colorado Desert and River valleys-----	1,550,750	279,600	766,500
Mojave Desert-----	2,328,000	15,489	113,000
Totals-----	6,070,325	745,486	1,949,600

\*For further valuable details, see Water Supply Paper, Part XI, by W. B. Clapp and F. F. Henshaw, United States Geological Survey.

†For detailed tables containing summary of agricultural land and irrigated areas in northern and central California, see Report for 1912, pages 200-204, and for the San Joaquin Valley, page 206, and southern California, pages 209-211.

NOTE.—For a full description of irrigated areas in the State and of land that it is possible to irrigate, see Report of the Conservation Commission of California, 1912, which contains a large number of valuable maps; also "Irrigation Resources of California and Their Utilization," by Frank Adams, irrigation manager in charge of work in California. Experiment Station Bulletin 254.

## Summary of Areas Irrigated, 1909-1911, Revised to 1912.

Division	Agricultural areas in irrigation zones, acres	Areas irrigated, acres	Total areas it is estimated may ultimately be irrigated, acres	Approximate per cent of total estimated as ultimately irrigable
Northern California -----	6,200,200	487,805	3,450,000	56
Central California -----	9,665,000	1,959,355	4,300,000	44
Southern California -----	6,000,000	745,486	1,949,600	33
Totals -----	21,865,200	3,192,646	9,699,600	44

## Drainage Area in Square Miles, Annual Flow in Cubic Feet of Rivers and Creeks in Sacramento Valley, 1875-1910.

Streams and point of measurement	Number of years	Drainage area, square miles	Mean flow, cubic feet per second	Total mean annual run-off, acre feet
Sacramento River, Red Bluff -----	16	9,300	14,300	10,400,000
Sacramento River, Collinsville -----	7	26,200	35,960	26,000,000
Stony Creek, Fruto -----	10	600	802	581,000
Feather River, Oroville -----	9	3,640	8,320	6,020,000
Yuba River, near Smartsville -----	7	1,220	4,440	3,220,000
Bear River, Van Trent -----	6	263	574	416,000
Cache Creek, Yolo -----	8	1,230	960	695,000
Putah Creek, Winters -----	5	805	712	515,000
American River, Fair Oaks -----	6	1,910	5,060	3,660,000
Cosumnes River, Michigan Bar -----	3	524	571	404,000

## Drainage Area in Square Miles, Mean and Annual Flow in San Joaquin Valley.\*

Rivers, creeks, and measurement at edge of foothills*	Number of years	Drainage area, square miles	Mean flow, cubic feet	Total mean annual run-off, acre feet
San Joaquin River, and north:				
Mokelumne River -----	12	657	1,380	1,000,000
Calaveras River -----	6	491	520	377,000
Stanislaus River -----	18	1,051	1,930	1,400,000
Tuolumne River -----	21	1,635	2,870	2,080,000
Merced River -----	15	1,090	1,700	1,228,000
Bear Creek -----	6	166	65	47,000
Mariposa Creek -----	6	122	46	33,000
Chowchilla River -----	6	268	152	110,000
Fresno River -----	6	272	167	121,000
Upper San Joaquin River -----	16	1,640	2,850	2,060,000
Totals -----	11	7,392	11,680	8,456,000
South of San Joaquin River:				
Kings River -----	23	1,740	2,647	1,920,000
Kaweah River -----	13	520	736	533,000
Tule River -----	9	266	204	148,000
Kern River -----	22	2,345	1,063	770,000
Caliente Creek -----	6	423	191	138,000
Poso Creek -----	6	289	128	92,000
White Creek -----	6	90	40	29,000
Deer Creek -----	6	110	49	35,000
Totals -----	11	5,738	5,058	3,665,000
Grand totals -----	11	13,175	16,738	12,121,000

\*From records of California Engineering Department.

## Irrigation From Underground Waters in the Central Coast Valleys and the San Joaquin Valley.

## CENTRAL COAST VALLEYS IN 1909.

Counties	Areas irrigated from pumped wells, acres*	Areas irrigated from flowing wells, acres*
Alameda -----	1,125	-----
Contra Costa -----	68	-----
Monterey -----	4,428	-----
San Benito -----	1,812	847
San Francisco -----	383	-----
San Luis Obispo -----	109	18
San Mateo -----	1,057	-----
Santa Clara -----	15,947	7,415
Santa Cruz -----	247	2
Totals -----	25,176	8,282

## SAN JOAQUIN VALLEY IN 1909 AND 1912.

Counties	Area irrigated by pumping plants, 1909, acres*	Area irrigated from flowing wells, 1909, acres*	Total irrigated from ground waters, 1909, acres*	Area reported irrigated in 1912, acres†
Fresno -----	21,729	-----	21,729	27,620
Kern -----	4,290	2,097	6,387	12,240
Kings -----	1,042	11,400	12,442	30,780
Madera -----	1,663	-----	1,663	9,300
Merced -----	2,002	262	2,264	4,680
San Joaquin -----	8,642	-----	8,642	11,380
Stanislaus -----	5	-----	5	440
Tulare -----	31,286	6,556	37,942	75,320
Totals -----	70,659	20,415	91,074	171,760

\*From the Census Reports in 1909. †California Conservation Commission.

NOTE.—The increase for the three years, 1909-1912, in the San Joaquin Valley, has averaged 30 per cent per year.

## CALIFORNIA RIVERS AND CREEKS IN 1911.\*

(Compiled from the Reports of the U. S. Geological Survey.)

Rivers or creeks, and canals	Drainage area, square miles	Drainage in second-feet		Total run-off	
		Maximum	Minimum	Depth in inches on drainage area	Total in acre-feet
<i>Southern Pacific Ocean Drainage Basins.</i>					
Tia Juana River Basin—					
Cottonwood Creek (and conduit), near Jamul.....	270	97	.0		4,860
Sweetwater River, near Descanso .....	40	182	.0	2.57	5,490
San Diego River Basin—					
San Diego River (and flume) at Lakeside .....	208	660	.0	1.31	14,400
San Dieguito River Basin—					
Santa Ysabel Creek, near Escondido .....	128				3,410
San Luis Rey River, near Pala.....	318				31,000
Santa Ana River Basin—					
Santa Ana River, near Mentone and Pacific Light and Power canal .....	182	1,900	39	9.91	96,500
San Gabriel River and canal, near Azusa .....	222	9,160	32	23.33	276,000
Los Angeles River Basin—					
Arroyo Seco, near Pasadena.....	16.4				3,250
Santa Ynez River Basin—					
Santa Ynez River, near Santa Barbara .....	207				51,500
Santa Ynez River, near Lompoc .....	725	20,400	30	13.86	537,000
Salinas River Basin—					
Arroyo Seco, near Soledad.....	215	13,300	11	25.51	292,000
<i>San Francisco Bay Drainage Basins.</i>					
San Joaquin River Basin—					
San Joaquin River, near Friant (formerly Pollasky)....	1,640	38,800	297	40.81	3,570,000
Kern River (and power canal) at Isabella .....	1,220	5,750	245	13.02	846,000
Kern River, near Bakersfield.....	2,345	4,623	281	8.10	1,010,000
Tule River, near Porterville.....	266	2,780	14	8.58	122,000
Kaweah River, near Three Rivers .....	520	6,610	62	19.69	546,000
Kings River, near Sanger.....	1,740	20,500	270	30.58	2,840,000
Merced River, near Merced Falls .....	1,090	37,200	100	36.32	2,110,000
Tuolumne River, near Lagrange (and three canals).....	1,500	52,600	16		3,380,000
Modesto Canal, near Lagrange .....		618	.0		184,000
Turlock Canal, near Lagrange .....		1,030	.0		302,000
Lagrange Water and Power Co.'s canal, near Lagrange.....		66	.0		43,400
Stanislaus River, Stanislaus Water Co.'s canal and shell ditch at Knight's ferry.....	935	36,900	182	46.58	2,320,000
Mokelumne River, near Clements .....	642	16,700	75	44.29	1,520,000
Cosumnes River at Michigan Bar .....	524	22,400	24	31.24	874,000
Sacramento River Basin—					
Sacramento River at Antler.....	461	14,000	245	39.84	979,000
Sacramento River, near Red Bluff (including Goose Lake Basin) .....	10,400	130,000	5,110	17.27	9,580,000



## California Rivers and Creeks—Continued.

Rivers or creeks, and canals	Drainage area, square miles	Drainage in second-feet		Total run-off	
		Maximum	Minimum	Depth in inches on drainage area	Total in acre-feet
<i>San Francisco Bay Drainage Basins—Continued.</i>					
Pit River, near Ydaltom (includes Goose Lake drainage basin, 1,090 square miles)-----	6,350	20,600	3,080	11.91	4,040,000
McCloud River at Baird-----	665	12,600	1,240	46.45	1,650,000
North Fork of Cottonwood Creek at Ono-----	52	2,460	5	33.21	92,100
Stony Creek, near Fruto-----	601	15,400	15	16.20	519,000
Little Stony Creek, near Lodoga -----	102	4,980	2	17.41	94,800
Feather River at Oroville-----	3,640	75,400	1,060	25.27	6,850,000
Yuba River, near Smartsville--	1,220	39,000	410	53.09	3,460,000
North Fork of Yuba River at Goodyear Bar -----	214	4,570	120	63.74	727,000
North Fork of North Fork of Yuba River at Downieville---	71.2	2,290	42	71.10	270,000
Rock Creek at Goodyear Bar---	10.8	545	.5	59.40	34,200
Goodyear Creek at Goodyear Bar -----	12.2	1,180	3	106.95	69,600
Bear River at Van Trent-----	263	22,200	23	36.43	510,000
American River at Fair Oaks--	1,910	69,100	-----	53.01	5,400,000
Rubicon River, near Quintette-	198	3,000	5	37.66	398,000
Little South Fork of Rubicon River at mouth, near Quintette (1909-1911)-----	57.8	616	2	33.72	104,000
Cache Creek at Lower Lake---	500	1,410	3	9.47	252,000
Cache Creek at Yolo-----	1,230	18,400	.0	7.573	496,000
<i>Northern Pacific Ocean Drainage Basins.*</i>					

\*This includes the Russian River basin, Mattole Creek basin, Eel River basin, Yager Creek, Van Duzen River, Mad River basin, and Redwood Creek basin, but the records available are not sufficient to enable these details to be given.

In addition to these there are a large number of other rivers and streams, the details of which are not so complete as the above. See Water Supply Paper 311, U. S. Geological Survey, 1912, and Water Supply Paper 300, 1913.

NOTE.—There are four drainage areas in California: The South Pacific Coast area—Tia Juana River, Sweetwater River, San Diego River, San Dieguito River, San Luis Rey River, Santa Ana River, San Gabriel River, Malibu Creek, Santa Ynez River, Santa Maria River, Salinas River; North Pacific Coast area—Russian River, Eel River, Mad River, Klamath River (includes Trinity and Scott rivers); Big Basin area—Susan River, Willow Creek, Truckee River, Owens River; Great Valley area—Sacramento Valley, San Joaquin Valley, San Joaquin River basin, Tulare Lake basin, Kern River basin.

TABLE XXXIII.

## Irrigated Farms—Acreage and Cost, 1910.

(Compiled from the Reports of the Bureau of the Census.)

Counties	Number of farms irrigated	Acreage irrigated	Acreage capable of irrigation, 1910	Acreage capable of irrigation in projects	Cost of enterprises to July 1, 1910	Average cost per acre capable irrigation, 1910
Alameda -----	50	1,859	1,872	2,605	\$57,156	\$30 53
Alpine -----	32	3,349	3,399	3,435	7,493	2 20
Amador -----	73	826	3,973	4,139	265,608	66 85
Butte -----	556	28,754	115,075	233,500	1,231,894	10 71
Calaveras -----	154	1,275	3,161	3,919	121,033	38 29
Colusa -----	112	4,276	16,541	18,783	76,112	4 60
Contra Costa -----	78	26,856	32,562	32,640	90,503	2 78
Del Norte -----						
El Dorado -----	244	5,122	5,501	20,264	346,939	63 07
Fresno -----	5,310	402,318	560,326	633,652	1,898,460	3 39
Glenn -----	196	5,661	16,804	220,664	1,519,561	90 43
Humboldt -----	33	208	333	966	29,027	87 17
Imperial -----	1,250	190,711	242,000	375,000	4,955,272	20 48
Inyo -----	408	65,163	71,815	92,319	962,698	13 41
Kern -----	876	190,034	217,418	402,806	1,788,635	8 23
Kings -----	1,126	190,949	289,523	310,523	687,381	2 37
Lake -----	43	582	828	1,268	12,124	14 64
Lassen -----	355	77,079	89,815	149,530	884,965	9 85
Los Angeles -----	4,669	145,586	183,506	241,794	7,817,023	42 60
Madera -----	158	38,705	51,230	82,321	512,098	10 03
Marin -----	6	67	71	71	3,380	47 61
Mariposa -----	56	376	546	767	13,440	24 62
Mendocino -----	39	371	590	1,365	30,297	51 35
Merced -----	1,417	151,998	248,670	281,719	3,748,211	15 07
Modoc -----	437	82,075	89,476	124,166	301,040	3 36
Mono -----	76	49,027	50,007	84,973	64,282	1 29
Monterey -----	258	15,056	27,176	29,914	495,916	18 25
Napa -----	36	1,191	2,035	2,443	53,948	26 51
Nevada -----	300	3,839	4,259	5,267	1,569,028	368 40
Orange -----	2,215	55,056	63,486	71,444	1,948,246	30 69
Placer -----	618	16,845	23,365	61,751	2,798,740	119 78
Plumas -----	151	36,602	37,529	37,901	107,118	2 85
Riverside -----	2,174	71,436	103,233	210,452	5,648,469	54 72
Sacramento -----	1,053	53,683	69,970	74,588	1,452,471	20 76
San Benito -----	240	7,186	13,790	20,067	177,924	12 90
San Bernardino -----	2,463	70,278	86,107	152,415	9,416,960	109 36
San Diego -----	890	24,944	31,205	45,535	3,753,127	120 27
San Francisco -----	25	383	383	383	21,975	57 38
San Joaquin -----	1,452	59,811	77,083	173,563	1,689,720	21 92
San Luis Obispo -----	91	1,687	2,416	2,539	32,311	13 37
San Mateo -----	75	3,648	3,653	3,983	90,921	24 89
Santa Barbara -----	137	12,012	13,572	13,603	307,186	27 28
Santa Clara -----	1,101	37,637	50,939	60,140	1,337,216	26 25
Santa Cruz -----	106	1,201	1,313	2,232	76,621	58 36
Shasta -----	639	33,004	36,564	72,653	430,766	11 78
Sierra -----	94	17,504	17,505	18,249	69,650	3 98
Siskiyou -----	636	60,301	66,866	79,161	370,627	5 54
Solano -----	150	3,610	7,160	8,192	135,532	18 93
Sonoma -----	38	631	761	951	13,801	18 14
Stanislaus -----	1,911	84,015	141,785	340,914	4,051,870	28 53
Sutter -----	39	1,173	1,361	1,959	18,800	13 81
Tehama -----	366	14,281	23,167	36,020	263,055	11 35
Trinity -----	201	6,324	7,127	9,513	173,414	24 33
Tulare -----	3,048	265,404	337,938	466,735	5,634,379	16 67
Tuolumne -----	157	2,035	2,083	5,958	180,474	84 64
Ventura -----	489	25,273	49,407	56,357	2,262,205	45 79
Yolo -----	333	11,754	14,697	55,967	311,660	21 21
Yuba -----	112	3,073	6,401	46,322	198,268	30 97
Totals -----	39,352	2,664,104	3,619,378	5,490,360	\$72,580,030	av. \$20 05

TABLE XXXIV

Irrigated Farms—Main Ditches, Laterals, Flowing Wells and Pumped Wells, 1910.

Counties	Main ditches		Laterals		Wells	
	Number	Length, miles	Number	Length, miles	Number of flowing wells	Number of pumped wells
Alameda	49	21				56
Alpine	25	34	3	1		
Amador	55	185	12	56		
Butte	135	270	145	170		46
Calaveras	148	124	32	31	6	7
Colusa	38	44	10	7		3
Contra Costa	176	172			1	26
Del Norte						
El Dorado	56	235	25	55		
Fresno	254	831	688	1,354	3	855
Glenn	50	136	554	1,073		105
Humboldt	33	26	4	2		2
Imperial	12	117	179	890		
Inyo	184	396	326	168	10	1
Kern	178	441	118	257	25	140
Kings	27	137	51	159	75	20
Lake	44	26	21	2	1	3
Lassen	295	368	263	116		
Los Angeles	601	800	494	500	376	1,673
Madera	34	79	30	294		33
Marin	5	5				1
Mariposa	49	21				2
Mendocino	33	19	8	6		6
Merced	45	261	353	352	29	78
Modoc	446	637	490	175	45	2
Mono	85	172	101	65		
Monterey	106	223	23	32		102
Napa	26	8	3	3		2
Nevada	110	236	46	32		5
Orange	309	180	115	246	588	580
Placer	35	194	46	108		2
Plumas	147	201	62	16	3	
Riverside	301	500	262	288	553	792
Sacramento	213	238	5	8		1,168
San Benito	64	61	12	33		87
San Bernardino	291	466	237	283	79	449
San Diego	288	259	244	140		438
San Francisco	24	7				39
San Joaquin	298	308	49	192		1,618
San Luis Obispo	51	42	5	3	4	12
San Mateo	57	58				40
Santa Barbara	76	75	4	5	7	113
Santa Clara	458	228	39	27	438	800
Santa Cruz	81	41			2	58
Shasta	446	678	130	81	2	34
Sierra	119	150	4	1		
Siskiyou	595	688	172	41		3
Solano	20	22				125
Sonoma	32	21				11
Stanislaus	23	153	34	274		3
Sutter	13	6				18
Tehama	136	164	41	40	1	141
Trinity	208	228	41	13		1
Tulare	752	1,033	577	629	79	794
Tuolumne	62	153	11	24	2	4
Ventura	148	177	53	87	32	157
Yolo	8	87	8	83		58
Yuba	36	128	13	87		11
Totals	8,590	12,620	6,143	8,590	2,361	10,724

## PART VII.

## PETROLEUM, NATURAL GAS, MINERALS AND MINERAL SPRINGS.

**Petroleum by Counties and Fields. Production 1890-1914. Production in Other States. World's Output. Imports and Exports. Natural Gas. Minerals. Mineral Springs.**

## PRODUCTION OF PRINCIPAL MINERALS—1890-1913.

Value of Principal Minerals, Value by Counties, Mineral Springs in California.

## PETROLEUM.\*

The existence of petroleum in California has long been known. The native Indians used it in the form of asphaltum for various purposes, and it was utilized by the Catholic fathers for roofing their missions and other buildings. For nearly half a century Russia was the largest producer of petroleum in the world, but now occupies the second place, the first being held by California.

## Duration of Oil Fields.

The National Conservation Committee in 1908 estimated the petroleum area in California as 850 square miles, and the natural gas area as 310 square miles.

A vast system of pipe lines has been constructed from the various fields to the coast. In 1913 there were 27 pipe lines and branches in operation. The total pipe-line carrying capacity at the end of 1913 was as follows:

	Barrels
Daily capacity of San Joaquin Valley.....	191,000
Daily capacity of Santa Maria system.....	100,000
Daily capacity of Santa Clara Valley system to Ventura.....	3,500
Daily capacity of pipe lines from Los Angeles and Puente Hills districts to Los Angeles city and harbor.....	106,800
Daily carrying capacity of all lines in California.....	401,300

## Petroleum Reserves in California.

Two reserves of public lands have been established to assure the Navy a supply of oil in case of need. These reserves are in the Elk Hills and the Buena Vista Hills, Kern County. The public lands within these areas have been withdrawn from all forms of entry during the last three years, and in 1912 a special reservation for naval purposes was made.

## Exports of Petroleum From the United States.

The quantity of oil exported from the United States is enormous, and has increased from 967,262,000 gallons in 1900 to 1,989,772,000 in 1913, and the value has increased during this period from \$68,247,000 to \$137,237,000.

\*For the early development of California oil fields, see Report for 1913, pages 176-177.



**Production and Value of Petroleum in California in 1911 and 1912, by Districts and Counties, in Barrels.\***

District and county	1912			1913		
	Quantity	Value	Price per barrel	Quantity	Value	Price per barrel
<b>Coastal and southern:</b>						
Los Angeles County—						
Los Angeles city-----	344,789	\$211,896	\$0.615	320,804	\$176,398	\$0.550
Newhall -----						
Puente -----						
Salt Lake-Sherman -----						
Whittier -----						
Orange County—						
Fullerton -----	116,685,230	110,186,018	.615	19,777,885	11,027,878	.557
Ventura County—						
Santa Paula -----						
Santa Barbara County—						
Lompoc -----						
Santa Maria -----						
Summerland -----	65,376	44,295	.677	66,000	44,150	.669
San Luis Obispo County-----	20,123	11,977	.595	42,216	25,368	.601
Santa Clara County-----						
<b>San Joaquin Valley:</b>						
Fresno County—						
Coalinga -----	19,911,820	8,768,303	.441	19,302,654	8,507,714	.442
<b>Kern County—</b>						
Lost Hills -----	1,367,359	652,927	.477	3,440,595	2,209,909	.642
Kern River -----	12,558,439	5,399,914	.422	9,885,380	3,917,273	.396
McKittrick -----	5,881,996	2,350,056	.399	6,391,716	2,485,492	.389
Midway -----	23,928,368	9,713,362	.405	30,000,336	14,075,950	.469
Sunset -----	6,509,093	2,285,713	.351	8,560,939	3,238,268	.378
<b>Totals -----</b>	<b>50,245,255</b>	<b>20,402,012</b>	<b>.406</b>	<b>58,278,966</b>	<b>\$25,929,892</b>	<b>.445</b>
<b>Grand totals -----</b>	<b>87,272,593</b>	<b>39,624,501</b>	<b>.454</b>	<b>97,788,525</b>	<b>\$45,709,400</b>	<b>.467</b>

\*Includes small quantity from Alaska.

\*From Reports of the U. S. Geological Survey, 1913.

The following table shows the production of petroleum in California, by counties, from 1904 to 1913, inclusive:

**Production of Petroleum in California, 1904-1913, by Counties, in Barrels.**

Year	Fresno	Kern	Los Angeles	Orange	Santa Barbara	Ventura	San Mateo	Santa Clara	Totals
1904 ---	5,114,958	19,608,045	2,102,892	1,473,335	789,006	517,770	1,500	41,928	29,649,434
1905 ---	10,967,015	14,487,967	3,469,433	1,429,688	2,684,837	337,970	50,563		33,427,473
1906 ---	7,991,039	14,520,854	3,449,119	2,032,637	4,774,361	299,124	131,464		33,098,598
1907 ---	8,871,723	15,652,156	3,477,235	2,604,982	8,708,077	357,094	177,108		39,748,375
1908 ---	10,386,168	18,132,893	4,692,495	3,358,714	7,816,682	379,044	183,741		44,854,737
1909 ---	14,795,459	23,831,768		16,774,195			170,179		55,471,601
1910 ---	18,387,750	37,896,727		16,665,678			260,405		73,010,560
1911 ---	18,483,751	45,921,712		16,708,466			220,462		81,134,391
1912 ---	19,911,820	50,245,255		17,095,395			220,123		87,272,593
1913 ---	19,302,654	58,278,966					242,216		97,788,525

<sup>1</sup>Includes oil produced in San Luis Obispo County.

<sup>2</sup>Production of Santa Clara and San Luis Obispo counties.

<sup>3</sup>Includes small quantity from Alaska.

**Production of Petroleum in California in 1911 and 1912, by Districts and Counties,  
With Increase or Decrease and Percentage Thereof, in Barrels.\***

District and county	1912	1913	Increase	Decrease	Percentage	
					Increase	Decrease
Coastal and southern:						
Los Angeles County—						
Los Angeles city-----	344,789	320,804		23,985		7.48
Newhall-----						
Puente-----						
Salt Lake-Sherman-----						
Whittier-----						
Orange County—						
Fullerton-----	116,685,230	19,777,885	3,192,655		19.67	
Ventura County—						
Santa Paula-----						
Santa Barbara County—						
Lompoc-----						
Santa Maria-----						
Summerland-----	65,376	66,000	624		.95	
San Luis Obispo County-----	20,123	42,216	22,093		109.79	
Santa Clara County-----						
San Joaquin Valley:						
Fresno County—						
Coalinga-----	19,911,820	19,302,654		609,166		3.06
Kern County—						
Lost Hills-----	1,267,359	3,440,595	2,073,236		151.62	
Kern River-----	12,568,439	9,885,380		2,673,059		21.28
McKittrick-----	5,881,996	6,391,716	509,720		8.66	
Midway-----	23,928,368	30,000,336	6,071,968		25.38	
Sunset-----	6,509,093	8,560,939	2,051,846		31.52	
Totals-----	50,245,255	58,278,966	8,033,711		15.99	
Grand totals-----	87,272,593	97,788,525	10,515,932		12.05	

\*Includes small quantity from Alaska.

\*From the Report of the U. S. Geological Survey, 1913.

**Production, Value, and Average Price Per Barrel of Petroleum in California,  
1904-1913, by Districts, in Barrels.**

Year	Coastal and southern			San Joaquin Valley			Totals		
	Quantity	Value	Average price per barrel	Quantity	Value	Average price per barrel	Quantity	Value	Average price per barrel
1904 ---	24,723,003	\$4,952,255	\$0.200	4,926,431	\$3,313,179	\$0.672	29,647,434	\$8,265,434	\$0.279
1905 ---	25,454,982	5,351,572	.210	7,972,491	2,850,274	.357	33,427,473	8,201,846	.245
1906 ---	22,511,893	5,191,060	.231	10,586,705	4,362,370	.412	33,098,598	9,553,430	.289
1907 ---	24,523,879	7,393,036	.301	15,224,496	7,306,920	.479	39,748,375	14,699,956	.370
1908 ---	16,335,676	9,296,743	.569	28,519,061	14,136,759	.495	44,854,737	23,433,502	.523
1909 ---	16,844,374	9,737,616	.578	38,627,227	21,019,097	.544	55,471,601	30,756,713	.554
1910 ---	16,726,083	10,532,080	.629	56,284,477	25,217,393	.448	73,010,560	35,749,473	.490
1911 ---	16,728,928	10,607,280	.604	64,405,463	28,111,800	.436	81,134,391	38,719,080	.477
1912 ---	17,115,518	10,454,186	.615	70,157,075	29,170,315	.416	87,272,593	39,624,501	.454
1913 ---	20,206,905	11,293,794	.557	77,581,620	34,435,606	.444	97,788,525	45,709,400	.467

\*Includes small quantity from Alaska.

## Estimated Monthly Production, 1913.

	Barrels
January .....	7,566,789
February .....	7,206,198
March .....	7,986,407
April .....	7,927,041
May .....	8,049,715
June .....	8,080,111
July .....	8,427,081
August .....	8,812,793
September .....	8,655,341
October .....	8,236,649
November .....	8,367,151
December .....	8,491,438
Total .....	97,756,714

Number of Wells Producing and Drilling, in 1914.  
(From Reports of the Independent Oil Producers Agency.)

Month	Com- pleted number	Producing		Drilling		Rigs up	Aban- doned
		Active	Idle	Active	Idle		
January .....	31	5,781	1,508	263	414	15	4
February .....	44	5,787	1,525	241	422	17	23
March .....	34	5,802	1,529	234	417	35	12
April .....	33	5,847	1,512	279	402	28	17
May .....	63	5,879	1,494	255	403	26	19
June .....	45	5,954	1,487	239	405	21	11
July .....	38	5,988	1,488	239	416	17	4
August .....	29	5,985	1,530	226	415	19	13
September .....	30	5,829	1,713	198	431	6	9
October .....	32	5,817	1,744	176	446	11	11
November .....	23	5,826	1,765	161	438	17	6
December .....	36	5,909	1,697	147	434	12	5
Total, 1914 .....	438						
Total, 1913 .....	627						
Monthly av., 1914 .....	37	5,867	1,583	222	420	19	11
Monthly av., 1913 .....	52	5,880	1,154	349	392	35	16

Estimated Production, by Fields, in 1914.  
(From Reports of the Independent Oil Producers Agency.)

District	1913	1914	Difference	
Kern River .....	10,449,509	7,227,422	Decrease,	3,222,087
McKittrick .....	4,520,549	3,871,352	Decrease,	649,197
Midway-Sunset .....	39,277,370	49,408,493	Increase,	10,131,123
Lost Hills-Belridge .....	5,272,630	4,825,366	Decrease,	447,264
Coalinga .....	18,696,110	15,952,190	Decrease,	2,743,920
Lompoc-Santa Maria .....	4,843,683	4,266,387	Decrease,	577,296
Ventura County-Newhall .....	1,009,633	943,929	Decrease,	65,704
Los Angeles-Salt Lake .....	2,942,684	2,456,937	Decrease,	485,747
Whittier-Fullerton .....	10,685,146	13,860,431	Increase,	3,175,285
Summerland .....	59,400	59,400		
Total, 1914 .....	97,756,714	102,871,907	Increase,	5,115,193
Oil shut in .....	1,530,000	6,755,930	Increase,	5,225,930
Potential .....	99,286,714	109,627,837	Increase,	10,341,123

NOTE.—The greater proportion of the oil shut in is recorded against Kern River and Coalinga in relatively equal amounts.

## SUMMARY.

## Production of Petroleum in California, 1890-1914.

Year	Barrels of 42 gallons	Value
1890	307,360	\$884,200
1891	323,600	401,264
1892	385,049	561,333
1893	470,179	608,092
1894	783,078	1,064,521
1895	1,245,339	1,000,235
1896	1,257,780	1,180,793
1897	1,911,569	1,918,269
1898	2,249,088	2,376,420
1899	2,677,875	2,660,793
1900	4,329,950	4,152,928
1901	7,710,315	2,961,102
1902	14,356,910	4,692,189
1903	24,340,839	7,313,271
1904	29,736,003	8,317,809
1905	34,275,701	9,007,820
1906	32,624,000	9,238,020
1907	40,311,171	16,783,943
1908	48,306,910	26,566,181
1909	58,191,723	32,398,187
1910	73,010,560	35,749,473
1911	78,195,139	40,552,088
1912	90,073,202	43,000,000
1913	97,756,714	46,000,000
1914 (estimated)	102,871,907	47,487,109

The estimates of the output do not always agree, as some authorities include the quantity used in the field, which amounts to about 5,000,000 gallons annually.

Of the fourteen states now producing petroleum, the date of first production was as follows:

State	Year	Barrels
Pennsylvania and New York	1859	2,000
California	1876	12,000
West Virginia	1876	120,000
Ohio	1876	31,763
Kentucky and Tennessee	1883	4,755
Colorado	1887	76,295
Indiana	1889	33,375
Illinois	1889	1,460
Kansas	1889	500
Texas	1889	48
Missouri	1889	20
Oklahoma	1891	30
Wyoming	1894	2,369
Louisiana	1902	548,617



## Rank of Producing State With Quantity of Petroleum Produced in 1913.\*

State	1913		
	Rank	Quantity	Percentage
California -----	1	97,788,525	39.356
Oklahoma -----	2	63,579,384	25.59
Illinois -----	3	23,893,899	9.62
Texas -----	4	15,009,478	6.04
Louisiana -----	5	12,498,828	5.03
West Virginia -----	6	11,567,299	4.66
Ohio -----	7	8,781,468	3.53
Pennsylvania -----	8	7,963,282	3.20
Wyoming -----	9	2,406,522	.97
Kansas -----	10	2,375,029	.96
Indiana -----	11	956,095	.39
New York -----	12	902,211	.36
Kentucky -----	13	524,568	.21
Colorado -----	14	188,799	.08
Alaska -----	15	10,843	.004
New Mexico -----	16		
Missouri -----	17		
Michigan -----	18		
Totals -----		248,446,230	100.000

## Rank of Producing State With Value of Petroleum Produced in 1913.\*

State	1913		
	Rank	Value	Percentage
Oklahoma -----	1	\$59,581,948	25.13
California -----	2	45,709,400	19.28
Illinois -----	3	30,971,910	13.06
West Virginia -----	4	28,828,814	12.16
Pennsylvania -----	5	19,805,452	8.35
Ohio -----	6	17,538,452	7.40
Texas -----	7	14,675,593	6.19
Louisiana -----	8	12,255,931	5.17
Kansas -----	9	2,248,283	.95
New York -----	10	2,169,357	.91
Indiana -----	11	1,279,226	.54
Wyoming -----	12	1,187,232	.50
Kentucky -----	13	675,748	.28
Colorado -----	14	174,779	.07
Alaska -----	15	19,263	.01
New Mexico -----	16		
Missouri -----	17		
Michigan -----	18		
Totals -----		\$237,121,388	100.00

\*From the Report of the U. S. Geological Survey, 1913.

**World's Production of Crude Petroleum in 1913, and in 1857-1913 by Countries, in Barrels, and Metric Tons.\***

Country	Production, 1913			Total production, 1857-1913		
	Barrels	Metric tons	Percent- age of total	Barrels	Metric tons	Percent- age of total
United States -----	248,446,230	33,126,164	65.12	3,069,694,605	409,292,614	59.16
Russia -----	60,935,482	8,124,731	15.97	1,553,314,449	207,108,593	29.93
Mexico -----	25,696,291	3,426,172	6.74	68,965,294	9,195,373	1.33
Roumania -----	13,554,768	1,885,225	3.53	105,155,895	14,020,786	2.03
Dutch East Indies -----	11,966,857	1,534,223	3.14	125,573,184	16,743,091	2.42
Galicia -----	7,818,130	1,087,286	2.05	126,840,251	16,912,033	2.44
India -----	†7,560,000	1,000,000	1.98	65,549,770	8,739,969	1.26
Japan -----	1,942,009	258,934	.51	24,312,780	3,241,704	.47
Peru -----	1,857,355	247,647	.49	12,113,264	1,615,102	.23
Germany -----	†995,764	132,769	.27	11,969,805	1,595,974	.23
Canada -----	228,080	30,410	.06	23,278,805	3,103,841	.45
Italy -----	†50,334	7,000	.01	765,759	102,101	.02
Other countries -----	517,616	69,015	.13	1,493,616	199,149	.03
Totals -----	381,508,916	50,929,576	100.00	5,189,027,477	691,870,330	100.00

\*From the Report of the U. S. Geological Survey, 1913.

†Estimated.

**Imports of Petroleum in 1900-1914.**

Year	Free gallons	Value	Dutiable gallons	Value
1900 -----	2,354,720	\$217,405	19,509	\$3,042
1910 -----	13,693,228	609,400	*2,156	644
1911 -----	38,775,884	2,143,661	-----	-----
1912 -----	160,502,114	3,654,453	-----	-----
1913 -----	529,737,973	9,216,980	-----	-----
1914 -----	791,137,399	13,665,940	-----	-----

\*From July 1st to August 5th, all mineral oils became free on August 6, 1909. Note the enormous increase of 369,235,859 gallons in 1913, after being placed on the free list.

**IMPORTS AND EXPORTS OF PETROLEUM IN 1913-1914.**

**Imports.**

	1913		1914	
	Gallons	Value	Gallons	Value
Mineral, crude -----	510,660,641	\$7,437,227	773,052,480	\$11,776,737
Benzine, gasoline, and naphtha -----	15,330,733	1,266,807	16,139,912	1,400,740
All others -----	3,746,599	512,946	1,945,007	488,463
Totals -----	529,737,973	\$9,216,980	791,137,399	\$13,665,940

## Exports of Domestic Petroleum.

	Gallons	Value
1913—		
Mineral, crude, including all natural oils, without regard to gravity-----	195,642,935	\$7,570,767
Refined or manufactured—		
Naphtha and all lighter products of distillation:		
Illuminating oil -----	1,048,894,297	66,189,265
Gasoline -----	81,698,917	10,831,490
All other illuminating oil -----	101,821,572	14,269,878
Lubricating and heavy paraffin oil -----	213,671,499	29,574,410
Gas oil and fuel oil -----	320,529,925	8,305,715
All other -----	27,513,568	496,237
Totals -----	1,794,129,778	\$129,666,995
1914—		
Mineral, crude, including all natural oils, without regard to gravity-----	146,477,342	\$6,812,672
Refined or manufactured—		
Illuminating oil -----	1,157,283,310	74,500,162
Lubricating and heavy paraffin oil -----	196,884,696	27,852,959
Naphthas and all lighter products of distillation:		
Gasoline -----	151,611,537	21,699,475
All other -----	40,840,730	5,653,210
Residuum, tar, and all from which the light bodies have been distilled:		
Gas oil and fuel oil -----	475,143,205	13,747,863
All others -----	113,370,245	1,907,715
Totals -----	2,135,133,723	\$145,361,384

It may be noted that although the production of petroleum in this country has developed into such huge quantities, the imports are quite considerable and increasing.

## NATURAL GAS AND GASOLINE.

Since 1889, when natural gas was first produced and used in California, the natural gas industry has become of great importance, and to the United States belongs the credit of making natural gas a commercial product.

Since the discovery of gas in the Buena Vista Hills, near Taft, in Kern County, the natural gas industry of California has continued to improve.

In 1913 the pipe line from the midway field to Southern California was completed at a great cost, and natural gas was introduced into Los Angeles and other towns and cities in the adjacent territory.

It is estimated that 11,034,597,000 cubic feet of gas, valued at \$1,883,450, or 17.07 cents per thousand cubic feet, was produced in this State and consumed in 1913, as compared with 9,354,428,000 cubic feet, valued at \$1,134,456, or 12.13 cents per thousand cubic feet in 1912. The wells with greatest capacity and highest pressure are located in Kern County, where at the close of 1913 there were 27 gas wells, which range in depth from 1,600 to 2,782 feet, and have a pressure of from 250 to 960 pounds. Considerable gas is produced from the oil wells of Orange and Santa Barbara counties, where it is largely used for field purposes, and as this gas is very rich in gasoline, several plants have

been installed in these counties for the production of gasoline, which has become an important industry of this State, the production in 1913 being second only to Oklahoma. In 1913 the production was three and one-half times as great as in 1912. The quantity of gasoline produced in 1913 was 3,460,747 gallons, valued at \$376,227, as compared with 1,040,695 gallons, valued at \$112,502 in 1912. The number of plants in operation at the close of 1913 was 14, with a total daily capacity of 21,135 gallons, as compared with 7 in 1912, with a total daily capacity of 6,669 gallons. The counties in which gas is produced are: Humboldt, Kern, Orange, Los Angeles, Sacramento, San Joaquin, Santa Barbara, Santa Clara, Solano, Tehama, Ventura, and Fresno. The number of productive gas wells in the State at the close of 1913 was 72.

**Natural Gas Produced in California, 1900-1913.**

Year	Value
1900	\$79,083
1901	67,602
1902	120,648
1903	104,521
1904	114,195
1905	133,696
1906	134,560
1907	168,397
1908	307,652
1909	446,933
1910	476,697
1911	800,714
1912	1,134,456
1913	1,883,450

**MINERALS.**

California is rich in minerals, but as yet comparatively little has been done, with the exception of gold mining, and in more recent years in the petroleum fields, to develop its vast resources. The great difficulty in the way of opening up some of these valuable deposits is the want of transportation facilities.

Borax, magnesite, and chrome production in the United States come solely from California. Eighty per cent of the domestic supply of quicksilver and platinum is mined in this State. California leads all other states in the Union in the value of petroleum and gold produced: is first of all states west of the Mississippi in the value of her total mineral production, and is only outranked by a few of the great iron and coal producing states of the East. The value of the total mineral output for 1913 is estimated at \$98,644,639.

The following summaries are compiled from the reports of the State Mining Bureau:

**Total Gold Production of California, 1909-1913.\***

Gold is more widely distributed than any other substance thus far mined in California, thirty-two counties out of the fifty-eight in the State showing a gold yield in 1913, and gold is known to exist in several others. Gold was discovered by James W. Marshall, on January 24, 1848, at Sutter's Mill, near Coloma, El Dorado County. The value of the gold produced since that year, until 1913, amounts to about \$1,588,087,904.

\*The complete Output and Value of Minerals for 1914 has not yet been issued.



## Gold, 1890-1913.

Year	Value	Year	Value
1890 -----	\$12,309,793	1902 -----	\$16,910,320
1891 -----	12,728,869	1903 -----	16,471,264
1892 -----	12,571,900	1904 -----	19,109,600
1893 -----	12,422,811	1905 -----	19,197,043
1894 -----	13,923,281	1906 -----	18,732,452
1895 -----	15,334,317	1907 -----	16,727,928
1896 -----	17,181,562	1908 -----	18,761,559
1897 -----	15,871,401	1909 -----	20,237,870
1898 -----	15,906,478	1910 -----	19,715,440
1899 -----	15,336,031	1911 -----	19,738,908
1900 -----	15,863,355	1912 -----	19,713,478
1901 -----	16,989,044	1913 -----	20,406,958

## Silver, 1900-1913.

Year	Value	Year	Value
1900 -----	\$1,510,344	1907 -----	\$751,646
1901 -----	1,229,356	1908 -----	873,057
1902 -----	616,412	1909 -----	896,250
1903 -----	517,444	1910 -----	993,646
1904 -----	873,525	1911 -----	673,336
1905 -----	678,494	1912 -----	799,584
1906 -----	817,830	1913 -----	832,553

The total value of silver obtained 1887-1913 is estimated at \$22,050,084. The average price for the year 1913 was 60.4 cents per ounce, as compared with 61.5 cents in 1912.

Silver is found in thirty-three counties, Shasta being the leading producer, the value in 1913 being \$448,031.

## Quicksilver, 1900-1913.

Year	Flasks	Value	Year	Flasks	Value
1900 -----	26,317	\$1,182,786	1907 -----	17,379	\$663,178
1901 -----	26,720	1,285,014	1908 -----	18,039	763,520
1902 -----	29,552	1,276,524	1909 -----	16,217	773,788
1903 -----	32,094	1,335,954	1910 -----	17,665	799,002
1904 -----	28,876	1,086,323	1911 -----	19,109	879,205
1905 -----	24,655	886,081	1912 -----	20,600	866,024
1906 -----	19,516	712,334	1913 -----	15,661	630,042

NOTE.--Flasks contain 75 pounds since June 1, 1904. Average price in San Francisco, \$40.23 per flask, as compared with \$42.04 in 1912.

Eight counties reported a production of quicksilver during 1913. California supplies about 80 per cent of the quicksilver production in the United States. San Benito County is the largest producer, followed by Santa Clara and San Luis Obispo.

## Copper, 1900-1913.

Year	Pounds	Value	Year	Pounds	Value
1900 -----	29,515,512	\$4,748,242	1907 -----	32,602,945	\$6,341,887
1901 -----	34,931,788	5,501,782	1908 -----	40,868,772	5,350,777
1902 -----	27,860,162	3,239,975	1909 -----	65,727,736	8,478,142
1903 -----	19,113,861	2,520,997	1910 -----	53,721,032	6,680,641
1904 -----	29,974,154	3,969,995	1911 -----	36,838,024	4,604,753
1905 -----	16,997,489	2,650,605	1912 -----	34,169,997	5,638,049
1906 -----	28,726,448	5,522,712	1913 -----	34,471,118	5,343,023

Copper was produced in seventeen counties in 1913, Shasta being by far the largest, producing more than two-thirds of the amount.

## Platinum, 1900-1913.

Year	Ounces	Value	Year	Ounces	Value
1900 -----			1907 -----	300.07	\$6,255
1901 -----	250	\$3,200	1908 -----	706	13,414
1902 -----	39	468	1909 -----	416	10,400
1903 -----		1,052	1910 -----	337	8,386
1904 -----		1,849	1911 -----	511	14,873
1905 -----	200	3,320	1912 -----	603	19,731
1906 -----	91.46	1,647	1913 -----	368	17,738

## Gems, 1900-1913.

Year	Value	Year	Value
1900 -----	\$20,560	1907 -----	\$232,642
1901 -----	40,000	1908 -----	208,950
1902 -----	162,100	1909 -----	193,700
1903 -----	110,500	1910 -----	237,475
1904 -----	136,000	1911 -----	51,824
1905 -----	148,500	1912 -----	23,050
1906 -----	497,090	1913 -----	13,740

Gems are found in eight counties, San Diego County being the largest producer.

## Asphalt (Refined), 1900-1913.

Year	Tons	Value	Year	Tons	Value
1900 -----	12.575	\$253,950	1907 -----	79,718	\$1,058,400
1901 -----	21.634	313,219	1908 -----	105,443	1,082,376
1902 -----	34.511	349,344	1909 -----	136,664	1,707,159
1903 -----	41.670	503,659	1910 -----	184,967	2,125,122
1904 -----	56.187	672,910	1911 -----	180,000	2,250,000
1905 -----	40.304	285,290	1912 -----	250,000	2,500,000
1906 -----	77.756	777,560	1913 -----	344,000	2,752,000

There are forty-eight refineries in the State, mostly located near the oil fields.

## Bituminous Rock, 1900-1913.

Year	Tons	Value	Year	Tons	Value
1900 -----	25,306	\$71,495	1907 -----	24,122	\$72,835
1901 -----	24,052	66,354	1908 -----	30,718	109,818
1902 -----	33,490	43,411	1909 -----	34,123	116,436
1903 -----	21,944	53,106	1910 -----	87,547	165,711
1904 -----	45,280	175,680	1911 -----	75,125	117,279
1905 -----	24,753	60,436	1912 -----	44,073	87,467
1906 -----	16,077	45,204	1913 -----	37,541	78,479

The only counties which produce bituminous rock are: Santa Cruz, 26,932 tons; Santa Barbara, 10,000 tons; San Luis Obispo, 609 tons.

## Coal, 1900-1913.

Year	Tons	Value	Year	Tons	Value
1900 -----	176,956	\$535,531	1907 -----	23,734	\$55,849
1901 -----	150,724	401,772	1908 -----	18,496	55,503
1902 -----	88,460	248,622	1909 -----	49,389	216,913
1903 -----	93,026	265,383	1910 -----	11,033	23,484
1904 -----	79,062	376,494	1911 -----	11,047	18,297
1905 -----	46,500	144,500	1912 -----	14,848	39,092
1906 -----	24,850	61,600	1913 -----	25,198	85,809

## Borax, 1900-1913.

Year	Pounds	Value	Year	Pounds	Value
1900 -----	51,674,000	\$1,013,251	1907 -----	106,825,000	\$1,200,913
1901 -----	14,442,000	982,380	1908 -----	44,400,000	1,117,000
1902 -----	34,404,000	2,234,994	1909 -----	33,257,000	1,163,960
1903 -----	68,860,000	661,400	1910 -----	33,656,000	1,177,960
1904 -----	91,294,000	698,810	1911 -----	50,945,000	1,456,672
1905 -----	97,068,000	1,019,158	1912 -----	42,135,000	1,122,713
1906 -----	116,346,000	1,182,410	1913 -----	58,051	1,491,530

## Salt, 1900-1913.

Year	Tons	Value	Year	Tons	Value
1900 -----	89,338	\$204,754	1907 -----	88,063	\$310,967
1901 -----	126,218	366,376	1908 -----	121,764	281,469
1902 -----	115,208	205,876	1909 -----	155,680	414,708
1903 -----	102,895	211,365	1910 -----	174,920	395,417
1904 -----	95,968	187,300	1911 -----	173,332	324,255
1905 -----	77,118	141,925	1912 -----	185,721	383,370
1906 -----	101,650	213,228	1913 -----	204,407	462,681

Salt is produced by seven counties, Alameda being the largest producer.

## Magnesite, 1900-1913.

Year	Tons	Value	Year	Tons	Value
1900 -----	2,252	\$19,333	1907 -----	6,405	\$57,720
1901 -----	4,726	43,057	1908 -----	10,582	80,822
1902 -----	2,836	20,655	1909 -----	7,942	62,588
1903 -----	1,361	20,515	1910 -----	16,570	113,887
1904 -----	2,850	9,298	1911 -----	8,858	67,430
1905 -----	3,933	16,221	1912 -----	10,512	105,120
1906 -----	4,032	40,320	1913 -----	9,632	77,056

Magnesite is found in Tulare, Fresno, Riverside, and Santa Clara counties.

TABLE XXXV.

## Production of Minerals, 1912-1913.

(From the California State Mining Bureau.)

Substance	1912	1913
Asbestos -----	\$2,700	\$1,175
Barytes -----	2,812	3,680
Bituminous rock -----	87,467	78,479
Borax -----	1,122,713	1,491,530
Brick -----	2,940,290	2,915,350
Cement -----	6,074,661	7,743,024
Chromite -----	11,260	12,700
Clay -----	215,683	261,273
Coal -----	39,092	85,809
Copper -----	5,638,049	5,343,023
Feldspar -----	6,180	7,850
Fuller's earth -----	6,500	3,700
Gems -----	23,050	13,740
Gold -----	19,713,478	20,406,958
Graphite -----		25
Gypsum -----	117,388	135,050
Infusorial earth -----	17,074	35,968
Iron ore -----	2,508	4,485
Lead -----	61,653	160,202
Lime -----	464,140	528,547
Limestone -----	570,248	274,455
Magnesite -----	105,120	77,056
Manganese -----	400	
Marble -----	74,120	113,282
Mineral paint -----	1,800	1,780
Mineral water -----	529,384	599,748
Natural gas -----	940,076	1,053,292
Petroleum -----	41,868,344	48,578,014
Platinum -----	19,731	17,738
Pumice -----	2,500	4,500
Pyrates -----	203,470	218,537
Quartz rock -----		7,756
Quicksilver -----	866,024	630,042
Salt -----	383,370	462,681
Sand-glass -----	15,404	14,143
Sandstone -----	22,574	27,870
Silver -----	799,584	832,553
Soapstone -----	7,350	6,150
Soda -----	37,094	24,936
Stone industry* -----	5,473,928	6,168,020
Tungsten ore -----	206,000	234,673
Zinc -----	298,866	64,845
Totals -----	\$88,972,385	\$98,644,639
Asphalt -----	2,500,000	2,752,000
Total, including asphalt -----	\$91,472,385	\$101,396,639

\*Including granite, macadam, rubble, paving blocks, sand, and gravel.



TABLE XXXVI.

Value of Minerals Produced, by Counties, 1912-1913.

(From the California State Mining Bureau.)

County	1912	1913	Mineral springs†
Alameda	\$794,961	\$844,217	6
Alpine*	*	541	1
Amador	2,925,202	3,013,180	-----
Butte	2,403,675	2,533,940	3
Calaveras	2,051,781	2,042,901	1
Colusa	70,165	48,481	12
Contra Costa	829,811	1,962,640	8
Del Norte	3,950	2,514	-----
El Dorado	122,001	67,723	5
Fresno	8,897,685	8,438,810	9
Glenn	32,950	27,776	3
Humboldt	268,116	471,052	5
Imperial	30,000	95,054	8
Inyo	483,330	1,942,309	36
Kern	23,097,003	28,406,193	26
Kings	1,850	1,335	-----
Lake	123,286	125,829	56
Lassen		2,382	19
Los Angeles	5,594,513	5,833,298	14
Madera	112,285	371,867	10
Marin	122,200	278,453	4
Mariposa	214,294	246,079	4
Mendocino	300	9,450	35
Merced	45,000	35,329	-----
Modoc	29,187	6,875	18
Mono	454,268	184,428	20
Monterey	132,749	178,679	8
Napa	266,708	1,186,353	14
Nevada	2,108,543	2,950,367	1
Orange	4,518,275	6,948,495	2
Placer	881,537	520,808	12
Plumas	196,997	143,698	16
Riverside	782,627	2,071,969	23
Sacramento	2,171,399	2,925,706	-----
San Benito	494,068	514,995	1
San Bernardino	1,428,057	2,486,100	44
San Diego	305,683	315,694	19
San Francisco	151,147	110,551	-----
San Joaquin	210,040	165,157	-----
San Luis Obispo	31,564	63,675	12
San Mateo	216,582	215,371	-----
Santa Barbara	4,111,258	3,636,288	7
Santa Clara	557,585	311,383	12
Santa Cruz	270,207	1,816,805	3
Shasta	5,825,819	6,212,344	16
Sierra	736,423	1,010,976	2
Siskiyou	598,713	309,986	28
Solano	203,073	1,839,721	2
Sonoma	346,306	239,037	21
Stanislaus	295,673	272,249	2
Sutter			-----
Tehama	1,300	2,442	11
Trinity	733,755	435,142	4
Tulare	142,890	119,760	18
Tuolumne	1,353,706	1,198,383	1
Ventura	595,399	924,972	9
Yolo			-----
Yuba	2,775,132	2,507,139	-----
Unapportioned	7,821,357	17,738	-----
Totals	\$88,972,385	\$98,644,639	591

\*Alpine included in Stanislaus. †From report of U. S. Geological Survey.

## CALIFORNIA MINERAL SPRINGS.

There are a very large number of valuable mineral springs in California, which contain the same curative properties as the most famous spas of Europe, but they are not so widely known as they deserve. Among these are to be found alkaline, carbonated, chalybeate, epsom salts, saline, sulphur, soda, vichy, cold, warm, and hot, and also hot mud springs. There are 591 springs in California, some of which consist of several separate springs, and of these 118 are spring resorts.\*

Mineral waters are generally divided into four classes: Acidulous, sulphurous, chalybeate, and saline.

There was a large increase in the mineral water sales of California during 1913, the sales reported being 2,801,393 gallons, as compared with 2,089,951 gallons in 1912, an increase of 711,442 gallons, or 34 per cent. The value of the product, however, remained practically the same, chiefly because a few table waters sold at a lower price than formerly.

Regardless of the fact that half of California mineral water is reported to be sold for table use, California is second in the value of the medicinal water output. There are resorts at twenty-three of the larger springs with accommodation for nearly 4,800 patrons, and the water at seventeen springs is used for bathing. Spring owners reported a total of 50,000 gallons of water used for the manufacture of soft drinks.

Production and Value of Mineral Waters in California, 1908-1913.

Year	Commercial springs	Quantity sold, gallons	Value	Price per gallon received at springs, cents
1908 -----	40	1,960,770	\$393,920	20.1
1909 -----	44	2,179,187	444,230	20.4
1910 -----	41	2,008,697	394,841	19.7
1911 -----	40	2,310,237	578,439	25.0
1912 -----	41	2,089,951	532,971	26.0
1913 -----	49	2,801,393	531,925	19.0

\*Eleven counties: Amador, Del Norte, Kings, Merced, Sacramento, San Francisco, San Joaquin, San Mateo, Sutter, Yolo, and Yuba have no springs. The largest number is 56 in Lake County, followed by San Bernardino with 44, Inyo 36, and Mendocino 35.

## Summary of Mineral Springs.

Name of spring	Description	County
Adams Springs .....	Alkaline—Carbonated water .....	Lake.
Aetna Soda Springs .....	Alkaline water .....	Napa.
Aqua Calienta Springs .....	Sulphur (hot) .....	San Diego.
Aqua Calienta Springs .....	Sulphur (hot) .....	Kern.
Aqua de Vida Springs .....	Alkaline-saline. Sulphureted .....	Alameda.
Alabaster Cave Springs .....	.....	El Dorado.
Alameda Warm Springs .....	.....	Alameda.
Alder Glen Springs .....	.....	Sonoma.
Alhambra Mineral Spring .....	.....	Contra Costa.
Alkali Springs .....	.....	Mono.
Allen Springs .....	Alkaline-saline. Carbonated .....	Lake.
Alma Springs .....	Alkaline and chalybeate .....	Santa Clara.
Anderson Mineral Springs .....	Mild alkalo—Sulphureted chalybeate and saline-acidulous; also hot sulphurous springs.	Lake.
Arrowhead Hot Springs .....	Upwards of 20 hot springs .....	San Bernardino.
Arroyo Grande Springs .....	Alkaline and carbonated .....	San Luis Obispo.
Azule Springs .....	Carbonated .....	Santa Clara.
Barcal Mineral Spring .....	.....	Sonoma.
Bartlett Springs .....	Alkaline. Carbonated .....	Lake.
Bear Valley Hot Springs .....	Saline and calcic .....	San Bernardino.
Benton Hot Springs .....	Very hot, slightly alkaline .....	Mono.
Bitter Springs .....	Cold saline .....	San Bernardino.
Black Lake .....	Sulphurous and saline .....	Mono.
Blank's Hot Springs .....	Hot sulphur .....	Colusa.
Blodgett's Soda Springs .....	Alkalo-carbonated and sulphur .....	Santa Clara.
Boiling Lakes .....	Alkaline .....	Plumas.
Boiling Springs .....	Alkaline .....	Inyo.
Boiling Sulphur Springs .....	Alkalo-sulphureted .....	Mono.
Boyes Hot Spring .....	.....	Sonoma.
Bonanza Hot and Cold Springs .....	Hot carbonated and hot sulphureted.	Lake.
Borax Pond .....	Biborate of soda (borax) .....	Lake.
Borax Hot, Borax Marsh, and Borax Patch .....	Borax .....	San Bernardino.
Borax Springs .....	On the edge of Clear Lake .....	Lake.
Boyd's Hot Springs .....	Alkaline, charged with carbonic acid gas.	Modoc.
Branhick's Boiling Springs .....	Alkaline .....	Lassen.
Buckman's Spring .....	.....	San Diego.
Byron Springs .....	Hot and cold; muriated saline, sulphurous, chalybeate, black sulphurous, mud and others.	Contra Costa.
Bythnia Springs .....	.....	Santa Barbara.
California Geysers .....	Many various kinds; also mud springs.	Sonoma.
Calistoga Mineral Springs .....	Light sulphureted water; also hot.	Napa.
Campbell's Hot Springs .....	One cold and two hot; slightly saline and mildly sulphurous.	Sierra.
Carbonated Springs .....	.....	Siskiyou.
Casa Diablo Hot Springs .....	Saline and sulphureted; also small boiling geysers.	Mono.
Castalian Mineral Springs .....	Mostly cold, sulphurous, alkaline and carbonated; one of the heaviest waters on the coast.	Inyo.
Castle Rock Springs .....	Sulphureted and carbonated soda.	Shasta.
Chalybeate Mineral Springs .....	.....	Tehama.
Coal Valley Boiling Springs .....	Very hot; soda .....	Modoc.
Cold Soda Lake .....	Alkaline .....	Plumas.
Cold Soda Springs .....	Alkaline and carbonated .....	Tuolumne.
Congress Springs .....	Muriated-alkaline .....	Santa Clara.

## Summary of Mineral Springs—Continued.

Name of spring	Description	County
Console Mineral Springs	-----	San Bernardino.
Cook's Springs	Saline and sulphurous	Colusa.
Coronado Mineral Springs	Light alkalo-carbonated	San Diego.
Corral De Leo z Warm Springs.	Highly charged with sulphur	San Diego.
Crystal Springs	Carbonated alkaline	Napa.
Crystal Springs	-----	Los Angeles.
Cuyana Hot Springs	Sulphurous	Santa Barbara.
Desert or Cave Springs	Alkaline carbonated	Kern.
Duncan Springs	Alkaline-calcic	Mendocino.
El Granito Mineral Spring	-----	San Diego.
Elliotta White Sulphur Spring.	-----	Riverside.
Elysian Springs	-----	Los Angeles.
Elsinore Springs	Hot and cold; carbonated	San Diego.
Eureka Springs	Chlorinated—heavy; hot mud	Humboldt.
Fairmont Mineral Springs	Alkaline and carbonated	Sonoma.
Felt's Mineral Springs	-----	Humboldt.
Fouts Springs	-----	Colusa.
Fresno Hot Springs	-----	Fresno.
Geyser Spa or Soda Springs.	Alkaline and chalybeate	Sonoma.
Gilroy Hot Springs	Alkalo-sulphureted	Santa Clara.
Glen Alpine Springs	Carbonated and chalybeate	El Dorado.
Gordon's Mineral Springs	Alkalo-saline	Lake.
Grizzle Springs	-----	Colusa.
Harbin Hot Sulphur Springs.	Saline-sulphureted, arsenic and others.	Lake.
Hibb's Soda Springs	-----	Shasta.
Highland Springs	Alkalo-saline and chalybeate, heavy saline and others.	Lake.
High Rock Springs	Hot alkaline	Lassen.
Hot Borate Springs	Borate water	Lake.
Hot Mud Springs	Sulphur	Siskiyou.
Hot Springs	(On Pahoa Island in Mono Lake)	Mono.
Hough's Mineral Springs	-----	Lake.
Howard Springs	Alkalo-carbonated	Lake.
Iodine Springs	-----	Lake.
Klamath Hot Springs	Alkalo-saline and sulphurous	Siskiyou.
Lake Tahoe or Carnelian Hot Springs.	Hot and cold; sulphurous and saline.	Placer.
Lepori Vichy Springs	-----	Napa.
Kellogg's Springs	Saline and sulphureted	Napa.
Lane's Mineral Springs	Alkalo-sulphurous and chalybeate.	Calaveras.
Las Cruces Hot Springs	-----	Santa Barbara.
Little Yosemite Soda Springs.	Alkalo-carbonated	Tulare.
Lytton Seltzer Springs	Alkalo-carbonated and chalybeate.	Sonoma.
Mark West Springs	Hot sulphur and hot mud	Sonoma.
Matilija Hot Springs	Hot and cold; sulphureted	Ventura.
Mission San Jose Hot Springs.	-----	Alameda.
Mono Basin Warm Springs	Chlorinated and alkaline	Mono.
Mono Lake	Chlorinated (the Dead Sea of California).	Mono.
Montecito Hot Springs	Sulphurous	Santa Barbara.
Monterey Mineral Well	-----	Monterey.
Napa Soda Springs	Alkaline-chalybeate	Napa.
Newsom's Arroyo Grande Springs.	Light salino-sulphureted	San Luis Obispo.
New Almaden Vichy Springs.	Vichy-alkalo-chalybeate	Santa Clara.
Nicholas Springs	Epsom salts and iron salts	Santa Cruz.
Nuvida Springs	-----	San Diego.
Ojai Hot Sulphur Springs.	Hot and cold; carbonated and sulphureted.	Ventura.
Orr's Hot Springs	-----	Mendocino.



## Summary of Mineral Springs—Continued.

Name of spring	Description	County
Owen's Lake -----	The second Dead Sea in California; highly chlorinated and alkaline.	Inyo.
Pacific Congress Springs--	Alkalo-chalybeate -----	Santa Clara.
Palm Springs -----		Riverside.
Paraiso Hot Springs-----	Sulphur; hot soda, similar to Carlsbad of Austria.	Monterey.
Paso Robles Springs-----	Hot and cold, sulphur mud springs; alkaline-saline, sulphined.	San Luis Obispo.
Piedmont White Sulphur Springs.	Chalybeate and sulphur-----	Alameda.
Pinkham Springs -----		Santa Barbara.
Purity Springs -----		Marin.
Radium Sulphur Springs--		Los Angeles.
Redwing Springs -----		Lake.
Samuel Springs -----		Napa.
San Benito Springs-----		San Benito.
Rubicon Soda Springs-----		Placer.
San Bernardino Hot Springs.	Calcic and saline-----	San Bernardino.
San Jacinto Springs-----	Arsenic, white sulphur, soda, and mud.	Los Angeles.
San Juan Capistrano-----	Light carbonated -----	San Bernardino.
San Luis Hot Springs-----		San Luis Obispo.
San Marcos Sulphur Springs.		Santa Barbara.
San Rafael Springs-----	Slightly saline and carbonated.	Marin.
Santa Barbara Hot Springs.	Sulphurous, saline and chalybeate.	Santa Barbara.
Santa Rosa White Sulphur Springs.	Light-salino-sulphurous -----	Sonoma.
Santa Ysabel Cold and Hot Sulphur Springs.	Salino-sulphureted, sulphur mud springs and others.	San Luis Obispo.
Saratoga Springs -----		Inyo.
Saratoga Mineral Springs	Cold, contain sulphur, soda and iron.	Lake.
Seigler's Springs -----	Arsenic, soda, epsom salts-----	Lake.
Seltzer Springs -----	Alkaline-saline-calcic, carbonated.	Mendocino.
Shafer's Hot Springs-----	Saline and sulphates-----	Lassen.
Shasta Soda Springs-----	Carbonated and ferruginous--	Siskiyou.
Simmons' Hot Sulphur Springs.		Colusa.
Skagg's Hot Springs-----	Alkalo-carbonated (heavy) -----	Sonoma.
Springs of Dos Palos-----	Chlorinated, warm -----	San Diego.
Summit Soda Springs-----	Alkalo-chalybeate -----	Placer.
Tamalpais Springs -----		Marin.
Tassajara Hot Springs-----	Saline and sulphurous-----	Monterey.
Thermal Acid Springs-----	Acid, sulphate -----	Inyo.
Tia Juana Springs-----		San Diego.
Tolenas Springs -----	Alkalo-saline and chlorinated--	Solano.
Tule River Soda Springs--		Tulare.
Tuscan or Lick Springs-----	Saline and sulphurous-----	Tehama.
Upper Soda Springs-----	Alkalo-carbonated or soda class	Siskiyou.
Vallejo Sulphur Springs--		Solano.
Valley Springs -----		Calaveras.
Veronica Medicinal Springs		Santa Barbara.
Vito Nuevo Springs-----		Mono.
Viehy Springs -----	Alkalo-carbonated or soda class	Mendocino.
Volcanic Mineral Springs.	(In Death's Valley)-----	Inyo.
Warner Hot Springs-----	Hot, sulphurous and saline-----	San Diego.
Watters Springs -----		Napa.
Wheeler's Hot Springs-----		Ventura.
White Sulphur Springs-----	Light sulphureted and alkaline.	Napa.
Wilbur Springs -----	Thermal salino-sulphureted -----	Colusa.
Witter's Mineral Springs--	Saline-chalybeate. Sulphureted	Lake.
Young's Natural Gas Well and Mineral Springs.		Lake.
Zem Zem -----	Highly carbonated -----	Lake.

NOTE.—There are many other unnamed and undeveloped springs in California, including geysers, salt, thermal, hot, warm and white sulphur springs.

## PART VIII.

CALIFORNIA FORESTS. THE LUMBER  
INDUSTRY. MANUFACTURES.

## NATIONAL FORESTS.

**Grazing Permits; Ownership of Forests by Counties; Forest Fires;  
National Monuments; Lumber Industry—Lumber Cut, 1905-1912,  
Value of Lumber, 1850-1909.**

## MANUFACTURES.

**Summary of Fourteen Leading Manufactures; Manufacturing Industry, 1900-1909;  
Manufactures of Twenty-one Leading Cities.**

The total area within the boundaries of the national forests was decreased in 1911 by presidential proclamation, which eliminated 4,598,705 acres and added 2,806,267 acres. While it will doubtless be necessary in the future to make small additions and eliminations from time to time, as conditions change, it is believed that the boundaries now established or planted may be regarded as fairly stable.

As the national forests consist largely of unsurveyed lands, the gross area figures are subject to correction. The area in California is larger than any other state in the Union, Idaho and Montana ranking next, with 19,000,000 acres each.

California	Acres
Gross area, June 30, 1910.....	27,968,510
Additions .....	732,378
Eliminations .....	883,400
Gross area, September 30, 1911.....	27,667,695
Alienated area .....	6,676,130
Net area, September 30, 1911.....	20,991,565

The amounts paid to the State to be expended for roads and schools from the national forest receipts for 1910 was \$60,752.91; for 1911, \$53,716.87; for 1912, \$62,052.82; for 1913, \$74,541, and for 1914, \$74,541.55.

In the timber-sale policy of the Forest Service, provision is first made for local needs, present and future, and sale of timber which will enter into the general markets is considered only when it is clear that an excess over the permanent supply required by local industries exists.

## Number of Timber Sales, Classified According to Amount of Sale.

Amount	Number	
	1913	1914
Under \$100 .....	555	682
From \$100 to \$500.....	24	16
From \$500 to \$1,000.....	5	11
From \$1,000 to \$5,000.....	14	10
Over \$5,000 .....	9	4
Total number of sales.....	607	723

## Timber Sold and Cut in National Forests, 1911-1914.

Year	Timber sold, board-feet	Value	Timber cut under sales, board-feet	Value
1911 -----	112,438,000	\$295,536 22	37,899,000	\$80,243 65
1912 -----	109,214,000	232,697 81	43,914,000	97,239 33
1913 -----	1,064,804,000	2,324,936 03	52,419,000	108,708 74
1914 -----	79,706,000	153,171 54	48,598,000	105,467 99

Total number of timber sales in 1912 was 635, compared with 543 in 1911.

Free timber is accorded to residents in or near the national forests who need material for personal use and who can not reasonably be expected to purchase. Special consideration is given to new settlers and prospectors for minerals. Free use is also granted on a liberal scale for co-operative enterprises and public purposes.

## Free Use of Timber, 1911-1914.

Year	Number of permits	Board-feet	Value
1911 -----	3,085	9,197,000	\$17,359 02
1912 -----	2,756	8,490,000	14,797 95
1913 -----	3,118	8,918,000	18,011 15
1914 -----	2,915	8,416,000	12,250 47

## Reforestation, 1911-1914.

Year	Sown acres	Planted acres	Total
1911 -----	2,659	169	2,828
1912 -----	632.69	188.60	821.29
1913 -----	133.16	276.77	409.93
1914 -----	5.15	224.09	229.24

## Grazing Permits, 1911-1914.

Year	Number of permits	Cattle, number	Horses, number	Hogs, number	Number of permits	Sheep and lambs	Number of goats
1911 -----	2,382	151,582	9,824	3,867	298	368,781	13,464
1912 -----	2,521	169,361	10,403	3,480	367	432,974	15,235
1913 -----	2,664	169,951	11,765	2,360	377	435,856	13,249
1914 -----	2,696	175,856	12,487	1,608	348	422,102	10,956

## Predatory Animals Destroyed, 1910-1914.

Animal	1910	1911	1912	1913	1914
Bears -----	73	37	12	6	28
Mountain lions -----	23	5	3	3	-----
Wolves -----	2	3	2	-----	2
Wolf pups -----	-----	2	-----	-----	-----
Coyotes -----	963	743	478	337	419
Wildcats -----	309	193	160	132	91
Lynxes -----	37	15	2	2	-----
Totals -----	1,347	998	657	480	540

## LAND CLASSIFICATION.

A system of land classification has been established to cover all the forests affording any prospect of agricultural development within them. Its purpose is to segregate and make available for the establishment and development of homes all national forest land which will serve its best use by being brought under cultivation.

## Land Classification Projects in California.

National forest	Project	Area. acres
Angeles -----	Cajon -----	135,000
	San Gabriel -----	175,000
Cleveland -----	Laguna -----	165,000
Klamath -----	Klamath River -----	80,000
Lassen -----	Hat Creek -----	80,000
Santa Barbara -----	Matilija -----	160,000
Santa Clara River -----		75,000
Total -----		870,000

## Location, Date Latest Proclamation Effective, and Area of the National Forests on June 30, 1913.

(From reports of the Forest Service, Department of Agriculture.)

State or territory and forests	Proclamation effective	Area
California:		
Angeles -----	May 27, 1913	1,165,300
California -----	Oct. 12, 1910	1,061,000
Cleveland -----	Nov. 8, 1912	1,575,670
Crater <sup>1</sup> -----	July 1, 1911	61,100
El Dorado <sup>2</sup> -----	July 28, 1910	835,800
Inyo <sup>3</sup> -----	Feb. 23, 1911	1,337,780
Kern -----	Jan. 30, 1911	1,934,275
Klamath <sup>4</sup> -----	June 21, 1912	1,688,720
Lassen -----	Dec. 30, 1910	1,397,000
Modoc -----	Dec. 23, 1910	1,578,200
Mono <sup>5</sup> -----	June 30, 1911	883,150
Monterey -----	Dec. 12, 1910	501,150
Plumas -----	July 28, 1910	1,433,600
Santa Barbara -----	July 1, 1910	2,348,200
Sequoia -----	Feb. 17, 1912	1,191,840
Shasta -----	June 19, 1912	1,586,880
Sierra -----	July 1, 1910	1,743,000
Siskiyou <sup>6</sup> -----	July 1, 1911	406,260
Stanislaus -----	Oct. 12, 1910	1,186,500
Tahoe <sup>7</sup> -----	July 28, 1910	1,210,500
Trinity -----	June 7, 1912	1,746,020
Total -----		26,821,945

<sup>1</sup>Total of Crater in California and Oregon=1,080,500 acres

<sup>2</sup>Total of El Dorado in California and Nevada=836,200 acres.

<sup>3</sup>Total of Inyo in California and Nevada=1,413,110 acres.

<sup>4</sup>Total of Klamath in California and Oregon=1,697,920 acres.

<sup>5</sup>Total of Mono in California and Nevada=1,336,440 acres.

<sup>6</sup>Total of Siskiyou in California and Oregon=1,694,250 acres.

<sup>7</sup>Total of Tahoe in California and Nevada=1,272,470 acres.

There are eighteen national forest reserves in California, containing 20,555,680 acres and there are 8,500,000 acres of forest land privately owned. There are approximately 12,786,306 acres of merchantable forests in the State. California has no state forests.



## National Monuments.

There are 159 national forests in the United States, of which 21 are in California.

The following five national monuments, situated within national forests, have been created under the act of June 8, 1906, for the preservation of objects of historic or scientific interest:

State or territory and forests	Proclamation effective	Area, acres
Cinder Cone, Lassen-----	May 6, 1907	5,120
Devil Postpile, Sierra-----	July 6, 1911	800
Lassen Peak, Lassen-----	May 6, 1907	1,280
Muir Woods-----	Jan. 9, 1908	295
Pinnacles-----	Jan. 16, 1908	2,080

Of the standing timber in this State a very large percentage is now in private ownership, the total acreage amounting to 4,555,941.

## Ownership of Forests.

County	Acres	County	Acres
Alpine-----	3,270	Plumas-----	224,717
Amador-----	17,903	Riverside-----	4,784
Butte-----	89,737	San Benito-----	2,960
Calaveras-----	68,663	San Bernardino-----	10,940
Del Norte-----	109,600	San Diego-----	23,460
El Dorado-----	96,820	San Luis Obispo-----	2,040
Fresno-----	19,983	Santa Barbara-----	160
Glenn-----	16,796	Santa Cruz-----	19,956
Humboldt-----	486,950	Shasta-----	429,512
Kern-----	8,600	Sierra-----	134,176
Lake-----	10,320	Siskiyou-----	693,180
Lassen-----	244,434	Sonoma-----	162,474
Madera-----	23,176	Tehama-----	126,358
Marin-----	11,597	Trinity-----	333,840
Mariposa-----	35,073	Tulare-----	33,358
Mendocino-----	475,318	Tuolumne-----	131,378
Modoc-----	265,317	Ventura-----	803
Mono-----	15,320	Yuba-----	19,400
Monterey-----	81,518		
Nevada-----	60,101	Total-----	4,555,941
Placer-----	156,949		

## Forest Fires in California, 1906-1914.

Year	Number of fires	Area burned, acres	Damage, value
1906-----	120	650,000	-----
1907-----	305	75,060	\$8,601
1908-----	572	163,216	103,259
1909-----	638	357,269	600,000
1910-----	553	367,344	407,569
1911-----	797	66,508	51,083
1912-----	998	156,241	31,906
1913-----	1,971	559,370	511,077
1914-----	1,565	122,636	263,160

## THE LUMBER INDUSTRY.

The timber of California is found upon the Sierra Nevada and Coast ranges, north of San Francisco Bay. A little is found in the Coast ranges farther south, and in those of southern California. The species consists mainly of yellow and sugar pine, redwood, and red fir. Redwood is found in a narrow strip stretching from the Oregon line southward, closely bordering the coast, nearly to the bay of San Francisco. In this strip, comprising some 2,000 square miles, there is estimated to be 75,000,000,000 feet of redwood in a pure forest. This is probably the densest forest, as measured by the amount of lumber per acre, in the world. Lumbering is carried on mainly about Humboldt Bay, at Crescent City, near the Oregon line, and at various points in Mendocino County.

Yellow pine is found along the entire length of the Sierra Nevada and in the northern Coast ranges. It occupies in the Sierra a well-defined belt, which, in the southern part of the range, is limited by a contour 3,000 feet above sea level, while northward it gradually descends, coming down to about 1,500 feet in the upper Sacramento Valley. Its upper limit is on an average about 8,000 feet, above which it is succeeded by species which are fitted to a colder climate. Throughout its range it is accompanied by sugar pine in the average proportion of about three of the former to one of the latter. The forest also contains a notable amount of incense cedar and of red fir. The composition of the forests in the northern part of the Coast ranges is quite similar to that in the Sierra, excepting that the proportion of red fir is somewhat greater.

Scattered about in the yellow pine forests, on the slope of the Sierra Nevada, at altitudes ranging from 4,000 to 6,000 feet, are ten groves, differing greatly in magnitude, of *Sequoia gigantea*, the big tree. These trees range in height up to 325 feet, and in diameter to a little over 30 feet. They do not appear in pure growth, but scattered through the yellow pine forest.

The wooded land of the State is estimated to have an area of 44,700 square miles, or 22 per cent of the total area of the State. The principal species are redwood and yellow pine, with smaller amounts of sugar pine, red fir, and incense cedar. Redwood is the only important kind of lumber, the production of which is limited to one state. California has no competitor in its production, nor can it ever have, since there is no commercial supply of redwood timber elsewhere.

Lumber Cut, 1905-1912.

Year	Million feet, board measure	Year	Million feet, board measure
1905	1,077,499	1909	1,143,507
1906	1,348,599	1910	1,254,826
1907	1,345,943	1911	1,207,561
1908	996,115	1912	1,203,059

## Lumber, Lath and Shingles in 1909.

Species	Number of active mills	Million feet, board measure	Value	Average per thousand feet
Soft woods:				
Redwood .....	69	521,630	\$7,720,124	\$14 80
Douglas fir .....	100	88,852	943,608	10 62
Spruce .....	28	13,241	196,099	14 81
Western or yellow pine .....	184	364,748	6,752,076	18 51
Cedar .....	67	14,834	192,100	12 95
Sugar pine .....	71	88,822	1,634,325	18 40
White fir .....	72	48,306	676,767	14 01
Laurel .....		26	650	25 00
Hemlock .....		416	4,044	
Lodgepole .....		452	4,068	
Total soft woods .....		1,141,301	\$18,123,211	
Hard woods:				
Oak .....		2,180	141,678	
All other .....		26	650	
Total hard woods .....		2,206	\$142,328	
Total soft woods .....		1,141,301	18,123,211	
Grand totals .....	305	1,143,507	\$18,265,539	

## Rough Lumber, Lath and Shingles in 1909.

Product	Quantity		Value, 1909
	1899	1909	
Rough lumber, thousand feet b. m. ....	737,035	1,143,507	
Laths, thousands .....	11,507	32,615	\$73,384
Shingles, thousands .....	650,090	574,342	833,671

## Lumber, Lath and Shingles in 1912.

Lumber sawed (thousand feet, board measure) by 229 active mills.

Soft woods	Feet	Hardwoods	Feet
Douglas fir .....	105,625	Oak .....	3,667
Hemlock .....	1,348	Birch .....	150
Spruce .....	12,847	Ash .....	210
Western pine .....	365,169	Cottonwood .....	2
Redwood .....	496,796	All other .....	2,038
Cedar .....	18,507		
Sugar pine .....	128,376	Total hard woods .....	6,067
White fir .....	68,324	Total soft woods .....	1,196,992
Total soft woods .....	1,196,992	Grand total .....	1,203,059
Laths produced .....			18,954
Shingles produced .....			471,592

During the ten years, 1899 to 1909, the output of rough lumber in California increased 55.1 per cent and that of laths 183.4 per cent, while the production of shingles decreased 11.7 per cent. The period of most rapid growth in the industry was from 1899 to 1904, when the output of lumber increased 46.2 per cent. The woods which supply the raw material are almost exclusively conifers, the hardwood cut in 1909, practically all of which was California or tanbark oak, forming only

one-fifth of 1 per cent of the total lumber production during the year. A total of 521,630 thousand feet, board measure, or more than 45.6 per cent of the lumber output in 1909, was California redwood, a species of timber which does not occur in saw-log size outside of California. Chief among the other species sawed into lumber in 1909 were western pine, with a production of 364,748 thousand feet, board measure; Douglas fir, with a production of 88,852 thousand feet; sugar pine, with a production of 88,822 thousand feet. The manufacture of shingles, while carried on to some extent in connection with that of lumber, nevertheless amounts practically to a separate industry. Over 88 per cent of the shingle output of the State for 1909 was manufactured from redwood, which timber possesses in very high degree the qualities most desirable in shingle material.

The term "white fir" is used as a designation for two or three firs of the Rocky Mountains and the Pacific coast. The lumber produced from them in no way resembles that of the Douglas fir, which, botanically, is not a fir at all.

The average value per thousand feet at the mill was \$13.10, the average for individual states ranging from \$10.20 in Oregon to \$14.01 in California.

*Yellow Pine.* Under the general term "yellow pine" is included all pine lumber which was produced east of the Rocky Mountains, with the exception of white, Norway, and jack pine. In the production of redwood, yellow pine, sugar pine, and white fir, California holds the first place.

*Sugar Pine.* The commercial range of this great giant of the white pine family is confined almost entirely to the regions of the Sierra in California, where 91.4 per cent of the total cut of 97,191,000 feet was produced in 1909. The output was 81.5 per cent greater than in 1899. The average value of the product per thousand feet in 1909 was 36 cents greater than in 1908, but \$1.70 less than in 1907.

California Tanbark and Tanning Extract in 1909.

Description	Tons	Cost	Average cost per ton
Oak bark -----	36,005	\$714,146	\$19 83
Myrobalan nuts -----	620	20,470	33 02
All others -----	495	10,152	20 51
Totals -----	37,120	\$744,768	\$20 06

The average cost per ton in 1909, \$10.31, was 73 cents more than in 1908. The highest average cost per ton was reported by California, \$20.06. In the total quantity of bark, etc., used in 1909, eleven out of the twenty-one states showed gains over 1908, the greatest being 9,605 tons in California.

The lumber industry includes three distinct operations, which are in some cases carried on by the same organization, in others separately:

1. The logging industry, including the felling of timber, cutting it into lengths, and transporting it by rail or river or flume to the mill.

2. The sawmill industry, in which the raw material consists of sawlogs, the product of the lumber camps; the finished product of rough lumber, including beams, joists, scantling, boards, shingles, laths, etc.



3. The planing mill industry, in which the raw material consists of rough lumber and the finished product planed lumber, with such minor manufactures as are carried on in connection with these mills. In the United States this industry ranks fourth among the greatest manufacturing industries of the country, being exceeded in value of products only by iron and steel, the textile, and the slaughtering and meat-packing industries.

Value of California Lumber Industry, 1850-1910.

Year	Value of product
1850	\$959,485
1860	3,943,881
1870	5,227,064
1880	4,428,950
1890	8,794,655
1900	13,764,647
1909	18,265,539

The ten largest holdings of timber lands comprise 2,448,094 acres, or approximately 42 per cent of all the privately-owned timber and cut-over land in the State. They are as follows:

	Acres
Central Pacific Railroad Company (S. P.)	921,311
T. B. Walker and associates	673,665
McCloud River Lumber Company	232,063
Diamond Match Company	159,499
Hammond Lumber Company	94,760
Union Lumber Company	80,350
L. E. White Lumber Company	79,540
Weed Lumber Company	71,458
C. A. Smith	69,768
Sierra Nevada Wood and Lumber Company	65,680

The Southern Pacific holding is the greatest in the United States—106,000,000,000 feet. It is difficult to give an adequate idea of its immensity. It stretches practically 680 miles along that railroad, between Portland and Sacramento. The fastest train over this distance takes thirty-one hours. During all that time the traveler is passing through lands a large portion of which, for 30 miles on each side belongs to the railroad, and in almost the entire strip this corporation is the dominating owner of both timber and land.

The holdings under 2,000 acres are too numerous to publish, but they are summarized as follows:

Size of holdings	Number of holding	Amount in acres		Total
		Timber	Cut over	
Below 1,000 acres	1,087	460,093	79,071	539,164
1,000 to 2,000 acres	196	195,687	59,321	255,008
2,000 acres and over	286	4,081,794	947,494	5,029,288
Grand totals		4,737,554	1,085,886	5,823,440

## MANUFACTURES.

Although agriculture and mining are the principal industries in California, the State shows a marked growth in manufactures during the last forty years. The gross value of products per capita of the total population increased from \$119 in 1869 to \$223 in 1909.

The natural resources of the State give rise to several of its leading industries, such as the lumber industry, canning and preserving, flour milling and gristmilling, petroleum refining, the refining of beet sugar, the wine industry, and the manufacture of cement.

The high cost of fuel, the greater part of which had to be brought from outside of the State, retarded the early development of manufactures, but the development of the oil fields, and the utilization during recent years of electricity generated by water power have given a decided impetus to manufactures in California.

The statistics of manufacture do not include the United States Navy Yard at Mare Island, which in 1909 employed an average of 1,917 wage-earners, and the value of the work performed was \$4,335,000.

The most important manufacturing industries are as follows:

*Lumber and Timber Products.* This industry embraces logging operations, sawmills, planing mills, and establishments engaged in the manufacture of wooden packing boxes. It does not include mills engaged exclusively in custom sawing. The industry is the leading one in the State, giving employment in 1909 to 22,935 wage-earners, or 19.9 per cent of the total for all manufacturing industries, and the value of its products amounted to \$45,000,000, or 8.5 per cent of the total.

The lumber industry is one of the seasonal industries. The number of wage-earners in January, the month of the minimum employment, was 14,585 less than the number in July, the month of maximum employment.

*Slaughtering and Meat-Packing.* This classification includes the wholesale slaughtering and meat-packing establishments and those engaged in the manufacture of sausage only. The animals slaughtered are largely cattle and sheep from the foothills and lower mountain slopes and from the plateau region of the northeastern part of the State, and southeastern Oregon, conditions in these sections being very favorable to stock raising. About half of the stock slaughtered is raised within the State. The fact that within recent years the meat packers have been able to overcome, through refrigeration, climatic difficulties, which required the excessive use of preservatives in salt meats, has been an important factor in the growth of this industry. The total value of products reported for the industry in 1909, \$34,280,000, represents an increase of \$18,463,000, or 116.7 per cent, as compared with the amount reported for 1899.

*Canning and Preserving.* This classification includes the canning of fruits and vegetables, fish, oysters, clams, etc., the preparation of pickled, smoked, and dried fish, the packing of dried fruits by packing houses which make a specialty of such business, and the manufacture of pickles, preserves, jellies, sauces, etc., but it does not include the drying and packing of fruits by the grower on the farm, nor does it include the canning of meats, soups, and similar products in meat-packing

establishments (the statistics for which are included with those for the slaughtering and meat-packing industry). The canning, pickling, smoking and drying of fish and the canning of oysters form comparatively unimportant branches of the industry. California far exceeds any other state in the value of products for this industry, the amount reported for 1909 being \$32,915,000, or 21 per cent of the total for the United States. Canning and preserving is a seasonal industry, giving employment to a large number of persons in July, August, September, and October, and to a comparatively small number during most of the other months of the year. The number of wage-earners employed in the industry varied from 2,781 in February to 16,047 in August.

*Foundry and Machine Shop Products.* This industry embraces, in addition to the general class of foundries and machine shops, establishments engaged in such special lines as the manufacture of gas machines and gas and water meters, hardware, plumbers' supplies, steam fittings and heating apparatus, and structural ironware. It does not, however, include establishments which manufacture distinctive products covered by other classifications, such as cash registers and calculating machines, or electrical machinery, apparatus, and supplies. This industry ranked third among the manufacturing industries of the State in 1909 in number of wage-earners, giving employment to 8,377, or 7.3 per cent of the total for all industries.

*Flourmill and Gristmill Products.* The statistics for all merchant mills grinding wheat, rye, buckwheat, corn or other grains are included in this classification. It does not, however, include factories making fancy cereals or other food preparations as a chief product, or mills doing custom grinding exclusively. The industry shows an increase of \$12,143,000, or 93.1 per cent, in value of products during the decade 1899-1909.

*Printing and Publishing.* This classification includes job printing, the printing and publishing of books, newspapers and periodicals, and music, bookbinding, steel engraving, and lithographing. The 1,240 establishments reporting included 705 publishing newspapers and periodicals and 481 doing book and job work exclusively. The average number of wage-earners employed in the newspaper and periodical branch of the industry was 3,650, and the value of products \$15,239,000; the average number of wage-earners engaged in book and job work was 2,907, and the value of products, \$7,438,000. These two branches of the industry together employed 86.8 per cent of the average number of wage-earners, and reported 90.6 per cent of the total value of products for the entire industry in 1909.

*Cars and General Shop Construction and Repairs by Steam Railroad Companies.* This industry represents the work done in the car shops, but does not cover minor repairs in roundhouses. It is seventh in importance as measured by value of products, and shows a remarkable development for the ten-year period. In 1909 the industry gave employment to an average of 9,342 wage-earners, the second largest number reported for any manufacturing industry in the State, and the value of the work amounted to \$18,719,000.

*Petroleum Refining.* The refining of petroleum has made remarkable progress in the State during the last few years, the value of the products of the industry in 1909 being \$17,878,000, or over twenty-five times as great as in 1899, when it was only \$698,000.



*Butter, Cheese and Condensed Milk.* This industry, which in California is confined chiefly to the manufacture of butter, has made marked progress during the past decade, the value of products increasing from \$3,583,000 in 1899 to \$12,761,000 in 1909, a gain of 256.2 per cent. The manufacture of cheese and condensed milk decreased materially during the period 1904-1909.

*Leather, Tanned, Curried and Finished.* The tanning, currying and finishing of leather did not become prominent in California until about 1861. From that time, however, it grew rapidly, and since 1877 the local supply of hides and skins has not been large enough to satisfy the requirements of the industry, so that it has been necessary to supplement it by hides and skins brought in from other states or imported from foreign countries.

*Malt Liquors.* This industry shows considerable growth for the decade, being greater, however, for the five-year period, 1899-1904, than for the following five-year period.

*Wines.* The extensive vineyards of California have placed the State far ahead of any other in wine industry. In 1909 the value of the products for the industry in the State, \$8,937,000, represented 68.1 per cent of the total for the United States.

*Gas, Illuminating and Heating.* The manufacture of gas is notable in California, because of the extensive use of petroleum. On account of the lack of coal in the State, the product of the gas plant has been limited to the manufacture of carbureted water gas and oil gas. According to the statistics for 1909, the production of oil gas greatly exceeds that of carbureted water gas. The total value of products reported for the industry in 1909 was \$8,927,000, an increase of \$5,765,000, or 182.3 per cent over that for 1899.

*Cement.* California has numerous beds of soft limestone and clay which are relatively low in magnesia and which are being utilized to a considerable extent for the manufacture of Portland cement. In 1904 there were four establishments engaged in the industry, employing 596 wage-earners and reporting products valued at \$1,601,000, while in 1909 the industry had increased to eight establishments, giving employment to an average of 2,407 wage-earners and reporting a product valued at \$6,504,000. The counties in which the industry is most extensively carried on, named in order of importance, are Solano, Santa Cruz, and San Bernardino.

*The Automobile Industry.* This industry, which in California had its beginning but a short time prior to 1904, shows a very high rate of increase, the value of products in 1909 being more than forty times as great as in 1904.

*Engines and Power.* The following shows the number of engines or other motors, according to their character, employed in generating power (including electric motors operated by purchased current) and their total horsepower in 1899 and 1909. The more general use of gas engines is shown, there being 765 such engines, with an indicated capacity of 10,115 horsepower, in 1909, as against 545 engines with 3,244 horsepower in 1899.

Water wheels show a decrease in number but an increase in total horsepower. The figures also show that the practice of renting electric power is increasing rapidly, 35.4 per cent of the total power being



rented electric power in 1909, as against 7.6 per cent in 1899. The proportion for 1909 is larger than for any other state in the Union. The use of electric motors for the purpose of applying the power generated within the establishments is rapidly becoming more common, the horsepower of such motors having increased from 6,138 in 1899 to 27,147 in 1909.

*Fuel.* Of the fuel consumed in generating this power, a notable fact is the large amount of oil and the small amounts of nearly all other kinds of fuel used. The larger part of this oil is crude oil used as fuel in the generation of steam power, but increasing quantities of refined oil are being used in internal-combustion engines.

Anthracite coal, tons.....	4,421
Bituminous coal, tons.....	43,165
Coke, tons.....	113,665
Wood, cords.....	76,323
Oil, including gasoline, barrels.....	8,883,015
Gas, 1,000 feet.....	302,548

#### MANUFACTURING IN CALIFORNIA, 1900-1909.

The growth of manufacturing in California has made rapid progress, as is shown by the following summary:\*

	1900	1909
Number of establishments.....	12,582	7,659
Capital invested.....	\$205,395,025	\$537,131,000
Average number of wage-earners.....	91,047	115,296
Total salaries and wages.....	\$47,425,947	\$107,097,000
Cost of materials used.....	\$188,125,602	\$325,238,000
Value of products.....	\$302,874,761	\$529,761,000

\*For statistics of the years 1850-1890, see Report for 1913, page 214.

#### Summary of Manufacturing Establishments.

(From the Report of the Census Bureau.)

	Number or amount	
	1889	1909
Number of establishments.....	4,997	7,659
Persons engaged in manufacture.....	*	141,576
Proprietors and firm members.....	*	8,077
Salaried employees.....	6,877	18,203
Wage-earners (average number).....	77,224	115,296
Primary horsepower.....	126,953	329,100
Capital.....	\$175,468,000	\$537,134,000
Expenses.....	\$225,404,000	\$476,154,000
Services--		
Salaries.....	\$7,495,000	\$22,955,000
Wages.....	39,890,000	84,142,000
Totals.....	\$47,385,000	\$107,097,000
Materials.....	\$164,894,000	\$325,238,000
Miscellaneous.....	\$13,125,000	\$43,819,000
Value of products.....	\$257,386,000	\$529,761,000
Value added by manufacture (value of products less cost of materials).....	\$92,492,000	\$204,523,000

\*Figures not available.

*Laundries.* Statistics for steam laundries are not included in these tables, or in the totals for manufacturing industries. In 1909 there were 321 such establishments in California, 87 of which were in San Francisco, 41 in Oakland, 31 in Los Angeles, and 10 in Sacramento.

The following statement summarizes the statistics:

Number of establishments	321
Persons engaged in the industry	9,060
Proprietors and firm members	308
Salaried employees	714
Wage-earners (average number)	8,038
Primary horsepower	8,961
Capital	\$6,295,915
Expenses	8,177,759
Services	5,260,743
Material	1,612,112
Miscellaneous	1,364,904
Amount received for work done	9,541,795

#### Fourteen Leading Manufactures.

Industry	Number of establishments	Persons engaged*	Salaries	Wages	Capital	Value of product
Automobiles	41	589	\$71,000	\$368,000	\$701,000	\$1,470,000
Butter, cheese and condensed milk	161	918	202,000	466,000	2,829,000	12,761,000
Canning and preserving	196	8,714	1,080,000	3,454,000	18,316,000	32,915,000
Cars and steam railway shop construction and repairs	42	9,688	379,000	8,394,000	4,721,000	18,719,000
Cement	8	2,521	195,000	1,650,000	24,014,000	6,564,000
Flour mill and grist mill products	125	1,392	514,000	732,000	13,424,000	25,188,000
Foundry and machine shops	543	10,218	1,832,000	7,312,000	28,693,000	26,731,000
Gas, illuminating and heating	74	2,538	824,000	1,408,000	47,075,000	8,927,000
Leather, tanned, curried and finished	40	1,547	215,000	988,000	8,535,000	9,367,000
Malt liquors	83	1,626	545,000	1,391,000	18,804,000	9,319,000
Wines	181	1,691	429,000	682,000	20,189,000	8,937,000
Lumber and timber products	644	25,079	2,237,000	15,651,000	55,165,000	45,000,000
Petroleum, refining	29	1,146	367,000	801,000	13,881,000	17,878,000
Printing and publishing	1,240	12,215	3,829,000	6,432,000	17,198,000	25,032,000
Slaughtering and meat packing	94	2,135	550,000	1,307,000	11,463,000	34,280,000

\*Includes proprietors and firm members, salaried employees, and wage-earners.

**Manufactures of Twenty-one Cities With a Population of Ten Thousand and Over,  
According to Their Relative Industrial Importance.**

(From the Report of the Census Bureau.)

	Capital		Average number of wage-earners		Value of products	
	1899	1909	1899	1909	1899	1909
San Francisco†	\$69,643,000	\$133,824,000	32,555	28,244	\$107,023,567	\$133,041,069
Los Angeles	10,045,000	59,518,000	5,173	17,327	15,133,696	68,586,274
Oakland	5,173,000	19,113,000	2,476	6,905	5,368,258	22,342,926
Sacramento	6,856,000	10,097,000	3,686	4,514	9,494,633	13,976,911
Stockton	4,454,000	8,250,000	1,185	1,594	5,525,391	11,849,252
Fresno	1,435,000	4,933,000	819	1,938	2,752,201	11,050,195
San Jose	2,980,000	3,815,000	1,221	1,430	3,291,641	5,610,427
San Diego	990,000	5,326,000	255	1,071	669,682	4,740,990
Berkeley	456,000	3,465,000	211	1,084	651,286	4,435,374
Eureka	*	3,306,000	*	946	*	3,011,682
Bakersfield	*	1,791,000	*	746	*	2,818,744
Alameda	749,000	3,002,000	372	915	1,335,326	2,554,417
Vallejo	*	1,559,000	*	203	*	1,895,562
Pasadena	313,000	1,347,000	177	499	330,578	1,724,364
San Bernardino	*	1,242,000	*	729	*	1,659,705
Riverside	*	1,102,000	*	267	*	1,177,962
Santa Barbara	*	895,000	*	265	*	1,169,195
Santa Cruz	*	2,605,000	*	274	*	1,161,269
Long Beach	*	1,326,000	*	277	*	927,180
Pomona	*	630,000	*	224	*	559,651
Redlands	*	1,104,000	*	147	*	518,320

\*Figures not available.

†The remarkable increases shown for Alameda and Berkeley, and also for Oakland, are doubtless due largely to the influx of population and business from San Francisco following the earthquake in 1906.

**Engines and Power.**

Power	Number of engines or motors		Horsepower		Per cent distribution of horsepower	
	1899	1909	1899	1909	1899	1909
<b>Owned:</b>						
Steam	2,158	2,520	105,190	193,526	82.9	58.8
Gas	545	765	3,244	10,115	2.6	3.1
Water wheels	171	115	4,680	7,390	3.7	2.2
Water motors	*	47	*	280	*	0.1
Other			1,609	30	1.3	*
<b>Totals</b>	<b>2,874</b>	<b>3,447</b>	<b>114,723</b>	<b>211,341</b>	<b>90.4</b>	<b>64.2</b>
<b>Rented:</b>						
Electric	*	10,802	9,624	116,537	7.6	35.4
Other			2,606	1,222	2.1	0.4
<b>Totals</b>	<b>2,874</b>	<b>14,249</b>	<b>12,230</b>	<b>329,100</b>	<b>100.0</b>	<b>100.0</b>
<b>Electric motors:</b>						
Run by current generated by establishment	281	1,591	6,138	27,147	38.9	18.9
Run by rented power	*	10,802	9,624	116,537	61.1	81.1
<b>Totals</b>	<b>281</b>	<b>12,393</b>	<b>15,762</b>	<b>143,684</b>	<b>100.0</b>	<b>100.0</b>

\*Not reported.

## PART IX.

## MISCELLANEOUS.

## TRANSPORTATION BY WATER: RIVER TRAFFIC.

**California Fisheries:** Quantity and Value of Salmon; Salmon Rivers; Salmon Catch by Counties; Monterey Sardines; California Oysters. **Game:** Deer; Antelope; Mountain Sheep; Bear; Wild Ducks and Geese; Quail; Grouse; Sage-hen; Doves and Pigeons; Pheasants and Wild Turkeys. **Public Roads:** Mileage of Roads by Counties. **Motor Vehicles.**

## TRANSPORTATION BY WATER.\*

The largest volume of unused water in California comes from the Sacramento and San Joaquin valleys, and it is here that the greatest development in the future will take place. It is not believed that this increased use of water will seriously injure navigation interests, because a large percentage of the water diverted will return to the streams as waste seepage.

The complete utilization of these two rivers will give California the largest rural population of any state in the Union. Whatever expenditure is necessary to protect navigation interests and enable this to be brought about should be made. Even if it requires the construction of locks and the canalizing of both streams, the improvements will be well worth their cost, and as it is a recognized field for the expenditure of government appropriations, a proper presentation of the situation should prove successful. The above is the opinion of such a high authority as Prof. Elwood Mead.

San Francisco Bay, which has an area of about 450 square miles, is by far the most important harbor of the State.

## RIVER TRAFFIC.

The Sacramento is navigable as far as Red Bluff, 262 miles above its mouth, while the San Joaquin is navigable, at high water, as far as Hills Ferry, 195 miles from the mouth. The channel up to Stockton is open throughout the year.

The wheat grown west of the Rocky Mountains enters into a trade distinct from that of the rest of the United States. The farmer of California, Oregon, or Washington looks to Liverpool and other European ports, not to Chicago and Minneapolis, for his market. His product is carried some 18,000 miles before it reaches the English miller, but this route is cheaper than the 2,000-mile haul across the mountains to milling centers of the Mississippi Valley. Local mills grind considerable quantities, but the surplus for export is regularly carried by sea to Europe.

This water service is especially valuable to a considerable area of rich farming land situated on islands in the deltas of the two rivers. Not only is grain an important product, but potatoes, beans, asparagus, and other vegetables are also shipped in large quantities.

\*For further details regarding transportation by water, see Report for 1913, pages 217-220.



## Navigable Streams—Length and Depth at Low Water.

Name and points connecting	Distance in miles	Navigable length	Depth at low water, feet	Traffic, tons	
				In 1905	In 1906
Redwood Creek:					
Mouth to Redwood	-----	1.0	3.0	47,700	-----
San Joaquin River:					
Mouth to Stockton	-----	200	8.0	-----	971,382
Stockton to railroad crossing	-----		3.0	-----	
Stockton to Firebaugh	-----		A few inches	-----	
Mokelumne River:					
Mouth to Galt	-----	20.0	2.0	-----	50,000
Mouth to Snodgrass Slough	13.0	-----	6.0	-----	to 100,000
Sacramento River:					
Mouth to Red Bluff	-----	262.0	2.5	-----	
Mouth to Sacramento	64.0	-----	7.0	-----	375,000
Sacramento to Red Bluff	198.0	-----	2.5	-----	*
Feather River:					
Mouth to Marysville	-----	30.0	1 to 2	5,306	-----
Petaluma Creek:					
Mouth to Petaluma	-----	16.0	4.0	-----	175,025
Napa River:					
Mouth to Napa	-----	16.0	4.0	-----	182,642

\*Steamboat lines only.

## Tonnage of All Freight and of Grain and Live Stock Carried on San Joaquin and Sacramento Rivers.

(Tons of 2,000 pounds.)

Calendar year	San Joaquin River, all freight, tons	Sacramento River, all freight, tons
1900	270,887	461,314
1901	357,746	452,965
1902	322,000	404,900
1903	366,088	383,724
1904	360,486	353,164
1905	373,186	365,957
1906	440,300	375,000
1907	736,472	367,224
1908	509,233	394,945

## Depth of Channel and Distance From Open Sea for California Ports.

Port	Location	Distance from open sea, nautical miles	Depth of channel		Remarks
			Mean low water, feet	Mean high water, feet	
Eureka	Humboldt Bay	5.5	18½	24	At wharves, 15 to 36 feet deep.
San Francisco	San Francisco Bay	14.8	18½	24	
Oakland	San Francisco Bay	14.8	18½	24	
Monterey	Bay of Monterey	3.0	-----	-----	
Port Harford	On the sea	-----	27	-----	At wharves, 15 to 48 feet.
Santa Barbara	On the sea	-----	25	-----	
Los Angeles ports:					
Port Los Angeles	On the sea	-----	34	-----	
Redondo Beach	On the sea	-----	-----	-----	
San Pedro	San Pedro Harbor	1.9	20	25	
San Diego	San Diego Bay	6.1	25	29½	

## CALIFORNIA FISHERIES IN 1909.\*

The principal feature in the California fisheries is a decline in value of products since the year 1904. Although the quantity is greater, fewer men are employed and more motive power in boats.

The quantity of fish, oysters, and whale products caught in 1908 was 645,000 pounds more than in 1899, but the value was \$581,000 less. Cod showed a decline, as did flounders, smelt, sole, and crabs. Oysters fell from \$867,000 in 1899 to \$337,000 in 1908. Salmon showed an increase, the catch amounting to 24 per cent of the total value of the products in 1908, compared with 10 per cent in 1899. Other species that have increased notably are striped bass, barracuda, spiny lobsters, rockfish, catfish, and white sea bass.

The value of the products taken in the shore and boat fisheries in 1908 was \$1,627,000, 38 per cent of which was obtained in the Sacramento River, where salmon was the principal species caught, amounting to 7,292,000 pounds. San Francisco Bay was second in rank, according to the value of products taken in the shore and boat fisheries. Herring was the principal species taken in the bay fisheries, while oysters, smelt, sea bass, rockfish, striped bass, and sardines were also taken in considerable quantities.

The vessel fisheries were credited with products valued at \$343,000, whalebone and whale oil accounting for \$132,000, but the vessel fisheries amounted to only 17 per cent of the total value of the fishery products of the State.

In 1908 salmon stood first, both in quantity and in value, among the species of fish taken in California waters, the State ranking third in the country, both in quantity and in value of the catch of salmon. Of the total quantity, 79 per cent was taken from the Sacramento River. Striped bass ranked second and cod third in value, the latter being taken largely off the coast of Alaska. All were salted, and the catch was 41 per cent less than in 1904.

## SUMMARY OF QUANTITIES AND VALUES.

In the value of products from fisheries, California ranked second among the Pacific coast states, both at the canvass of 1904 and 1908. The river or inland fisheries are confined almost exclusively to the rivers flowing into San Francisco Bay, the largest and most productive of which is the Sacramento.

The following tabular statement gives a summary of the industry for 1908:

Number of persons employed.....	4,129
Vessels and boats, including outfit.....	\$1,066,000
Apparatus of capture.....	\$502,000
Shore and accessory property and cash.....	\$91,000
Value of products.....	\$1,970,000

\*For further details regarding California Fisheries, see Report for 1913, pages 220-225.

The quantity and value of fish taken by the shore and boat fisheries from the different waters of the State in 1908 was as follows:

Fishing ground	Quantity, pounds	Value
Sacramento River .....	11,643,000	\$617,000
San Francisco Bay .....	3,522,000	431,000
Pacific Ocean .....	8,552,000	249,000
Humboldt Bay, including Eel and Mad rivers .....	2,888,000	96,000
Monterey Bay .....	5,248,000	89,000
Monica Bay .....	2,574,000	67,000
Santa Barbara channel .....	1,535,000	62,000
Klamath River .....	433,000	8,900
San Luis Obispo Bay .....	464,000	6,200
Totals .....	36,860,000	\$1,627,000

#### Varieties of Fish Caught in 1908.

Variety	Pounds	Value
Salmon .....	9,211,000	\$471,000
Chinook .....	8,846,000	460,000
Blueback .....	147,000	4,900
Silver .....	141,000	4,200
Steelhead .....	76,000	2,800
Sardines .....	4,638,000	30,000
Sole .....	3,487,000	65,000
Cod (salted) .....	3,298,000	94,000
Barracuda .....	3,205,000	88,000
Flounders .....	3,193,000	80,000
Rockfish .....	2,319,000	60,000
Striped bass .....	1,776,000	135,000
White sea bass .....	1,337,000	42,000
Catfish .....	1,069,000	56,000
Crabs .....	1,702,000	69,000
Oysters .....	729,000	337,000
Abalone (meat and shells) .....	1,235,000	22,000

#### THE SALMON FISHERIES.

The largest, best-known, and most valuable species is the Chinook, or King salmon, which is found from Ventura River to North Sound, Alaska. There are two runs of spawning fish in the Sacramento, the "spring run," in April, May, and June, spawning mainly in the cold water of the McCloud and Fall rivers. The second, or "fall run," occurs in August, September, and October, and these fish spawn in the riffles in the main river, between Tehama and Redding.

In former years the San Joaquin, and the American and Feather rivers of the Sacramento system, had large runs of salmon, but excessive fishing and the operation of various mining and irrigation projects have practically depleted them.

The Eel and Mad rivers of northern California have only a fall run, while the Klamath River has both a spring and a fall run, and the Smith River, in the northern part of the State, has a spring run alone.

The salmon rivers and fishing grounds in California are: Smith River, Klamath River, Humboldt Bay and tributaries, Mad River, Eel River, Mattole River, a small river in the southern part of Humboldt County, Sacramento and San Joaquin rivers, Pit and McCloud rivers, and Battle Creek.

The principal fishing grounds for salmon are Suisun Bay and the lower part of the San Joaquin and Sacramento rivers. Drift gill nets are used almost exclusively. From Sacramento to Anderson there is considerable commercial fishing with haul seines. The southernmost point on the coast where salmon are taken commercially is Monterey Bay.

*Persons Employed.* The total number of persons employed in the salmon fisheries in 1909 was 2,675, Contra Costa County leading with 774 persons. These are classified as follows:

	Fishermen	Shoremen	Transporters
White .....	2,114	276	-----
Japanese .....	168	5	-----
Chinese .....	15	-----	-----
Indians .....	-----	15	-----
Totals .....	2,297	296	82

The total catch in 1909 amounted to 12,141,937 pounds, valued at \$585,995. Contra Costa leads in catch, followed closely by Solano County. Nearly four-fifths of the catch were made with gill nets, while Chinook salmon comprise almost all of the catch.

#### Production and Value by Species.

Species	Pounds	Value
Blueback .....	21,000	\$689
Chinook (fresh) .....	11,893,199	575,542
Chinook (salted) .....	69,049	4,552
Silver (fresh) .....	99,500	2,675
Silver (salted) .....	46,000	1,900
Dog .....	4,200	84
Steelhead trout .....	8,989	553
Totals .....	12,141,937	\$585,995

#### Production and Value of Salmon Catch by Counties in 1909.

County	Pounds	Value
Del Norte .....	655,225	\$12,852
Humboldt .....	864,198	34,124
Marin .....	5,330	310
San Francisco .....	91,063	4,055
Solano .....	3,238,788	168,713
Contra Costa .....	3,949,080	211,166
San Joaquin .....	61,187	2,585
Yolo .....	197,520	10,852
Sacramento .....	599,723	32,690
Sutter .....	62,119	1,917
Butte .....	163,022	8,285
Glenn .....	72,547	3,627
Tehama .....	314,102	16,905
Shasta .....	46,475	2,789
Monterey* .....	1,779,524	73,134
Santa Cruz* .....	41,984	1,991
Totals .....	12,141,937	\$585,995

\*With lines.



## Statistics by Waters in 1909.

*Persons Employed.* Of the 2,675 persons employed in the industry, 1,880 were on Sacramento River; the next largest number was employed on Monterey Bay.

	Fishermen	Shoremen	Transporters	Total
Smith River -----	47	32		79
Klamath River -----	37		3	40
Mad River -----	41			41
Humboldt Bay -----	7	6		13
Eel River -----	291	13		304
Sacramento River -----	1,582	219	79	1,880
Monterey Bay -----	292	26		318
Totals -----	2,297	296	82	2,675

## Products and Value of the Salmon Catch by Waters.

Waters	Pounds	Value
Smith River -----	94,000	\$3,200
Klamath River -----	561,225	9,652
Mad River -----	108,900	4,286
Humboldt Bay -----	28,000	840
Eel River -----	727,298	28,998
Sacramento River -----	8,801,006	463,894
Monterey Bay -----	1,821,508	75,125
Totals -----	12,141,937	\$585,995

## Canned and Cured Salmon.

## Mild, Cured, and Smoked Salmon in 1909.

River	Mild, cured Chinook		Smoked				Total	
			Chinook		Silver			
	Pounds	Value	Pounds	Value	Pounds	Value	Pounds	Value
Eel -----	64,000	\$6,400	50,000	\$5,000	3,000	\$300	117,000	\$11,700
Sacramento ----	4,095,162	450,019	56,550	8,943	4,660	326	4,156,372	459,288
Monterey Bay ---	728,800	64,049	4,000	700			732,800	64,749
Totals -----	4,887,962	\$520,468	110,550	\$14,643	7,660	\$626	5,006,172	\$535,737

## Sacramento Canned Salmon.

The quantity of canned salmon from the Sacramento River since 1873 increased rapidly the first ten years, until it touched upwards of 200,000 cans in 1882; since that year the quantity packed rapidly declined until 1905, only 2,780 cases were canned. Since then local industry has lapsed, as the cost of the fish was so high that it did not pay.

## Codfish Catch, 1913-1914.

The codfish catch of the San Francisco fishing fleet in 1913 amounted to 1,639,847 fish, and in 1914 to 2,439,202.

## Sardine Fishery.

A regular sardine fishery exists in Monterey Bay, where large quantities are caught and packed. In 1913 the quantity packed at Monterey amounted to 8,750,000 pounds, and in 1914 to 7,500,000 pounds.

## Pack of Tunny Fish.

The pack of tunny fish, which was only commenced a year or two ago at San Pedro, Los Angeles County, shows a steady increase, the output being:

Year	Cases
1911 -----	42,000
1912 -----	90,000
1913 -----	115,000
1914 -----	325,000

## Abalones.

More than two thirds of the catch in this State comes from Monterey Bay.

## California Oysters Produced.

The production of oysters varies considerably. The figures are not available for every year, but the following summary will give some idea of the size and value of the industry.

Year	Bushels	Value
1890 -----	151,325	\$502,137
1895 -----	163,636	539,497
1899 -----	420,000	867,000
1904 -----	188,613	628,023
1908 -----	104,000	337,000
1912 -----	68,037	280,344

In California the oyster industry, including the cultivation of oysters and the oyster trade, centers in San Francisco, and the oyster grounds are located chiefly in San Francisco Bay, although there are oyster grounds also in Tomales and Humboldt bays. The oyster product of the State is all obtained from private grounds, and the season extends practically through the entire year. Of the 68,000 bushels produced in 1913 all, except 600 bushels of native oysters, valued at \$1,800, were Eastern oysters, grown from seed oysters brought from the Atlantic coast and planted on the local beds.

## CALIFORNIA GAME.\*

The game animals are so valuable in California that the title to them has been retained by the State, and the fees charged for licenses, which expire annually on June 30th, amount to a considerable sum.

The rates are: Residents, \$1; nonresidents, \$10, and aliens, \$25.

The receipts in the last four years have been: 1910-11, \$143,265; 1911-12, \$146,181; 1912-13, \$115,984; and 1913-14, \$164,111.

### Fish and Game Districts.

In California there are so many different conditions of climate and topography that it is almost impossible to create a blanket fish and game law. When deer, for example, are in proper condition to be killed in one section they are out of condition in another. The legislature in 1915 divided the State into twenty-nine fish and game districts.

*Deer.* It is reported in many parts of the State that deer are on the increase, but this is doubtful. There are probably killed in the State each year by hunters 10,000 deer. It has been estimated that every mountain lion will kill at least 52 deer a year; estimating the lions at 250, the number devoured by them would amount to 13,000. Coyotes and other animals would probably bring the total number destroyed to near 30,000. In average years the natural death rate is not great; most of them meet violent deaths, so the above number can be accepted as the number of deer dead from all causes in the State. The total number killed in 1911 was 6,489; in 1912, 7,537; and in 1913, 8,269.

*Elk and Antelope.* Of the thousands of these animals that formerly ranged the State, there are now but a few scattered bands. In the San Joaquin Valley, near Buttonwillow, and in the Sequoia National Park range are all that are left of the thousands of "tule," a dwarf elk that formerly were found throughout the San Joaquin and Sacramento valleys. This species is peculiar to California, and now only number between 400 and 500 head.

Another variety is found in small numbers in Humboldt and Del Norte counties, in bands numbering from six to twelve, but the total number probably does not exceed 200.

*The Antelope.* The antelope is still found in the extreme eastern part of the State; some are found in Antelope Valley, in the northeastern part of Los Angeles County, while in the western San Joaquin Valley the largest band of the State is found. In Modoc, Lassen, and Siskiyou counties there are several small bands. All told, there are probably about 600 antelope left in the State.

*Mountain Sheep.* These still flourish in considerable numbers in the southeastern part of the State. Formerly this magnificent game animal ranged over the entire Sierra Nevada region and across to the lower Coast Range, as far north as San Luis Obispo County, but they are now restricted to the most inaccessible portions.

*Bear.* The grizzly bear is practically extinct. The common brown or black bear is fairly abundant in some parts. It is for the most part a harmless species, feeding on roots, berries, grubs and insects, and

\*See Report of the California Fish and Game Commission, 1910-12 and 1912-14.

rarely kills sheep or hogs. The pelt of a well-colored bear in prime condition is worth from \$20 to \$40.

*Fur-bearing Animals.* Few people realize the importance of fur-bearing animals in this State, yet each year furs worth nearly \$200,000 are shipped to the various fur centers.

*Wild Ducks and Geese.* These are the most abundant game birds in the State, although neither of them are nearly as numerous as they were in former years. Ducks breed throughout the entire State, and the number killed in California in 1911 is estimated at approximately one million.

*Quail.* Quail are slowly decreasing throughout most of the State, on account of the great number of hunters. In parts of the State there is urgent need of a close season for a number of years if quail are to be kept from extermination. Mountain quail have become very scarce throughout the southern end of the State, and in the coast region below San Francisco. In other parts of the State they are about holding their own.

*Grouse.* Ruffed grouse are fairly abundant in the extreme northwestern corner of the State. The blue grouse is becoming scarcer, and where the settlers have engaged in sheep raising, they are almost extinct.

*The Sage Hen.* This bird is found only in the eastern part of the State, in the true sagebrush country. The sage hen is practically never found below an elevation of 3,000 to 4,000 feet, nor out of the true sagebrush country. It is the largest California game bird.

*Doves and Pigeons.* The most difficult bird to arrange a proper season for is the common mourning dove, January being the only month in which they do not nest. On this account many sportsmen advocate the removal of the dove from the list of game birds. There is urgent need for the protection of the wild (band-tail) pigeon. This is the slowest breeding game bird in the United States. One egg is the complete set, and probably only one egg is laid the entire year.

*Pheasants and Wild Turkeys and Hungarian Partridges.* Of the introduced game birds, ring-neck pheasants have done well, especially in Humboldt County; they have also increased in parts of Santa Clara and San Joaquin valleys. Wild turkeys have been liberated in the lower Sierra Nevada region; other plants have been made in San Diego, San Bernardino, Monterey, San Benito, Alameda, Sonoma, and Humboldt counties. Hungarian partridges have been given a good trial, but, as yet, without success.

## PUBLIC ROADS.

The total mileage of public roads in the United States in 1909 was 2,199,645 miles, and the total of improved roads 190,476 miles, made up as follows: Stone 59,237 miles, gravel 102,870 miles, other material 28,372 miles. Indiana leads all other states in the mileage of improved roads, with 24,955 miles; Ohio is second, New York third, California seventh, and Massachusetts eighth. A decrease in improved roads is reported from California, Michigan, Minnesota, and Wisconsin.

The practice of improving the earth roads by the use of oil in California has been, to a large extent, discontinued, and this has had the



effect of cutting down the mileage of that class of roads considerably, and so reducing the total mileage of improved roads. The information from some of the counties is not altogether satisfactory, but the figures are as accurate and complete as it was possible to obtain at the time. California had, at the close of 1909, 48,069 miles of public roads, which exceeds the total mileage reported for 1904 by 1,416 miles.

Of the total mileage of public roads in the State, 579 miles are reported as having been surfaced with stone, 6,054 miles with gravel, 1,289 miles with sand clay, and 653 miles with oiled earth, making a total mileage of improved roads of 8,587, or 17.87 per cent. This is about 1 per cent less than was reported in 1904, and this decrease is due principally to the fact that the oiling of earth roads has been abandoned to a large extent, for while there were 2,541 miles of earth roads reported to have been oiled in 1904, there were only 653 miles of oiled roads reported in 1909.

**Motor Vehicle Registration and Revenues, 1914.**

(Compiled by U. S. Department of Agriculture.)

	California	Total United States
Automobiles .....	123,504	1,666,984
Motorcycles .....	24,709	152,945
Owners and chauffeurs' licenses .....	18,601	427,179
Manufacturers' and dealers' licenses .....	927	21,255
Automobile fines to State road fund .....		\$101,364 00
Gross registration revenues .....	\$1,338,785 25	\$12,270,035 00
Net registration revenues .....	\$1,182,457 14	

New York had the largest number of automobiles, 150,898 in 1914; Illinois, 131,140; California, 123,504; Ohio, 122,504; and Iowa, 106,087. Other states have under 100,000. The automobile registrations in this State from January 1 to June 1, 1915, was 133,419, and motorcycles, 22,100.

TABLE XXXVII.  
Miles of Public Roads in 1909.

Counties	Total mileage of all public roads	Mileage of improved roads					Approximate percentage of roads improved
		Stone	Gravel	Sand clay	Oiled	Total	
Alameda	765	25	400			425	55.55
Alpine	100						
Amador	500	15	20			35	7.00
Butte	1,200	5	400			405	33.75
Calaveras	606	5	40			45	7.42
Colusa	578		302			302	52.24
Contra Costa	500		100	10	40	150	30.00
Del Norte	125		30			42.5	34.00
El Dorado	900			5		5	.55
Fresno	1,500			20	150	170	11.33
Glenn	500		138			138	27.60
Humboldt	1,130	10	300	105		415	36.72
Imperial	726						
Inyo	500						
Kern	1,100	2			100	102	9.27
Kings	500				92	92	18.40
Lake	488		160			160	32.78
Lassen	720		25	25		50	6.94
Los Angeles	1,500	285	1,000			1,085	72.33
Madera	410				30	30	7.31
Marin	309						
Mariposa	355						
Mendocino	1,200						
Merced	450	1	136			137	30.44
Modoc	766		10			10	1.30
Mono	380						
Monterey	600	50	50			100	16.66
Napa	560	3	450			453	80.89
Nevada	600	30				30	5.00
Orange	500		25	5		30	6.00
Placer	775	7				7	.90
Plumas	385		10			10	2.59
Riverside	800	4	48	2		54	6.75
Sacramento	1,500	86	20			106	7.06
San Benito	451		160	150		310	68.73
San Bernardino	3840						
San Diego	5,200			450		450	8.65
San Francisco	4						
San Joaquin	990	12	25			37	3.73
San Luis Obispo	1,100		162		1	163	14.82
San Mateo	350	131	65	15	17	228	65.14
Santa Barbara	750	16	45		5	66	8.80
Santa Clara	1,200	20	600	200	6	826	68.83
Santa Cruz	420	12.25	25	6	7	50.25	11.96
Shasta	1,575		66	170		236	14.98
Sierra	525						
Siskiyou	2,625	.5	20	4		24.5	.93
Solano	630	9	25	1		35	5.55
Sonoma	1,260	35	600	120		755	59.92
Stanislaus	470		55			55	11.70
Sutter	350	8	50			58	16.57
Tehama	650	5	60	1		66	10.15
Trinity	200		5			5	2.50
Tulare	2,285				60	60	2.62
Tuolumne	290		52		15	67	23.10
Ventura	700				100	100	14.28

TABLE XXXVII—Continued.

## Miles of Public Roads in 1909.

Counties	Total mileage of all public roads	Mileage of improved roads					Approximate percentage of roads improved
		Stone	Gravel	Sand clay	Oiled	Total	
Yolo -----	680	2.5	360	-----	30	392.5	57.72
Yuba -----	1,000	-----	15	-----	-----	15	1.50
Totals -----	48,069	579.25	6,054	1,289	653	8,587.75	17.87

## Increase in Five Years.

Year 1904 -----	46,653	418.5	5,843.5	-----	2,541	8,803	18.87
Year 1909 -----	48,069	579.25	6,054	1,289	653	8,587.75	17.87
Increase -----	1,416	160.75	210.5	289	-----	-----	-----

<sup>1</sup>Includes 12.5 miles of wood puncheon road. <sup>2</sup>Bituminous—macadam. <sup>3</sup>This is exclusive of roads in the Mojave Desert, which comprises about 85 per cent of the county. <sup>4</sup>Included in the city of San Francisco. No county roads in this county.

TABLE XXXVIII.

## Cost Data of Roads in 1909.

County	Average cost per mile			
	Sand clay	Gravel	Macadam	Bituminous
Alameda -----	-----	*\$1 35	*\$1 35	-----
Del Norte -----	-----	2,500 00	-----	-----
Glenn -----	-----	†89	-----	-----
Humboldt -----	-----	*60	*95	*
Los Angeles -----	-----	-----	-----	\$11,000 00
Merced -----	-----	-----	9,000 00	-----
Nevada -----	-----	1,400 00	-----	-----
Riverside -----	-----	*14	-----	*76
Sacramento -----	-----	-----	-----	7,500 00
San Diego -----	\$625 00	-----	-----	*1 62
San Mateo -----	-----	-----	*59	*1 73
Santa Barbara -----	-----	-----	-----	7,800 00
Santa Clara -----	200 00	1,000 00	6,000 00	8,000 00
Santa Cruz -----	-----	-----	5,200 00	-----
Shasta -----	-----	1,500 00	-----	-----
Siskiyou -----	-----	1,000 00	-----	-----
Sonoma -----	-----	*1 25	*1 87	-----
Tehama -----	-----	850 00	1,300 00	-----
Yolo -----	-----	*10	*63	-----
Average -----	\$412 00	\$1,375 00	\$5,375 00	\$8,575 00

\*Average cost per square yard: Gravel, 69 cents; macadam, \$1.08; bituminous, \$1.37.

†Cost per cubic yard

## PART X.

## FINANCE AND TAXATION.

**Tariff Acts 1789-1913; Foreign Trade and California Ports 1880-1914;  
Total Assessed Value by Counties 1910-1914. Assessed Value of  
All Property, 1850-1914.\***

## TARIFF ACTS.

Tariff Acts Passed by Congress.

(From 1789 to 1913.)

1789. July 4th.	1861. August 5th.
1790. August 10th.	1862. July 14th.
1791. March 3d.	1863. March 3d.
1792. May 2d.	1864. June 30th.
1794. June 7th.	1865. March 3d.
1795. January 29th.	1866. July 28th.
1797. March 3d.	1867. March 2d.
1800. May 13th.	1870. July 14th.
1804. March 27th.	1872. June 6th.
1816. April 27th.	1875. February 8th.
1818. April 20th.	1883. March 3d.
1824. May 22d.	1890. June 10th.
1828. May 19th.	1890. October 1st (McKinley bill).
1832. July 14th.	1894. August 27th (Wilson bill).
1833. March 2d.	1897. July 24th (Dingley bill).
1842. August 30th.	1905. March 3d (Philippine tariff).
1846. July 30th.	1909. August 5th (Paine-Aldrich bill).
1857. March 3d.	1909. August 5th (Philippine tariff).
1861. March 2d.	1913. October 3d (Wilson bill).

In addition to the above 38 acts, there are 224 other miscellaneous acts, proclamations, and joint resolutions, making a total of 262 on the subject of the tariff. The act passed last year, which came into effect on October 4, 1913, makes a considerable reduction on agricultural products and places many articles on the free list.

## FOREIGN TRADE AND CALIFORNIA IMPORTS AND EXPORTS.

<i>Custom districts and ports.</i>	<i>Sub-ports of entry.</i>
San Francisco -----	Oakland, Port Harford, Monterey.
Los Angeles -----	Santa Barbara, Redondo Beach and San Pedro.
San Diego -----	-----
Humboldt -----	Eureka.

\*For statistics regarding State and National Banks, Steam and Electric Railroads, and Insurance, see Report for 1913, pages 240-250.



TABLE XXXIX.  
TARIFF CHANGES, 1909 AND 1913.  
Summary of Principal Agricultural Products.

Article	Act of August 5, 1909	Act of October 3, 1913
Agricultural implements and machines.....	15 per cent	Free
Apples, peaches, pears, quinces, cherries, plums.....	25¢ bushel	10¢ bushel
Apricots and peach kernels.....	4¢ pound	3¢ pound
Bananas.....	Free	No change
Beans and peas, prepared.....	2½¢ pound	1¢ pound
Beans.....	45¢ bushel	25¢ bushel
Beeswax.....	Free	No change
Beets.....	25 per cent	5 per cent
Beets (sugar).....	10 per cent	5 per cent
Berries, in natural state.....	1¢ quart	½¢ quart
Brandy and other spirits.....	\$2.60 proof gal.	No change
Casks, barrels, packing boxes.....	30 per cent	15 per cent
Champagne.....	\$9.60 per dozen	No change
Cider.....	5¢ per gallon	2¢ per gallon
Cotton, raw.....	Free	No change
Cranberries.....	25 per cent	10 per cent
Currants, Greek.....	2¢ pound	1½¢ pound
Dates.....	1¢ pound	No change
Eggs (fresh).....	Free	No change
Evaporated fruits.....	2¢ pound	1¢ pound
Figs.....	2½¢ pound	2¢ pound
Fruit plants, tropical.....	Free	No change
Grapes (in packages).....	25¢ cubic foot	No change
Honey.....	20¢ gallon	10¢ gallon
Lemons.....	1½¢ pound	*
Oranges, limes, pomeloes.....	1¢ pound	*
Nursery stock.....	25 per cent	15 per cent
Nuts—		
Almonds, unshelled.....	6¢ pound	4¢ pound
Walnuts, shelled.....	4¢ pound	3¢ pound
Walnuts, unshelled.....	5¢ pound	4¢ pound
Filberts, shelled.....	3¢ pound	2¢ pound
Filberts, unshelled.....	5¢ pound	4¢ pound
Peanuts, shelled.....	3¢ pound	2¢ pound
Peanuts, unshelled.....	1¢ pound	3¢ pound
All other nuts.....	½¢ pound	¾¢ pound
All other nuts.....	1¢ pound	No change
Olives, in bottles, less than 5 gallons.....	25¢ gallon }	15¢ gallon
Olives, in packages, over 5 gallons.....	15¢ gallon }	
Olive oil in bottles, less than 5 gallons (edible).....	50¢ gallon	30¢ gallon
Other olive oil.....	40¢ gallon	20¢ gallon
Olive oil fit only for mechanical or manufacturing purposes.....	Free	No change
Petroleum and mineral oils.....	Free	No change
Onions.....	40¢ bushel	20¢ bushel
Peas, green or dried.....	25¢ bushel	10¢ bushel
Pickles and sauces.....	40 per cent	25 per cent
Pineapples in barrels or packages.....	8¢ cubic feet	6¢ cubic feet
Pineapples preserved in own juice.....	25 per cent	20 per cent
Potatoes (from countries imposing duty on American potatoes).....	25¢ bushel	10 per cent
Potatoes.....	25¢ bushel 60 lbs.	Free
Poultry, live.....	3¢	1¢
Poultry, dead.....	5¢	2¢
Prunes.....	2¢ pound	1¢ pound
Raisins and dried grapes.....	2½¢ pound	2¢ pound
Rice, cleaned.....	2¢ pound	1¢ pound
Rice, uncleaned.....	1½¢ pound	¾¢ pound
Sugar.....	Various rates	†
Sugar beets. (See beets).....		
Vegetables, prepared or pickled.....	40 per cent	25 per cent
Vegetables, natural, not otherwise specified.....	25 per cent	15 per cent
Vinegar.....	7½¢ per proof gal.	4¢ per proof gal.
Wine and brandy.....	Various rates	No change

\*In packages, capacity 1½ cubic feet, or less, 18¢ per package; exceeding 1½ cubic feet and not exceeding 2½ cubic feet, 35¢ per package; exceeding 2½ cubic feet and not exceeding 5 cubic feet, 70¢ per package; exceeding that size or in bulk, ½ of 1¢ per pound.

†No change till March 1, 1914, when a reduction of about 12½ per cent took place. After May 1, 1916, sugar will be admitted free.

TABLE XXXIX—Continued.  
Farm Animals and Dairy Products.

Commodity	Before October 4, 1913	October 4, 1913, and after
<b>Animals:</b>		
Asses .....	Breeding purposes and teams of immigrants, free; all other, 20 per cent ad valorem.	Breeding purposes and teams of immigrants, free; all other, 10 per cent ad valorem.
Cattle .....	Breeding purposes and teams of immigrants, free; all other: less than 1 year, \$2 per head; all other, worth not over \$14, \$3.75 per head; worth over \$14, 27½ per cent ad valorem.	Free.
Goats .....	20 per cent ad valorem.	Free.
Horses .....	Breeding purposes and teams of immigrants, free; all others: worth \$150 or less per head, \$30; worth over \$150, 25 per cent ad valorem.	Breeding purposes and teams of immigrants, free; all other, 10 per cent ad valorem.
Mules .....	Same as horses.	Same as horses.
Sheep .....	Breeding purposes, free; all other: less than 1 year old, 75 cents per head; 1 year old and over, \$1.50.	Free.
Swine .....	Breeding purposes, free; all other, \$1.50 per head.	Free.
<b>Dairy products:</b>		
Butter .....	6 cents per pound.	2½ cents per pound.
Cheese .....	6 cents per pound.	20 per cent ad valorem.
Cream .....	5 cents per gallon.	Free.
Milk .....	Fresh, 2 cents per gallon; condensed and evaporated, 2 cents per pound.	Free.
Hides and skins, raw .....	Free	Free.
<b>Meat:</b>		
Beef and veal .....	Fresh beef, 1½ cents per pound; other beef, 25 per cent ad valorem; veal, 1½ cents per pound.	Free.
Mutton and lamb .....	1½ cents per pound.	Free.
Pork .....	Fresh, 1½ cents per pound; bacon and hams, 4 cents per pounds; other pork, 25 per cent ad valorem.	Free.
Sausage .....	Bologna, or frankfurter, free; other sausage, 25 per cent ad valorem.	Free.
Wool .....	Class 1, clothing, etc., wools: unwashed, 11 cents per pound; washed, 22 cents; scoured, 33 cents. Class 2, combing, etc., wools: unwashed, 12 cents per pound; washed, 12 cents; scoured, 36 cents. Class 3: value not over 12 cents per pound, 12 cents; over 12 cents, 21 cents.	Free on and after Dec. 1, 1913.

Cereals, Hay, Hops, and Straw.

Barley, 30¢ per bushel of 48 pounds .....	15¢ per bushel
Broom corn, \$3 per ton .....	Free
Buckwheat, 15¢ per bushel of 48 pounds .....	Free
Corn, 15¢ per bushel of 56 pounds .....	Free
Oats, 15¢ per bushel of 32 pounds .....	6¢ per bushel
Rye, 10¢ per bushel .....	Free
Wheat, 25¢ per bushel .....	Free
Wheat flour, 25 per cent ad valorem .....	Free
Hay, \$4 per ton .....	\$2 per ton
Hops, 16¢ per pound .....	No change
Straw, \$1.50 per ton .....	50¢ per ton

TABLE XL.

Imports and Exports of Gold and Silver (Coin and Bullion) of California Ports,  
1890-1914, for fiscal year ending June 30.

San Francisco.

Year	Gold		Silver		Gold and silver	
	Imports	Exports	Imports	Exports	Total imports	Total Exports
1890	\$1,751,582	\$1,520,262	\$3,269,267	\$13,258,391	\$8,020,849	\$14,778,653
1891	6,358,074	1,646,118	3,634,455	5,609,371	9,992,529	7,255,489
1892	9,736,872	803,791	3,086,706	9,458,354	12,823,578	10,262,145
1893	5,508,193	1,110,013	2,661,819	13,870,229	8,170,012	14,980,242
1894	2,693,636	1,202,443	2,126,973	13,142,267	4,820,609	14,344,710
1895	1,858,878	708,293	1,971,768	13,344,012	3,830,646	14,052,305
1896	1,206,234	854,554	2,642,372	11,763,449	3,848,606	12,618,003
1897	9,647,628	1,083,945	2,611,694	9,459,133	12,259,322	10,543,078
1898	25,799,405	1,217,490	2,472,347	9,514,531	28,271,752	10,732,021
1899	32,124,013	1,774,717	2,551,666	4,889,974	34,675,679	6,664,691
1900	10,574,256	2,025,189	3,096,775	7,502,120	13,671,031	9,527,309
1901	24,911,109	364,758	3,738,814	7,927,900	28,649,923	8,292,658
1902	14,338,906	781,826	4,169,221	8,368,761	18,508,127	9,150,587
1903	9,263,674	3,114,023	2,679,547	6,392,414	11,943,221	9,506,437
1904	40,366,770	652,277	3,492,909	4,600,950	43,859,679	5,253,227
1905	15,590,871	5,905,700	3,003,796	6,622,002	18,594,667	12,527,702
1906	4,233,579	5,366,189	2,513,861	9,417,951	6,747,440	14,784,140
1907	14,504,917	22,391	3,414,584	2,410,717	17,919,501	2,433,108
1908	3,759,329	34,539	3,164,428	5,182,657	6,923,757	5,217,196
1909	3,588,424	3,033,975	2,652,954	6,886,849	6,241,378	9,920,824
1910	3,362,104	27,008,324	2,582,352	7,314,954	5,944,456	34,323,278
1911	8,111,108	20,690	1,579,109	9,262,759	9,690,217	9,283,449
1912	4,532,321	7,034,962	1,453,089	9,905,094	5,985,410	16,940,056
1913	3,941,975	113,108	1,808,461	11,753,927	5,750,436	11,867,035
1914	1,831,388	5,090	1,646,866	9,494,498	3,478,254	9,499,588

TABLE XL—Continued.

## Imports of Gold and Silver Into San Diego and Los Angeles, 1900-1913.

Year	Los Angeles			San Diego		
	Gold	Silver	Total gold and silver imports	Gold	Silver	Total gold and silver imports
1900	\$50		\$50	\$62,319	\$948	\$63,267
1901				67,392		67,392
1902				46,690	948	47,638
1903		\$172	172	14,233		14,233
1904		25	25	16,774	418	17,192
1905				32,565		32,565
1906		*172	*172	9,695		9,695
1907				4,915	996	5,911
1908	25		25	10,553	997	11,550
1909	50		50	29,066		29,066
1910				26,638		26,638
1911				11,481		11,481
1912	6,000		6,000	16,053	4,686	20,739
1913				6,640		6,640

## Southern California 1914.†

1914				22,009	27,146	49,155
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NOTE.—The custom district of Los Angeles was established in 1883, and that of San Diego in 1879. No gold or silver is exported except through San Francisco.

†Since 1913 the returns for Los Angeles and San Diego are combined under this heading.

\*Also \$1,000 in silver exported.



TABLE  
Imports and Exports of Foreign and Domestic  
(For fiscal year

Year	San Francisco		Los Angeles	
	Imports	Exports	Imports	Exports
1890 -----	\$48,751,223	\$36,876,091	\$169,955	\$220
1891 -----	50,943,299	40,168,771	315,226	-----
1892 -----	47,135,684	40,737,044	398,517	42,535
1893 -----	45,291,099	31,144,180	502,044	-----
1894 -----	38,146,626	24,903,009	445,966	102,943
1895 -----	36,269,637	24,873,148	657,671	6,696
1896 -----	41,400,317	31,582,910	679,944	30,487
1897 -----	34,375,945	39,647,606	504,028	7,499
1898 -----	42,822,945	41,223,759	476,042	110,440
1899 -----	35,746,577	30,214,904	769,472	4,090
1900 -----	47,869,628	40,368,288	1,011,090	-----
1901 -----	35,161,753	34,596,792	885,473	30
1902 -----	35,102,981	38,183,755	676,615	80
1903 -----	36,454,283	33,502,616	1,019,481	682
1904 -----	37,542,978	32,547,181	1,292,560	503
1905 -----	46,675,545	49,924,026	810,000	291
1906 -----	44,433,271	39,915,269	827,059	12,105
1907 -----	54,094,570	33,026,664	1,559,322	45,000
1908 -----	48,251,476	28,000,069	1,538,199	187,247
1909 -----	49,998,111	31,669,370	1,305,341	193,221
1910 -----	49,350,643	31,180,760	1,942,647	135,911
1911 -----	53,885,021	40,624,903	2,655,558	86,415
1912 -----	59,235,471	49,249,734	3,225,618	161,735
1913 -----	62,501,681	66,021,385	2,747,601	253,562

NOTE.—The customs district of San Francisco was established September 28, 1850; that of San Diego in 1879; Los Angeles (Wilmington) and Humboldt in 1883.

\*For the imports and exports, 1851-1879, see Report for 1912, pages 266-267.

## XLI.

## Merchandise From California Ports, 1889-1913.\*

ending June 30.)

San Diego		Humboldt		Total*	
Imports	Exports	Imports	Exports	Imports	Exports
\$437,665	\$264,644	\$1,549	\$108,051	\$49,360,392	\$37,249,006
538,066	394,824	4,005	154,503	51,800,596	40,718,098
380,770	441,200	3,925	151,553	47,918,906	41,372,332
407,236	79,443	1,571	138,008	46,201,950	31,361,631
383,399	379,586	-----	106,750	38,975,991	25,492,288
346,155	45,225	2,110	106,594	37,275,573	25,031,663
324,465	196,419	1,460	102,440	42,406,186	31,912,256
222,063	199,540	1,183	162,027	35,103,219	40,016,672
198,417	491,139	1,181	146,725	43,498,645	41,972,063
397,115	1,425,861	2,006	195,678	36,915,170	31,840,533
559,585	2,739,174	1,528	253,616	49,441,831	43,361,078
511,661	963,014	-----	163,682	36,558,887	35,723,518
440,239	255,833	1,908	319,550	36,221,743	30,759,218
417,557	168,993	3,423	497,810	37,894,744	34,170,101
459,786	317,830	7,107	550,436	39,302,431	33,415,950
275,631	320,533	1,821	140,441	47,762,997	50,385,291
464,634	299,579	4,283	737,940	45,729,247	40,964,893
653,789	809,809	1,173	677,092	56,308,854	34,558,565
722,359	641,223	10,736	759,726	50,522,770	29,788,265
535,257	397,626	4,862	894,228	51,843,571	33,154,445
741,916	928,994	6,317	1,031,182	52,041,523	33,276,847
875,184	1,022,481	6,779	1,058,615	57,422,542	42,792,414
1,076,990	1,092,159	7,622	1,231,441	63,545,701	51,735,069
1,022,904	1,137,116	8,330	1,028,046	66,280,516	68,440,109

On account of the reorganization of the custom districts since 1913, they having been consolidated into San Francisco for the northern ports, and southern California for the southern ports, the above detailed classification can not be continued.

\*To these totals must be added the total imports and exports of gold and silver in Table XL.

Year	San Francisco		Southern California	
	Imports	Exports	Imports	Exports
1914 -----	\$67,111,081	\$63,374,909	\$4,908,543	\$2,010,280

TABLE XLII.

Grand Total Value of All Assessed Property in California,\* 1911-1914.

(From the Reports of the State Controller's Department.)

Counties	1911	1912	1913	1914
Alameda -----	\$206,308,270	\$243,043,586	\$256,363,895	\$252,751,974
Alpine -----	535,819	539,905	546,189	550,359
Amador -----	6,187,293	6,081,630	6,154,014	6,299,280
Butte -----	23,906,913	25,469,997	25,135,048	25,247,155
Calaveras -----	6,657,802	6,607,594	7,920,748	8,010,010
Colusa -----	13,626,337	14,685,281	15,485,375	15,662,550
Contra Costa -----	39,658,989	42,631,665	47,731,341	52,204,930
Del Norte -----	4,813,887	4,880,765	5,079,461	5,078,804
El Dorado -----	6,528,442	6,785,170	6,954,117	7,104,168
Fresno -----	70,616,735	78,998,660	92,261,816	96,567,818
Glenn -----	15,888,617	16,980,132	17,261,076	17,576,399
Humboldt -----	29,716,743	34,958,314	34,164,968	33,793,967
Imperial -----	16,034,094	17,002,655	21,554,632	25,757,829
Inyo -----	5,763,912	6,268,862	9,505,223	12,233,464
Kern -----	65,843,625	73,253,382	80,529,757	85,347,560
Kings -----	14,283,622	15,356,486	16,021,104	16,237,992
Lake -----	3,662,007	4,824,106	4,850,106	4,802,733
Lassen -----	6,990,498	7,431,405	8,338,937	9,336,777
Los Angeles -----	607,182,762	726,110,668	804,111,796	849,991,595
Madera -----	11,125,904	14,388,045	14,848,773	15,754,791
Marin -----	20,285,223	21,003,985	22,020,030	23,460,510
Mariposa -----	3,480,405	3,567,315	3,608,137	3,643,117
Mendocino -----	15,617,974	16,334,097	18,147,700	18,380,047
Merced -----	22,251,637	25,001,574	25,366,168	25,576,932
Modoc -----	6,488,434	6,691,970	7,709,392	7,972,273
Mono -----	1,349,890	1,437,518	1,946,359	1,831,331
Monterey -----	31,103,836	31,769,895	32,702,889	32,363,263
Napa -----	17,210,355	17,419,458	18,053,729	18,625,240
Nevada -----	8,173,371	8,100,054	8,060,030	8,226,968
Orange -----	35,593,063	44,526,688	48,185,593	54,546,951
Placer -----	12,959,724	13,379,216	12,973,772	12,710,488
Plumas -----	7,346,851	8,960,958	8,429,018	9,398,811
Riverside -----	29,079,084	31,532,687	31,984,516	34,005,577
Sacramento -----	78,296,179	86,589,795	91,000,053	93,464,057
San Benito -----	8,365,538	8,184,027	8,453,146	9,091,200
San Bernardino -----	52,428,789	58,285,281	60,176,743	63,345,022
San Diego -----	53,735,870	59,140,997	73,685,084	75,866,729
San Francisco -----	545,398,908	605,141,664	624,182,130	647,456,025
San Joaquin -----	56,067,807	64,715,657	65,557,627	66,368,964
San Luis Obispo -----	19,995,045	20,207,375	20,662,282	21,157,354
San Mateo -----	30,346,078	30,739,041	31,692,918	32,465,471
Santa Barbara -----	31,911,978	32,722,992	33,380,447	34,496,827
Santa Clara -----	76,283,890	77,987,556	80,072,624	81,008,331
Santa Cruz -----	19,809,398	19,915,174	20,903,743	21,135,033
Shasta -----	16,006,099	15,642,300	15,181,888	15,185,419
Sierra -----	2,381,360	2,394,194	2,428,636	2,395,222
Siskiyou -----	18,516,606	21,583,145	22,137,012	21,155,790
Solano -----	23,718,764	24,941,957	25,406,702	26,361,996
Sonoma -----	39,131,641	40,110,583	40,781,686	41,837,840
Stanislaus -----	25,793,669	29,878,470	31,158,943	31,843,486
Sutter -----	8,583,856	9,184,568	12,963,082	13,269,700
Tehama -----	14,457,968	14,474,792	15,644,158	15,779,193
Trinity -----	3,021,775	3,052,887	3,088,170	3,166,400
Tulare -----	44,672,734	45,397,614	46,842,975	48,840,387
Tuolumne -----	8,805,098	9,885,945	9,946,773	10,110,677
Ventura -----	26,468,131	30,763,999	30,834,087	30,971,620
Yolo -----	20,926,947	22,085,786	24,051,914	24,621,651
Yuba -----	8,520,444	9,493,367	9,898,108	10,200,095
Totals -----	\$2,602,344,933	\$2,919,342,889	\$3,114,136,640	\$3,232,646,152

\*For the figures for 1880 and 1890, see Report for 1912, pages 268-269.

TABLE XLIII.

Funded Debt, Total County Indebtedness, and State and County Rate of Taxation  
Each \$100 in 1914.

(From the Report of the State Controller.)

Counties	Funded debt	Floating debt with estimated interest	Total county indebtedness	Total state and county rate of taxation each \$100	
				Inside	Outside
Alameda				\$0 84	-\$1 24
Alpine		\$10,498 71	\$10,498 71	1 65	- 2 00
Amador				1 78	- 2 20
Butte				1 45	- 1 85
Calaveras				1 30	- 1 80
Colusa	\$200,000 00	42,000 00	242,000 00	1 20	- 1 60
Contra Costa	161,000 00		161,000 00	1 30	- 1 90
Del Norte				1 90	- 2 30
El Dorado	120,000 00		120,000 00	1 10	- 1 50
Fresno				1 50	- 1 90
Glenn	450,000 00		450,000 00	1 60	- 2 10
Humboldt				1 30	- 1 90
Imperial				1 00	- 1 30
Inyo	42,000 00		42,000 00	95	- 1 30
Kern	2,997,000 00		2,997,000 00	1 20	- 1 80
Kings				1 44	- 2 00
Lake	27,000 00		27,000 00	1 30	- 1 70
Lassen				85	- 1 25
Los Angeles	3,500,000 00		3,500,000 00	1 95	- 2 30
Madera				1 15	- 1 45
Marin					1 85
Mariposa				2 15	- 2 75
Mendocino	62,500 00	13,121 95	75,621 95	1 30	- 1 90
Merced	30,000 00		30,000 00	1 80	- 2 15
Modoc					3 00
Mono				1 37	- 1 97
Monterey	49,000 00		49,000 00		
Napa				1 90	- 2 40
Nevada				1 05	- 1 45
Orange	1,414,000 00		1,414,000 00	1 75	- 2 15
Placer	3,000 00		3,000 00		1 60
Plumas	135,100 00		135,100 00	1 65	- 2 25
Riverside	1,270,000 00		1,270,000 00	1 414	- 1 86
Sacramento	1,485,000 00	66,825 00	1,551,825 00	2 70	- 2 90
San Benito	304,000 00		304,000 00	1 43	- 2 00
San Bernardino				1 19	- 1 85
San Diego	1,126,000 00		1,126,000 00	2 289	
San Francisco	39,865,800 00		39,865,800 00	1 45	- 1 85
San Joaquin	1,750,000 00		1,750,000 00	1 62	- 2 22
San Luis Obispo	74,000 00	3,700 00	77,700 00	1 50	- 2 10
San Mateo	988,000 00		988,000 00	1 60	- 2 00
Santa Barbara				1 15	- 1 56
Santa Clara	300,000 00		300,000 00	1 50	- 2 10
Santa Cruz				2 15	- 2 55
Shasta				1 50	- 2 00
Sierra				1 35	- 1 75
Siskiyou				1 45	- 1 85
Solano	210,000 00		210,000 00	1 30	- 1 70
Sonoma	262,000 00		262,000 00	1 10	- 1 60
Stanislaus				1 90	- 2 25
Sutter				2 40	- 2 80
Tehama					2 50
Trinity				1 05	- 1 65
Tulare				1 33	- 1 93
Tuolumne				1 46	- 1 76
Ventura	392,000 00		392,000 00	1 30	- 1 90
Yolo				3 00	- 3 40
Yuba					
Totals	\$57,217,400 00	\$136,145 66	\$57,353,545 66		



TABLE XLIV.

Grand Total Value of All Assessed Property in California, 1850-1913.

(From the Reports of the State Controller's Department.)

Year	Total assessed value of property in California	Year	Total assessed value of property in California
1850	\$57,670,689	1883	\$765,729,430
1851	49,231,052	1884	821,078,767
1852	64,579,375	1885	859,512,384
1853	95,335,646	1886	817,445,729
1854	111,191,630	1887	956,740,805
1855	103,887,193	1888	1,107,952,700
1856	115,007,440	1889	1,111,550,979
1857	126,059,461	1890	1,101,187,290
1858	125,955,877	1891	1,242,300,434
1859	131,060,279	1892	1,275,678,822
1860	148,193,540	1893	1,216,380,398
1861	147,811,617	1894	1,204,347,291
1862	160,369,071	1895	1,132,512,903
1863	174,104,955	1896	1,264,973,043
1864	179,164,730	1897	1,089,373,316
1865	183,534,312	1898	1,132,230,221
1866	200,368,826	1899	1,193,961,761
1867	212,205,339	1900	1,217,648,863
1868	237,483,175	1901	1,241,359,555
1869	260,563,879	1902	1,290,238,964
1870	277,538,134	1903	1,597,944,240
1871	267,868,126	1904	1,545,698,785
1872	637,232,823	1905	1,624,023,172
1873	428,747,043	1906	1,594,231,577
1874	611,495,197	1907	1,879,950,692
1875	618,083,315	1908	1,990,256,945
1876	595,073,177	1909	2,439,566,433
1877	586,953,022	1910	2,372,944,301
1878	584,578,036	1911	2,602,344,933
1879	549,142,610	1912	2,919,342,889
1880	666,399,985	1913	3,114,136,640
1881	659,835,762	1914	3,232,646,152
1882	608,555,960		

## Summary.

	1913	1914
Total value of property as returned by auditor	\$2,963,022,898 00	\$3,075,896,671 00
Value of railroads as assessed by State Board of Equalization	151,113,742 00	156,749,481 00
Funded debt of counties	47,250,200 00	57,217,400 00
Floating debt with estimated interest of counties	96,340 52	136,145 66
Total county indebtedness	47,346,540 52	57,353,545 66

## APPENDIX A\*

## CALIFORNIA STATE BOARD OF AGRICULTURE.

State Board of Agriculture and Agricultural Experiment  
Stations in the United States.

## STALLION REGISTRATION BOARDS.

## State Boards of Agriculture and Experiment Stations.

There are 43 official bodies or organizations in the United States charged with the promotion of agriculture. Of these 20 are "State Boards of Agriculture"; 19 are governed by a "Commissioner of Agriculture"; 3, California, Georgia and Minnesota, have a "State Agricultural Society," and Pennsylvania a "Secretary of Agriculture." Of the above, California is the only one with a dual title, that of the "State Agricultural Society" and "State Board of Agriculture." There are also 60 agricultural experiment stations, conducted, in most cases, under the authority of the state universities.

The first agricultural experiment stations were formed some forty years ago, one of the pioneers being that of the State University at Berkeley in 1873. They were subsequently reorganized under the Hatch Act of 1887, which largely extended the number of these most valuable institutions.

## Stallion Registration Boards.\*

The first law regulating the registration of stallions was passed by the state of Wisconsin in 1906, since which time nineteen other states have taken this important step to improve the breed of their horses.

## California State Agricultural Society.

(Incorporated May 13, 1854. State Board of Agriculture appointed March 12, 1863.)

The California State Agricultural Society was one of the first to be organized, and ranks as fifth in the United States.

The first State Fair was held in the Music Hall at San Francisco from the 4th to about the 12th of October, 1854, and the stock show was held on the Pioneer race course. A fair has been held annually ever since—in 1855 at Sacramento, 1856 at San Jose, 1857 at Stockton, 1858 at Marysville, and since then at Sacramento.

The amount distributed in premiums and purses for the promotion of agriculture, the encouragement of live stock breeding and of other California industries during this period is upward of \$1,600,000.

\*For a list of states having Stallion Registration Boards, Agricultural Associations, Animal Pedigree Breeders' Societies, Fruit Associations, Agricultural Newspapers, State and District Fairs, see Report for 1913, pages 256-261.

## CALIFORNIA STATE FAIRS, 1854-1915.

Year	Place	Date	Pre- miums	Races	Total	Presidents
1854	San Fran.	Oct. 4	\$4,660	\$	\$4,660	F. W. Macondry, San Fran.
1855	Sacramento	Sept. 25-Oct. 1	6,550	-----	6,550	C. T. Hutchinson, Sac'to.
1856	San Jose	Oct. 7-10	6,746	-----	6,746	E. L. Beard, Alameda.
1857	Stockton	Sept. 29-Oct. 2	7,991	-----	7,991	C. M. Weber,* Stockton.
1858	Marysville	Aug. 23-28	7,435	-----	7,435	John C. Fall, Marysville.
1859	Sacramento	Sept. 13-23	8,139	-----	8,139	C. T. Hutchinson, Sac'to.
1860	Sacramento	Sept. 19-26	8,827	-----	8,827	T. G. Phelps, San Mateo.
1861	Sacramento	Sept. 16-21	7,231	-----	7,231	Jerome C. Davis, Yolo Co.
1862	Sacramento	Aug. 31-Sept. 4	-----	-----	5,000	A. Haraszthy, Sonoma.
1863	Sacramento	Sept. 25-Oct. 3	4,894	-----	4,894	Judge Isaac Davis, Yolo Co.
1864	Sacramento	Oct. 17-22	6,105	-----	6,105	C. F. Reed, Grafton, Yolo Co.
1865	Sacramento	Sept. 13-23	10,658	-----	10,658	C. F. Reed, Grafton, Yolo Co.
1866	Sacramento	Sept. 10-15	9,742	-----	9,742	C. F. Reed, Grafton, Yolo Co.
1867	Sacramento	Sept. 9-14	9,954	-----	9,954	C. F. Reed, Grafton, Yolo Co.
1868	Sacramento	Sept. 15-25	-----	-----	10,000	C. F. Reed, Grafton, Yolo Co.
1869	Sacramento	Sept. 6-11	-----	-----	-----	C. F. Reed, Grafton, Yolo Co.
1870	Sacramento	Sept. 12-17	-----	-----	30,000	C. F. Reed, Grafton, Yolo Co.
1871	Sacramento	Sept. 18-23	-----	-----	40,000	C. F. Reed, Grafton, Yolo Co.
1872	Sacramento	Sept. 19-28	-----	-----	20,000	C. F. Reed, Grafton, Yolo Co.
1873	Sacramento	Sept. 15-20	8,925	14,200	23,125	R. S. Carey, Yolo.
1874	Sacramento	Sept. 21-28	9,619	15,950	25,569	R. S. Carey, Yolo.
1875	Sacramento	Sept. 15-26	9,214	13,330	22,544	R. S. Carey, Yolo.
1876	Sacramento	Sept. 18-23	-----	-----	-----	R. S. Carey, Yolo.
1877	Sacramento	Sept. 17-22	-----	-----	-----	Marion Biggs, Butte.
1878	Sacramento	Sept. 16-21	10,965	13,775	24,740	Marcus D. Boruck, San Fran.
1879	Sacramento	Sept. 8-13	-----	12,260	12,260	Hugh M. Larue, Sacramento.
1880	Sacramento	Sept. 20-25	6,502	14,885	21,387	Hugh M. Larue, Sacramento.
1881	Sacramento	Sept. 19-24	6,603	12,525	19,128	J. M. McShaffer, San Fran.
1882	Sacramento	Sept. 11-16	8,651	14,262	22,913	Hugh M. Larue, Sacramento.
1883	Sacramento	Sept. 10-15	8,915	14,005	22,920	P. A. Fingan, Alameda.
1884	Sacramento	Sept. 8-20	11,467	23,165	34,632	P. A. Fingan, Alameda.
1885	Sacramento	Sept. 10-19	13,612	25,145	38,757	Jesse D. Carr, Salinas.
1886	Sacramento	Sept. 9-18	13,370	22,900	36,270	Jesse D. Carr, Salinas.
1887	Sacramento	Sept. 15-24	14,538	23,470	38,008	L. U. Shippee, Stockton.
1888	Sacramento	Sept. 6-15	14,256	25,560	38,816	L. U. Shippee, Stockton.
1889	Sacramento	Sept. 12-21	17,056	30,860	47,916	Christopher Green, Sac'to.
1890	Sacramento	Sept. 11-20	15,761	27,016	42,777	Christopher Green, Sac'to.
1891	Sacramento	Sept. 8-19	17,628	30,081	47,709	Frederick Cox, Sacramento.
1892	Sacramento	Sept. 5-17	17,106	29,950	47,056	Frederick Cox, Sacramento.
1893	Sacramento	Sept. 4-16	13,244	32,715	45,959	John Boggs, Princeton,
						Colusa Co.
1894	Sacramento	Sept. 3-15	13,447	29,220	42,667	John Boggs, Princeton,
						Colusa Co.
1895	Sacramento	Sept. 2-14	11,416	32,880	44,296	C. M. Chase, San Francisco.
1896	Sacramento	Sept. 1-19	12,971	47,222	60,193	C. M. Chase, San Francisco.
1897	Sacramento	Sept. 6-18	20,252	35,247	55,499	C. M. Chase, San Francisco.
1898	Sacramento	Sept. 5-17	20,163	28,170	48,333	A. B. Spreckels, San Fran.
1899	Sacramento	Sept. 4-16	10,529	38,745	49,274	A. B. Spreckels, San Fran.
1900	Sacramento	Sept. 3-15	9,768	38,745	48,513	A. B. Spreckels, San Fran.
1901	Sacramento	Sept. 2-14	8,974	30,355	39,329	A. B. Spreckels, San Fran.
1902	Sacramento	Sept. 8-20	15,000	40,280	55,280	A. B. Spreckels, San Fran.
1903	Sacramento	Aug. 31-Sept. 12	15,000	31,435	46,435	Benjamin F. Rush, Suisun.
1904	Sacramento	Aug. 22-Sept. 3	15,000	28,597	43,597	Benjamin F. Rush, Suisun.
1905	Sacramento	Sept. 2-9	6,656	24,419	31,075	Benjamin F. Rush, Suisun.
1906	Sacramento	Aug. 25-Sept. 1	7,598	10,640	18,640	Benjamin F. Rush, Suisun.
1907	Sacramento	Sept. 2-14	11,153	14,914	26,067	Benjamin F. Rush, Suisun.
1908	Sacramento	Aug. 29-Sept. 5	11,277	13,410	24,687	H. A. Jastro, Bakersfield.
1909	Sacramento	Aug. 28-Sept. 4	14,183	14,665	28,848	H. A. Jastro, Bakersfield.
1910	Sacramento	Sept. 3-10	14,465	6,930	21,395	H. A. Jastro, Bakersfield.
1911	Sacramento	Aug. 26-Sept. 2	14,790	26,300	41,090	A. L. Scott, San Francisco.
1912	Sacramento	Sept. 14-21	20,000	17,000	37,000	A. L. Scott, San Francisco.
1913	Sacramento	Sept. 13-20	25,000	37,000	62,000	A. L. Scott, San Francisco.
1914	Sacramento	Sept. 12-19	18,609	37,000	55,609	A. L. Scott, San Francisco.
1915	Sacramento	†	-----	-----	-----	John M. Perry, Stockton.

\*Resigned March 10th. Wm. Garrard appointed.

†No fair owing to the Panama-Pacific Exposition at San Francisco.

Many of the books and records of the Society were destroyed by a disastrous flood on the 9th of December, 1861, and 9th of January, 1862, caused by a break in the levee on the north side of Sacramento.



STATE BOARDS OF AGRICULTURE AND DEPARTMENTS OF AGRICULTURE  
IN THE UNITED STATES (43).

State	Description and location	Organized
Alabama .....	Commissioner of Agriculture, Montgomery.....	1888
Arkansas .....	Commissioner of Agriculture, Little Rock (Society).....	1898
California .....	State Board of Agriculture.....	1854
Colorado .....	State Board of Agriculture, Fort Collins.....	1877
Connecticut .....	Commissioner of Agriculture, Hartford.....	1866
Delaware .....	State Board of Agriculture, Dover.....	1901
Florida .....	Commissioner of Agriculture, Tallahassee.....	1889
Georgia .....	Georgia State Agricultural Society, Experiment.....	1846
Georgia .....	Commissioner of Agriculture, Atlanta.....	1874
Idaho .....	Commissioner of Immigration, Labor and Sta- tistics, Boise.....	1900
Illinois .....	State Board of Agriculture, Springfield.....	1853
Indiana .....	State Board of Agriculture, Indianapolis.....	1851
Iowa .....	State Board of Agriculture, Des Moines.....	1900
Kansas .....	State Board of Agriculture, Topeka.....	1862
Kentucky .....	Commissioner of Agriculture, Frankfort.....	1892
Louisiana .....	Commissioner of Agriculture, Baton Rouge.....	1880
Maine .....	Commissioner of Agriculture, Augusta.....	1855
Massachusetts .....	State Board of Agriculture, Boston.....	1852
Michigan .....	State Board of Agriculture, East Lansing.....	1881
Minnesota .....	State Agricultural Society, Hamline.....	1854
Mississippi .....	Commissioner of Agriculture, Jackson.....	1907
Missouri .....	State Board of Agriculture, Columbia.....	1865
Montana .....	Commissioner of Agriculture (Bureau of Agricul- ture, Labor, Industry and Publicity), Helena.....	1889
Nebraska .....	State Board of Agriculture, Lincoln.....	1858
Nevada .....	State Board of Agriculture, Carson City.....	
New Hampshire .....	State Board of Agriculture, Concord.....	1870
New Jersey .....	State Board of Agriculture, Trenton.....	1873
New York .....	Commissioner of Agriculture, Albany.....	1893
North Carolina .....	Commissioner of Agriculture, Raleigh.....	1877
North Dakota .....	Commissioner of Agriculture, Bismarck.....	1889
Ohio .....	State Board of Agriculture, Columbia.....	1846
Oklahoma .....	State Board of Agriculture, Stillwater.....	1907
Oregon .....	State Board of Agriculture, Salem.....	1861
Pennsylvania .....	Secretary of Agriculture, Harrisburg.....	1895
Rhode Island .....	State Board of Agriculture, Providence.....	1892
South Carolina .....	Commissioner of Agriculture, Columbia.....	1904
South Dakota .....	State Board of Agriculture, Huron.....	1884
Tennessee .....	Commissioner of Agriculture, Nashville.....	1875
Texas .....	Commissioner of Agriculture, Austin.....	1906
Vermont .....	Commissioner of Agriculture, Plainfield.....	1872
Virginia .....	Commissioner of Agriculture, Richmond.....	1888
West Virginia .....	Commissioner of Agriculture, Charleston.....	1891
Wisconsin .....	State Board of Agriculture, Madison.....	1897



## AGRICULTURAL EXPERIMENT STATIONS (60\*).

State	Description and location	Date of original organization	Organized under Hatch Act of March 2, 1887
Alabama	(College) Auburn	1872	Feb. 24, 1888
Alabama	(Canebrake) Uniontown	1885	Apr. 1, 1888
Alabama	(Tuskegee Institute) Tuskegee	Feb. 15, 1897	
Arizona	(State University of Tucson)	1885	1890
Arkansas	Fayetteville		Mar. 7, 1889
California	(State University) Berkeley	1873	Mar., 1888
Colorado	Fort Collins		Feb., 1888
Connecticut	(State) New Haven	Mar. 21, 1877	May 18, 1887
Connecticut	(Storrs) Storrs		May 18, 1887
Delaware	Newark		Feb. 21, 1888
Florida	Gainesville		1888
Georgia	Experiment	1888	July 1, 1889
Idaho	Moscow		Feb. 26, 1892
Illinois	Urbana		Mar. 21, 1888
Indiana	Lafayette		Jan. 1, 1888
Iowa	Ames		Feb. 17, 1888
Kansas	Manhattan		Feb. 8, 1888
Kentucky	Lexington	Sept. 25, 1885	Apr., 1888
Louisiana	(Sugar) New Orleans	Sept., 1886	
Louisiana	(State) Baton Rouge	Apr., 1887	1888
Louisiana	(North) Calhoun	May, 1887	
Louisiana	(Rice) Crowley		July 1, 1909
Maine	Orono	Mar., 1885	Oct. 1, 1887
Maryland	College Park		Mar. 9, 1888
Massachusetts	Amherst	1882	Mar. 2, 1888
Michigan	East Lansing		Feb. 26, 1888
Minnesota	(University Farm) St. Paul	Mar. 7, 1885	1888
Mississippi	(Agricultural College)		Jan. 27, 1888
Missouri	(College) Columbia		Jan., 1888
Missouri	(Fruit) Mountain Grove	Feb. 1, 1900	
Montana	Bozeman		Feb. 16, 1893
Nebraska	Lincoln	Dec. 16, 1884	June 14, 1887
Nevada	Reno		Dec., 1887
New Hampshire	Durham		Aug. 4, 1887
New Jersey	(State) New Brunswick	Mar. 10, 1880	
New Jersey	(College) New Brunswick		Apr. 26, 1888
New Mexico	(College of Agriculture) State College		Dec. 14, 1889
New York	(State) Geneva	Mar. 1, 1882	
New York	(Cornell University) Ithaca	1879	Apr. 1, 1888
North Carolina	(College) West Raleigh	Mar. 12, 1877	Mar. 7, 1887
North Carolina	(State) Raleigh	July 1, 1907	
North Dakota	(Agricultural College)		Mar., 1890
Ohio	Wooster	Apr. 25, 1882	Apr. 2, 1888
Oklahoma	Stillwater		1891
Oregon	Corvallis		July, 1888
Pennsylvania	(State College)		June 30, 1887
Pennsylvania	Institute of Animal Nutrition		July 1, 1907
Rhode Island	Kingston		July 30, 1888
South Carolina	(Clemson College)		Jan., 1888
South Dakota	Brookings		Mar. 13, 1887
Tennessee	Knoxville	June 8, 1882	Aug. 4, 1887
Texas	(College Station)		Jan. 25, 1888
Utah	Logan		Apr., 1890
Vermont	Burlington		Feb. 28, 1888
Virginia	(College) Blackburg		Oct. 16, 1888
Virginia	(Truck) Norfolk	Feb., 1907	
Washington	Pullman		1892
West Virginia	Morgantown		1887
Wisconsin	Madison	1883	1887
Wyoming	(State University) Laramie		Mar. 1, 1891

\*Not including Alaska, Hawaii, Philippine Islands, and Porto Rico.

## APPENDIX C.

## Temperature, Rainfall and Snowfall in Each County in 1914.

(Compiled from the Report of the United States Weather Bureau, San Francisco.)

Counties	County seat or observation station	Elevation, feet	Temperature		Rainfall, inches	Snowfall, inches
			Highest	Lowest		
Alameda	Oakland*	36	86	35	24.21	0
Alpine	Tamarack	8,000	85	-22	44.51	285.0
Amador	Ione	287	104	28	21.76	0
Butte	Oroville* (near)	250	109	29	26.24	0
Calaveras	Mokelumne Hill	1,550	101	30	32.32	3.0
Colusa	Colusa*	60	104	28	7.17	0
Contra Costa	Martinez*					
Del Norte	Crescent City*	125	91	28	91.09	2.0
El Dorado	Placerville*	1,875	93	24	42.45	4.0
Fresno	Fresno*	293	106	27	9.57	0
Glenn	Willows*	136	111	27	21.31	0
Humboldt	Eureka*	64	78	32	37.91	0
Imperial	Calxico	0	113	21	2.83	0
Inyo	Independence*	3,907	101	3	9.30	T.
Kern	Bakersfield*	404	108	24	6.50	0
Kings	Hanford*	249				
Lake	Upper Lake	1,350	104	24	33.79	0
Lassen	Susanville*	4,175	102	-4	18.6	60.3
Los Angeles	Los Angeles*	293	97	40	23.21	0
Madera	Storey	291	106	25		0
Marin	Point Reyes	490	88	37	16.68	0
Mariposa	Yosemite	3,945	110	0	32.83	90.5
Mendocino	Ukiah*	620	108	23	43.44	0
Merced	Merced*	173	106	26	14.72	0
Modoc	Alturas*	4,400	102	-9	8.88	22.2
Mono	Bridgeport*	6,500	90	-21	11.47	30.0
Monterey	Salinas	40	91	30		0
Napa	Napa*	60	101			
Nevada	Nevada City*	2,850	100	19	48.10	9.0
Orange	Yorba Linda	405	98	34	19.33	0
Placer	Auburn*	1,360	104	28	26.43	0
Plumas	Quincy*	3,400	98	0	40.45	60.0
Riverside	Riverside*	851	104	30	15.54	0
Sacramento	Sacramento*	71	102	30	16.05	0
San Benito	Hollister*	284	98	28	17.28	0
San Bernardino	San Bernardino*	1,054	104	23	21.85	0
San Diego	San Diego*	93	90	39	10.90	0
San Francisco	San Francisco*	207	92	41	21.64	0
San Joaquin	Stockton*	24	102	30	16.25	0
San Luis Obispo	San Luis Obispo*	201	98	32	26.74	0
San Mateo	Redwood City					
Santa Barbara	Santa Barbara*	130	98	35	29.64	T.
Santa Clara	San Jose*	95	95	29	17.75	0
Santa Cruz	Santa Cruz*	20	97	27	32.12	0
Shasta	Redding*	552	109	21	48.37	7.0
Sierra	Downieville	3,150	103	13	64.02	37.7
Siskiyou	Dunsmuir	2,285	104	18	57.17	59.4
Solano	Suisun	20	106	32	25.32	0
Sonoma	Santa Rosa*	181	100	24	34.62	0
Stanislaus	Oakdale	156	104	29	16.78	0
Sutter	Yuba City*	57				
Tehama	Red Bluff*	367	108	28	27.51	0
Trinity	Weaverville*	2,162	103	18	34.59	2.0
Tulare	Visalia*	334	108	25	6.89	0
Tuolumne	Jamestown	1,471	102	20	38.74	3.0
Ventura	Ojai Valley	900	101	27	36.83	0
Yolo	Davis	51	104	26	22.25	0
Yuba	Marysville*	67	105	28	20.64	0

\*County seat. When there is no observation station at the county seat some other station is given. There is no observation station in Contra Costa, Kings, Napa, San Mateo or Sutter counties. In the last named the figures for Yuba may be accepted as

correct, as Marysville is on the opposite side of the river. The snowfall in the mountains is more or less heavy; it rarely falls in the Sacramento and San Joaquin valleys. At Summit, in Placer County, 361.5 inches of snow fell, and at Tamarack, in Alpine County, 286 inches of snow were recorded in 1914.

*Summary for the year 1914:* Probably not in a decade have weather conditions given such general satisfaction as during the year 1914. The rainfall was above normal and was very well distributed both as to time and place; there were few frosts and very little damage resulted. The rainfall was unusually heavy in the winter, and floods caused considerable damage in the north in January and in the south in February. Bridges were washed away, towns were flooded and railroad traffic was demoralized. The winter and early spring months were very warm, and vegetation was from three to four weeks earlier than usual. December was the coldest month since State records were begun in 1897. The winter snowfall was the heaviest in years. It was well packed and melted slowly, yielding a plentiful supply of water for all purposes through the summer months.

SUPPLEMENT

SUMMARY OF THE RESOURCES

OF THE

STATE OF CALIFORNIA

BY COUNTIES.

The brief description of each county which follows, has been greatly condensed in order to keep it within the space available.

*Minerals.* The figures for minerals, with the exception of mineral springs, are from the Report of the State Mining Bureau. In the list of minerals, the stone industry includes granite, paving blocks, and crushed rock.

Petroleum comes first with a value of \$48,578,014, and gold second with value of \$20,406,958.

Kern heads the list of counties with a production valued at \$28,406,193, Fresno being second with \$8,438,810. Alpine County ranks last with \$541. Sutter and Yolo counties produced no minerals.

*Mineral Springs.* Some of these consist of several separate springs. Eleven counties have no springs. Lake County with 56 has the largest number. The total number in the State is 593.

*Irrigation.* Fresno County has the largest area of irrigated land. The county showing the lowest average cost per acre enterprises were capable of irrigating in 1910, \$1.29, is Mono, where much of the irrigated land consists of flooded pastures. The highest acreage cost per acre, \$368.40, is in Nevada County, where the unusual cost is due to the fact that many of the ditches now used for irrigation were originally constructed at heavy expense for mining purposes.

There are no Carey Act enterprises in California.

The totals given for orchard and tropical fruit trees do not always agree, as some contain a number of miscellaneous varieties which are not specified, although included in the total.

*Climate:* In the few counties where the temperature or rainfall is not given, is either because there is no observation station in the county, or the returns for some cause are incomplete.



## ALAMEDA COUNTY.

Date of creation, March 25, 1853.

Land area, 732 square miles.	Population-----	1890. 93,864	1900. 130,197	1910. 246,131
County seat, Oakland.	Population-----	48,682	66,960	150,174
Population per square mile, 336.2.				
Elevation, 36 feet.	Highest. Lowest.	Inches.	Inches.	
1914: Temperature---	86 35	Rainfall---24.21	Snow---	0

Alameda County fronts on the bay of San Francisco for a distance of 38 miles, with an average width of 25 miles, extending to and beyond the summit of the Contra Costa hills, comprising numerous beautiful valleys, besides the broad Alameda Valley, which last is bounded by the waters of the bay on the one side and the Contra Costa hills on the other, and is one of the richest and most fertile valleys in the State. The principal stream is Alameda Creek. There are other creeks crossing the county and emptying into the bay, two of which furnish water for the city of Oakland. The country around Hayward is one of the great fruit-raising regions, many millions of pounds being shipped annually.

The soils immediately along the bay in Alameda County and the marshes formed by the overflow are heavy, but very fertile when reclaimed. Then comes a broad belt of rich, black adobe that is crossed by deposits of alluvium made by shifting channels of streams running down from the Coast Range. In the Niles region are lighter loams. About Livermore are uplands, bench, and valley lands. The Pleasanton section consists of agricultural and grazing lands. The soil is a very rich sediment, producing hay, grain, potatoes, hops, and beets in abundance. At Alvarado the surrounding country is a fine farming and fruit region, and gardening and dairying are largely carried on.

Alameda County was among the first to begin the planting of orchards and vineyards. The county is divisible into three sections—the cherry district, the apricot district, and the vineyard district.

Alameda is *par excellence* a vegetable-producing county, since the profit in peas, potatoes, tomatoes, rhubarb, asparagus, and several other vegetables is large. Many acres in this county are planted in tomatoes, which prove to be a most profitable crop.

The growing of peas for canning has assumed importance. The output of the San Leandro cannery, located in this county, has reached as high as 1,200 cases per day, and 3½ tons of peas have been grown upon a single acre.

The average annual output of salt recovered from San Francisco Bay, in Alameda County, is very large, including both coarse and fine salt.

## ALAMEDA COUNTY SUMMARY.

Number of Farms Classified by Size.	
Under 3 acres.....	148
3 to 9 acres.....	589
10 to 19 acres.....	405
20 to 49 acres.....	424
50 to 99 acres.....	204
100 to 174 acres.....	238
175 to 259 acres.....	116
260 to 499 acres.....	163
500 to 999 acres.....	91
1,000 acres and over.....	44
Total.....	2,422
Total in 1900.....	2,787

## Land and Farm Areas.

Approximate land, acres.....	468,480
Land in farms in 1910.....	311,327
Land in farms in 1900.....	398,289
Improved land in farms in 1910.....	177,314
Improved land in farms in 1900.....	226,118
Woodland in farms.....	51,484
Other unimproved land.....	82,529

## Value of All Farm Property.

Total value in 1910.....	\$36,840,669
Total value in 1900.....	34,619,536
Per cent increase 1900-1910.....	6.4
Land in 1910.....	29,537,208
Land in 1900.....	28,751,590
Buildings in 1910.....	4,463,555
Buildings in 1900.....	3,485,310
Implements and machinery in 1910.....	817,861
Implements and machinery in 1900.....	780,040
Domestic animals, poultry and bees in 1910.....	2,022,045
Domestic animals, poultry and bees in 1900.....	1,602,596

## Domestic Animals on Farms and Ranges.

Cattle—	
Dairy cows.....	9,172
Other cows.....	5,827
Yearling heifers.....	2,609
Calves.....	4,113
Yearling steers and bulls.....	1,107
Other steers and bulls.....	1,491
Total.....	24,319
Value.....	\$611,907
Horses—	
Mature horses.....	9,266
Yearling colts.....	842
Spring colts.....	536
Total.....	10,644
Value.....	\$1,151,631
Mules—	
Mature mules.....	223
Yearling colts.....	4
Total.....	227
Value.....	\$28,545
Asses and burros—	
Number.....	3
Value.....	\$48

## Swine—

Mature hogs.....	3,640
Spring pigs.....	2,770
Total.....	6,410
Value.....	\$55,333

## Sheep—

Rams, ewes and wethers.....	5,680
Spring lambs.....	3,507
Total.....	9,187
Value.....	\$32,559

## Goats—

Number.....	64
Value.....	\$321

Total value all domestic animals \$1,880,344

## Poultry and bees—

Poultry of all kinds.....	240,914
Value.....	\$139,589
Colonies of bees.....	610
Value.....	\$2,112

## Principal Crops.

Description.	Acres.	Bushels.
Corn.....	503	13,097
Oats.....	1,725	53,745
Wheat.....	1,075	21,535
Barley.....	12,650	473,575
Kafir corn and milo maize.....		10
Dry edible beans.....	86	2,933
Potatoes.....	1,655	175,920
Hay and forage—		Tons.
Timothy and clover mixed..	84	115
Clover alone.....	407	472
Alfalfa.....	1,109	3,514
Other tame or cultivated grasses.....	5,202	8,060
Wild, salt, or prairie grasses	729	1,030
Grains cut green.....	73,041	99,538
All other hay and forage....	163	805

Total 80,735 113,534

## Poultry products—

Poultry raised, number.....	230,417
Eggs produced, dozen.....	1,391,728
Value poultry and eggs produced..	\$471,769

## Honey and wax—

Honey produced, pounds.....	9,848
Wax produced, pounds.....	179
Value of honey and wax produced..	\$1,321

## Wool—

Wool, fleeces shorn.....	5,783
Value wool and mohair produced..	\$4,930

## Special crops—

Potatoes, acres.....	1,655
Sweet potatoes, acres.....	2
All other vegetables, acres.....	7,459
Sugar beets, acres.....	2,516

## ALAMEDA COUNTY SUMMARY—Continued.

Principal Crops—Continued.		Irrigation.	
Orchard fruits—	Number bearing trees.	Number of farms irrigated in 1909---	50
Apples -----	26,045	Acres irrigated in 1909-----	1,859
Apricots -----	270,461	Acreage enterprises were capable of irrigating in 1910-----	1,872
Cherries -----	89,234	Acreage included in projects-----	2,605
Peaches and nectarines-----	12,555	Main ditches, number-----	49
Pears -----	70,382	Length, miles -----	21
Prunes and plums-----	157,981	Pumped wells, number-----	56
Total -----	627,824	Cost of irrigation enterprises up to July 1, 1910-----	\$57,156
Tropical fruits—		Average cost per acre irrigation enterprises were capable of irrigating in 1910-----	20.5
Figs -----	482		
Lemons -----	660		
Oranges -----	3,782		
Pomeloes -----	4		
Olives -----	10,963		
Total -----	15,900		
Grapevines—			
Number in bearing-----	2,390,959		
Small fruits—			
Strawberries, acres -----	18		
Blackberries and dewberries, acres-----	12		
All others, acres-----	371		
Total -----	401		
Nuts—	Number bearing trees.		
Almonds -----	21,190		
Pecans -----	5		
Walnuts -----	3,726		
Total -----	25,250		
		Mineral Production in 1913.	
		Substance.	Amount. Value.
		Brick, thousand -----	13,977 \$122,937
		Clay, tons -----	3,000 2,700
		Lime, barrels -----	5,000 5,000
		Pyrite, tons -----	6,029 24,128
		Salt -----	129,318 233,388
		Stone industry -----	456,064
		Total -----	\$844,217
		Number of mineral springs-----	6

## ALPINE COUNTY.

Date of creation, March 16, 1864; reorganized in 1900.

Land area, 776 square miles.

County seat, Markleeville, Township No. 1. Population..... 309

Population per square mile, 0.4.

Tamarack (Station):

Elevation, 8,000 feet. 1914: Temperature.. 85   —22   Rainfall..44.51   Snow..286.0

Alpine County is one of the counties on the eastern border, and out of the way, as far as her means of communication with the other counties of the State is concerned, there being no public road maintained to the border, thereby rendering it necessary to turn to the state of Nevada for a route to reach the capital at Sacramento, or any other part of the State. This condition militates against the development of Alpine County's many natural resources, as intending investors or purchasers are not afforded a convenient route of reaching the county.

The resources of Alpine County are great, especially in mineral, timber, and water power, the latter offering a field of immediate development to enterprising capital.

## ALPINE COUNTY SUMMARY.

Number of Farms Classified by Size.		Yearling steers and bulls.....		400
20 to 49 acres.....	1	Other steers and bulls.....		23
50 to 99 acres.....	3			
100 to 174 acres.....	4	Total .....		2,754
175 to 259 acres.....	9	Value .....		\$58,619
260 to 499 acres.....	14	Horses—		
500 to 999 acres.....	3	Mature horses .....		376
1,000 acres and over.....	8	Yearling colts .....		38
		Spring colts .....		12
Total .....	42			
Total in 1900.....	37	Total .....		426
		Value .....		\$36,325
Land and Farm Areas.		Mules—		
Approximate land, acres.....	496,640	Mature mules .....		18
Land in farms in 1910.....	32,001			
Land in farms in 1900.....	15,681	Total .....		18
Improved land in farms in 1910.....	7,579	Value .....		\$1,420
Improved land in farms in 1900.....	4,391	Asses and burros—		
Woodland in farms.....	7,597	Number .....		14
Other unimproved land.....	16,828	Value .....		\$200
		Swine—		
Value of All Farm Property.		Mature hogs .....		309
Total value in 1910.....	\$811,442	Spring pigs .....		208
Total value in 1900.....	324,441			
Per cent increase 1900-1910.....	150.1	Total .....		517
Land in 1910.....	530,968	Value .....		\$2,515
Land in 1900.....	198,100	Sheep—		
Buildings in 1910.....	88,475	Rams, ewes and wethers.....		9,832
Buildings in 1900.....	45,400	Spring lambs .....		6,808
Implements and machinery in 1910.....	30,405			
Implements and machinery in 1900.....	10,810	Total .....		16,640
Domestic animals, poultry and bees		Value .....		\$61,200
in 1910.....	161,594	Goats—		
Domestic animals, poultry and bees		Number .....		10
in 1900 .....	70,131	Value .....		\$44
Domestic Animals on Farms and Ranges.		Total value all domestic animals		\$160,323
Cattle—		Poultry and bees—		
Dairy cows .....	759	Poultry of all kinds.....		2,159
Other cows .....	661	Value .....		\$1,139
Yearling heifers .....	485	Colonies of bees.....		49
Calves .....	426	Value .....		\$132



## ALPINE COUNTY SUMMARY—Continued.

Principal Crops.				
Description.	Acres.	Bushels.		
Oats .....	135	7,274		
Wheat .....	618	19,464		
Barley .....	38	1,480		
Dry edible beans .....		3		
Potatoes .....	22	2,944		
Hay and forage—	Acres.	Tons.		
Timothy alone .....	206	315		
Timothy and clover mixed..	351	567		
Clover alone .....	10	20		
Alfalfa .....	1,081	2,573		
Other tame or cultivated grasses .....	697	699		
Wild, salt, or prairie grasses	1,116	1,309		
Grains cut green .....	355	312		
All other hay and forage...	30	20		
Total .....	3,846	5,815		
Poultry products—				
Poultry raised, number .....		2,547		
Eggs produced, dozen .....		8,904		
Value poultry and eggs produced..		\$3,618		
Honey and wax—				
Honey produced, pounds .....		220		
Value of honey and wax produced..		\$23		
Wool—				
Wool, fleeces shorn .....		6,790		
Value wool and mohair produced..		\$9,561		
Special crops—				
Potatoes, acres .....		22		
All other vegetables, acres .....		14		
Orchard fruits—		Number bearing trees		
Apples .....		1,140		
Apricots .....		7		
Cherries .....		63		
Peaches and nectarines .....		23		
Pears .....		79		
Prunes and plums .....		214		
Total .....		1,531		
			Tropical fruits—	Number bearing trees
			Olives .....	4
			Grapevines—	
			Number in bearing .....	9,000
			Nuts—	Number bearing trees.
			Almonds .....	12
			Total .....	12
			Irrigation.	
			Number of farms irrigated in 1909....	32
			Acres irrigated in 1909 .....	3,349
			Acreage enterprises were capable of irrigating in 1910 .....	3,399
			Acreage included in projects .....	3,435
			Main ditches, number .....	25
			Length, miles .....	34
			Laterals, number .....	3
			Length, miles .....	1
			Cost of irrigation enterprises up to July 1, 1910 .....	\$7,493
			Average cost per acre irrigation enterprises were capable of irrigat- ing in 1910 .....	2.20
			Mineral Production in 1913.	
			Substance.	Value.
			Gold .....	\$537
			Silver .....	4
			Total .....	\$541
			Number of mineral springs .....	1

## AMADOR COUNTY.

Date of creation, May 11, 1854.

Land area, 601 square miles.	Population-----	1890.	1900.	1910.
County seat, Jackson City.	Population-----	10,320	11,116	9,086
Population per square mile, 15.1.	-----	-----	-----	2,085
One (Station):	Highest.	Lowest.	Inches.	Inches.
Elevation, 287 feet.	1914: Temperature--104	28	Rainfall--21.76	Snow-- 0

Amador adjoins El Dorado County on the south, Alpine on the west, Calaveras on the north and Sacramento and San Joaquin counties on the east. It is inland and occupies the east central portion of the State. It has no navigable rivers. The Cosumnes forms a part of its northern boundary and the Mokelumne forms its entire southern boundary. Both of the rivers are tributaries of the Sacramento. Varying, in main, in altitude from 30 feet to 1,500 feet, and having a most productive soil, and the great portion of the county being a rolling, or foothill, region, it is adapted to the cultivation of any kind of farm, of horticultural, or of viticultural product.

Grain and hay are cultivated to a considerable extent. In many parts of the western portion of the county a great variety of vegetables is grown throughout the year. Yielding, as the county does, an abundance of the best natural grasses, it offers inducements to stockmen.

Distinctively, the county is a region of mineral deposits. The one resource, however, that is paramount, is gold from the quartz mine.

Mountain lakes and valleys and river canyons furnish abundant opportunity for those needing recreation, or for those that enjoy hunting and fishing. Mineral springs, having medicinal properties that are prescribed in certain cases, are found in different parts of the county.

## AMADOR COUNTY SUMMARY.

Number of Farms Classified by Size.		Value of All Farm Property.	
Under 3 acres-----	2	Total value in 1910-----	\$4,820,809
3 to 9 acres-----	13	Total value in 1900-----	3,318,850
10 to 19 acres-----	19	Per cent increase 1900-1910-----	45.3
20 to 49 acres-----	41	Land in 1910-----	3,252,895
50 to 99 acres-----	52	Land in 1900-----	2,185,150
100 to 174 acres-----	145	Buildings in 1910-----	589,925
175 to 259 acres-----	64	Buildings in 1900-----	495,630
260 to 499 acres-----	105	Implements and machinery in 1910--	141,379
500 to 999 acres-----	58	Implements and machinery in 1900--	127,180
1,000 acres and over-----	38	Domestic animals, poultry and bees	
		in 1910-----	836,610
Total-----	537	Domestic animals, poultry and bees	
Total in 1900-----	560	in 1900-----	510,890
Land and Farm Areas.		Domestic Animals on Farms and Ranges.	
Approximate land, acres-----	384,640	Cattle--	
Land in farms in 1910-----	291,730	Dairy cows-----	2,747
Land in farms in 1900-----	214,024	Other cows-----	7,985
Improved land in farms in 1910-----	45,969	Yearling heifers-----	2,175
Improved land in farms in 1900-----	48,936	Calves-----	3,444
Woodland in farms-----	114,960	Yearling steers and bulls-----	1,970
Other unimproved land-----	129,801	Other steers and bulls-----	3,945
		Total-----	22,266
		Value-----	\$506,380

## AMADOR COUNTY SUMMARY—Continued.

Domestic Animals on Farms and Ranges—Continued.		
<b>Horses—</b>		
Mature horses .....	2,291	
Yearling colts .....	218	
Spring colts .....	176	
Total .....	2,685	
Value .....	\$233,128	
<b>Mules—</b>		
Mature mules .....	212	
Yearling colts .....	10	
Spring colts .....	17	
Total .....	239	
Values .....	\$27,590	
<b>Asses and burros—</b>		
Number .....	23	
Value .....	\$458	
<b>Swine—</b>		
Mature hogs .....	3,623	
Spring pigs .....	1,673	
Total .....	5,296	
Value .....	\$32,647	
<b>Sheep—</b>		
Rams, ewes, and wethers .....	3,919	
Spring lambs .....	2,726	
Total .....	6,645	
Value .....	\$20,023	
<b>Goats—</b>		
Number .....	1,597	
Value .....	\$3,673	
Total value all domestic animals .....	\$823,899	
<b>Poultry and bees—</b>		
Poultry of all kinds .....	23,630	
Value .....	\$12,380	
Colonies of bees .....	170	
Value .....	\$331	

## Principal Crops.

Description.	Acres.	Bushels.
Corn .....	301	12,526
Oats .....	1,354	30,813
Wheat .....	293	5,169
Barley .....	1,513	29,071
Dry edible beans .....	3	31
Potatoes .....	125	14,054
<b>Hay and forage—</b>		
Timothy alone .....	6	6
Timothy and clover mixed .....	29	29
Clover alone .....	33	33
Alfalfa .....	1,724	4,778
Other tame and cultivated grasses .....	968	993
Wild, salt, or prairie grasses .....	3,599	3,471
Grains cut green .....	8,090	8,651
Total .....	14,449	17,961
<b>Poultry products—</b>		
Poultry raised, number .....	23,628	
Eggs produced, dozen .....	142,824	
Value poultry and eggs produced .....	\$49,621	
<b>Honey and wax—</b>		
Honey produced, pounds .....	2,402	
Wax produced, pounds .....	100	
Value of honey and wax produced .....	\$326	

<b>Wool—</b>	
Wool, fleeces shorn .....	7,253
Mohair and goat hair, fleeces shorn .....	449
Value wool and mohair produced .....	\$5,882
<b>Special crops—</b>	
Potatoes, acres .....	125
Sweet potatoes, acres .....	1
All other vegetables, acres .....	200
Sugar beets, acres .....	315
<b>Orchard fruits—</b>	
Apples .....	8,592
Apricots .....	1,197
Cherries .....	1,143
Peaches and nectarines .....	16,349
Pears .....	5,112
Prunes and plums .....	10,685
Total .....	43,332
<b>Tropical fruits—</b>	
Figs .....	347
Lemons .....	8
Oranges .....	151
Olives .....	274
Total .....	780
<b>Grapevines—</b>	
Number in bearing .....	314,604
<b>Small fruits—</b>	
Strawberries, acres .....	6
Blackberries and dewberries, acres .....	13
All others .....	10
Total .....	29
<b>Nuts—</b>	
Almonds .....	628
Pecans .....	1
Walnuts .....	185
Total .....	830

## Irrigation.

Number of farms irrigated in 1909 .....	73
Acres irrigated in 1909 .....	826
Acreege enterprises were capable of irrigating in 1910 .....	3,973
Acreege included in projects .....	4,139
Main ditches, number .....	55
Length, miles .....	185
Laterals, number .....	12
Length, miles .....	56
Cost of irrigation enterprises up to July 1, 1910 .....	\$265,608
Average cost per acre irrigation enterprises were capable of irrigating in 1910 .....	66.85

## Mineral Production in 1913.

Substance.	Amount.	Value.
Brick, thousand .....	2,000	\$30,000
Clay, tons .....	39,678	38,653
Copper, pounds .....	19,023	2,949
Gold .....		2,901,898
Lime, barrels .....	1,000	1,200
Quartz, tons .....	1,960	3,556
Sand-glass, tons .....	877	670
Sandstone, cubic feet .....	2,500	2,500
Silver .....		18,097
Soapstone, tons .....	350	1,750
Stone industry .....		670
Other minerals .....		11,237
Total .....		\$3,013,180

## BUTTE COUNTY.

Date of creation, February 18, 1850.

Land area, 1,722 square miles.	Population-----	1890. 17,939	1900. 17,117	1910. 27,301
County seat, Oroville.	Population-----			3,859
Population per square mile, 15.9.				
Elevation, 250 feet.	Highest.	Lowest.	Inches.	Inches.
1914: Temperature--	109	29	Rainfall--26.24	Snow-- 0

Butte County is situated in the northern and eastern Sacramento Valley, and embodies within its confines both mountain, foothill, and valley land. Its climate is most diverse, and in its confines are grown all the products to be found in the temperate and semi-tropical zones. In the higher altitudes, apples thrive, while in the lowest stretches of the rolling foothills, oranges and olives reach perfection. On the broad plains great rice fields are now being planted, and the industry promises to rival that of alfalfa and dairy farming and the more extensive grain farming that has hitherto prevailed. Deciduous fruits of every kind are grown. Large olive pickling works are located in Oroville. The olive crop in the northern part of the State for 1914 was estimated to amount to about 10,000 tons. There are also a number of orange packing houses in the county.

The county is exceptionally well watered. Through it runs the Feather River, with a large number of tributary streams. On one boundary is the great Sacramento River. As a result of the abundance of water, increased attention is being given to irrigation. The Butte County canal covers thousands of acres around Gridley, where the utmost prosperity prevails.

Butte County is also the third largest gold-producing county of the State. The chief gold-dredging field lies around Oroville.

The county was the first to grow rice on commercial scale, at Biggs and Gridley.

## BUTTE COUNTY SUMMARY.

Number of Farms Classified by Size.		Value of All Farm Property.	
Under 3 acres-----	2	Total value in 1910-----	\$24,086,440
3 to 9 acres-----	116	Total value in 1900-----	15,535,404
10 to 19 acres-----	186	Per cent increase 1900-1910-----	55.0
20 to 49 acres-----	321	Land in 1910-----	19,404,863
50 to 99 acres-----	143	Land in 1900-----	12,460,530
100 to 174 acres-----	220	Buildings in 1910-----	2,281,132
175 to 259 acres-----	127	Buildings in 1900-----	1,434,870
260 to 499 acres-----	171	Implements and machinery in 1910--	532,320
500 to 999 acres-----	116	Implements and machinery in 1900--	439,390
1,000 acres and over-----	98	Domestic animals, poultry, and bees	
		in 1910-----	1,868,125
Total-----	1,500	Domestic animals, poultry, and bees	
Total in 1900-----	1,179	in 1900-----	1,200,614
Land and Farm Areas.		Domestic Animals on Farms and Ranges.	
Approximate land, acres-----	1,102,080	Cattle--	
Land in farms in 1910-----	490,777	Dairy cows-----	4,713
Land in farms in 1900-----	677,080	Other cows-----	8,359
Improved land in farms in 1910--	247,097	Yearling heifers-----	2,605
Improved land in farms in 1900--	302,029	Calves-----	3,772
Woodland in farms-----	119,126	Yearling steers and bulls-----	2,109
Other unimproved land-----	124,554	Other steers and bulls-----	4,660
		Total-----	26,584
		Value-----	\$673,968



## BUTTE COUNTY SUMMARY—Continued.

Domestic Animals on Farms and Ranges—Continued.		
<b>Horses—</b>		
Mature horses .....	6,638	
Yearling colts .....	645	
Spring colts .....	402	
Total .....	7,655	
Value .....	\$685,441	
<b>Mules—</b>		
Mature mules .....	1,719	
Yearling colts .....	151	
Spring colts .....	91	
Total .....	1,961	
Value .....	\$225,465	
<b>Asses and burros—</b>		
Number .....	18	
Value .....	\$2,655	
<b>Swine—</b>		
Mature hogs .....	9,317	
Spring pigs .....	5,016	
Total .....	14,333	
Value .....	\$83,927	
<b>Sheep—</b>		
Rams, ewes, and wethers .....	29,137	
Spring lambs .....	15,940	
Total .....	45,077	
Value .....	\$138,092	
<b>Goats—</b>		
Number .....	3,215	
Value .....	\$8,356	
Total value all domestic animals	\$1,817,904	

<b>Poultry and bees—</b>		
Poultry of all kinds .....	74,982	
Value .....	\$45,750	
Colonies of bees .....	1,384	
Value .....	\$4,471	

## Principal Crops.

Description.	Acres.	Bushels.
Corn .....	359	14,856
Oats .....	1,432	54,685
Wheat .....	20,894	245,743
Barley .....	17,705	326,447
Kafir corn and milo maize .....	409	9,529
Dry edible beans .....	27	150
Potatoes .....	171	17,201
<b>Hay and forage—</b>		
Timothy alone .....	226	162
Timothy and clover mixed .....	157	271
Clover alone .....	81	95
Alfalfa .....	9,351	38,196
Other tame and cultivated grasses .....	1,994	2,369
Wild, salt, or prairie grasses .....	1,253	1,177
Grains cut green .....	42,726	49,243
All other hay and forage .....	174	319
Total .....	55,962	91,832

<b>Poultry products—</b>		
Poultry raised, number .....	94,183	
Eggs produced, dozen .....	377,598	
Value poultry and eggs produced .....	\$158,052	
<b>Honey and wax—</b>		
Honey produced, pounds .....	9,702	
Wax produced, pounds .....	170	
Value of honey and wax produced .....	\$924	

<b>Wool—</b>		
Wool, fleeces shorn .....	38,261	
Mohair and goat hair, fleeces shorn .....	1,749	
Value wool and mohair produced .....	\$33,991	
<b>Special crops—</b>		
Potatoes, acres .....	171	
Sweet potatoes, acres .....	21	
All other vegetables, acres .....	513	
Sugar beets, acres .....	711	
<b>Orchard fruits—</b>		
Number bearing trees.		
Apples .....	34,425	
Apricots .....	9,900	
Cherries .....	4,317	
Peaches and nectarines .....	255,047	
Pears .....	22,159	
Prunes and plums .....	104,474	
Total .....	452,302	
<b>Tropical fruits—</b>		
Figs .....	9,518	
Lemons .....	2,223	
Oranges .....	147,412	
Pomelos .....	122	
Olives .....	73,453	
Total .....	235,442	
<b>Grape vines—</b>		
Number in bearing .....	258,742	
<b>Small fruits—</b>		
Strawberries, acres .....	48	
Blackberries and dewberries, acres .....	57	
All others, acres .....	43	
Total .....	148	

<b>Nuts—</b>		
Number bearing trees.		
Almonds .....	84,069	
Pecans .....	158	
Walnuts .....	1,063	
Total .....	85,445	

## Irrigation.

Number of farms irrigated in 1909 .....	556
Acres irrigated in 1909 .....	28,754
Acreage enterprises were capable of irrigating in 1910 .....	115,075
Acreage included in projects .....	233,500
Main ditches, number .....	135
Length, miles .....	270
Laterals, number .....	145
Length, miles .....	170
Flowing wells, number .....	
Pumped wells, number .....	46
Cost of irrigation enterprises up to July 1, 1910 .....	\$1,231,894
Average cost per acre irrigation enterprises were capable of irrigating in 1910 .....	10.71

## Mineral Production in 1913.

Substance.	Amount.	Value.
Gems .....		\$175
Gold .....		2,269,849
Mineral water, gallons .....	1,000	250
Silver .....		5,163
Stone industry .....		258,503
Total .....		\$2,533,940
Number of mineral springs .....		3

## CALAVERAS COUNTY.

Date of creation, February 18, 1850.

Land area, 1,027 square miles.	Population-----	1890. 8,882	1900. 11,200	1910. 9,171
County seat, San Andreas.	Population-----	1,640	1,683	1,120
Population per square mile, 8.9.				
Mokelumne Hill (Station):	Highest. Lowest.		Inches.	Inches.
Elevation, 1,550 feet. 1914: Temperature--101	30	Rainfall--32.32	Snow--	3.0

Calaveras is located on the long, gradual western slope of the Sierra Nevada, a little above the center of the State north and south. The Sierra on the east is an abrupt wall plunging down 10,000 feet in ten miles, while the westward side is a long, grand sweep, full seventy miles from foothill to summit. On the east is the great desert basin of Nevada and Utah; on the west the exuberance of California valleys, rich in meadows, grainfields, and orchards. Above the level plain rise the foothills in waves or ripples, hardly distinguishable from the plains at first, but more rolling as you go upward, with long swells of hill and little dales and scattering growth of oak and pine and patches of chaparral.

The elevation rises gradually from about 150 feet to table-lands lying 4,000 feet and peaks of 7,500 feet.

In several parts of the county Angora goats are kept. They are profitable, are hardy, and increase rapidly. The young make excellent "mutton."

Alfalfa is a staple crop wherever it can be irrigated.

## CALAVERAS COUNTY SUMMARY.

Number of Farms Classified by Size.		Domestic Animals on Farms and Ranges.	
Under 3 acres-----	25	Cattle--	
3 to 9 acres-----	14	Dairy cows-----	1,824
10 to 19 acres-----	48	Other cows-----	8,407
20 to 49 acres-----	45	Yearling heifers-----	2,432
50 to 99 acres-----	171	Calves-----	3,355
100 to 174 acres-----	60	Yearling steers and bulls-----	2,057
175 to 259 acres-----	127	Other steers and bulls-----	2,902
260 to 499 acres-----	80		
500 to 999 acres-----	62	Total-----	20,977
1,000 acres and over-----	632	Value-----	\$422,395
Total-----	575		
Total in 1900-----		Horses--	
		Mature horses-----	3,143
		Yearling colts-----	302
		Spring colts-----	203
		Total-----	3,648
		Value-----	\$264,717
		Mules--	
		Mature mules-----	25
		Yearling colts-----	13
		Spring colts-----	25
		Total-----	63
		Value-----	\$3,920
		Asses and burros--	
		Number-----	27
		Value-----	\$1,850
		Swine--	
		Mature hogs-----	2,588
		Spring pigs-----	1,586
		Total-----	4,174
		Value-----	\$24,368

## Land and Farm Areas.

Approximate land, acres-----	657,280
Land in farms in 1910-----	271,401
Land in farms in 1900-----	212,820
Improved land in farms in 1910-----	59,104
Improved land in farms in 1900-----	41,402
Woodland in farms-----	149,642
Other unimproved land-----	62,655

## Value of All Farm Property.

Total in 1910-----	\$3,973,409
Total in 1900-----	2,335,659
Per cent increase 1900-1910-----	70.1
Land in 1910-----	2,376,303
Land in 1900-----	1,393,510
Buildings in 1910-----	664,000
Buildings in 1900-----	427,190
Implements and machinery in 1910-----	138,905
Implements and machinery in 1900-----	89,030
Domestic animals, poultry, and bees in 1910-----	794,201
Domestic animals, poultry, and bees in 1900-----	425,929



## COLUSA COUNTY.

Date of creation, February 18, 1850.

Land area, 1,140 square miles.	Population-----	1890.	1900.	1910.
County seat, Colusa (town).	Population-----	14,640	7,364	7,732
Population per square mile, 6.8.		1,336	1,441	1,582
Elevation, 60 feet.	Highest.	Lowest.	Inches.	Inches.
1914: Temperature--	104	28	Rainfall--	7.17
			Snow--	0

Colusa County is situated in the heart of the great Sacramento Valley. The fertile soil, the temperate climate, the extreme dryness of the atmosphere during two-thirds of the year, and, lastly, a sufficient rainfall, make possible the production of great wealth from the fertile acres of this county.

The western portion of the county is principally mountainous, with some very productive valleys intervening. Cattle and live stock interests prevail. Several mineral springs are located in this portion of the county, and thousands of bottles of mineral water are shipped annually. At Sites two quarries take out stone, known as the famous Colusa sandstone, from which many prominent buildings in San Francisco are built.

Colusa County was one of the first to grow rice, and now has a considerable acreage in that grain.

## COLUSA COUNTY SUMMARY.

Number of Farms Classified by Size.		Domestic Animals on Farms and Ranges.	
Under 3 acres-----	1	Cattle—	
3 to 9 acres-----	31	Dairy cows-----	3,128
10 to 19 acres-----	35	Other cows-----	6,571
20 to 49 acres-----	85	Yearling heifers-----	2,140
50 to 99 acres-----	42	Calves-----	2,606
100 to 174 acres-----	90	Yearling steers and bulls-----	1,556
175 to 259 acres-----	30	Other steers and bulls-----	2,619
260 to 499 acres-----	129		
500 to 999 acres-----	104	Total-----	*18,750
1,000 acres and over-----	120	Value-----	*\$129,618
Total-----	667	Horses—	
Total in 1900-----	582	Mature horses-----	3,992
		Yearling colts-----	481
		Spring colts-----	259
		Total-----	4,732
		Value-----	\$128,700
		Mules—	
		Mature mules-----	4,607
		Yearling colts-----	437
		Spring colts-----	247
		Total-----	5,291
		Value-----	\$629,345
		Asses and burros—	
		Number-----	65
		Value-----	\$15,275
		Swine—	
		Mature hogs-----	17,646
		Spring pigs-----	10,418
		Total-----	28,064
		Value-----	\$161,174

Land and Farm Areas.	
Approximate land, acres-----	729,600
Land in farms in 1910-----	522,376
Land in farms in 1900-----	550,002
Improved land in farms in 1910-----	336,509
Improved land in farms in 1900-----	358,227
Woodland in farms-----	38,252
Other unimproved land-----	147,615

Value of All Farm Property.	
Total in 1910-----	\$19,602,208
Total in 1900-----	13,054,483
Per cent increase 1900-1910-----	50.2
Land in 1910-----	16,066,035
Land in 1900-----	10,885,350
Buildings in 1910-----	1,204,780
Buildings in 1900-----	838,420
Implements and machinery in 1910-----	419,557
Implements and machinery in 1900-----	417,690
Domestic animals, poultry, and bees in 1910-----	1,911,836
Domestic animals, poultry, and bees in 1900-----	918,023

\*Includes animals, age or sex not specified.



## COLUSA COUNTY SUMMARY—Continued.

Domestic Animals on Farms and Ranges—Continued.		
Sheep—		
Rams, ewes, and wethers.....	39,801	
Spring lambs .....	24,791	
Total .....	64,592	
Value .....	\$202,703	
Goats—		
Number .....	2,154	
Value .....	\$7,271	
Total value all domestic animals	\$1,874,086	

Poultry and bees—		
Poultry of all kinds.....	61,113	
Value .....	\$33,372	
Colonies of bees.....	1,406	
Value .....	\$4,378	

## Principal Crops.

Description.	Acres.	Bushels.
Corn .....	706	16,619
Oats .....	771	12,556
Wheat .....	11,168	221,549
Barley .....	89,985	1,949,223
Kafir corn and milo maize....	2,598	48,418
Dry edible beans.....	1,083	20,087
Potatoes .....	439	28,391
Hay and forage—	Acres.	Tons.
Timothy alone .....	225	305
Timothy and clover mixed....	160	191
Clover alone .....	10	20
Alfalfa .....	4,242	14,472
Other tame and cultivated grasses .....	70	85
Wild, salt, or prairie grasses	568	552
Grains cut green.....	24,221	29,047
All other hay and forage....	85	1,107
Total .....	29,581	45,779

Poultry products—		
Poultry raised, number.....	73,034	
Eggs produced, dozens.....	249,229	
Value poultry and eggs produced..	\$92,466	
Honey and wax—		
Honey produced, pounds.....	67,689	
Wax produced, pounds.....	798	
Value of honey and wax produced	\$5,790	

Wool—		
Wool, fleeces shorn.....	73,221	
Mohair and goat hair, fleeces shorn	4,009	
Value wool and mohair produced..	\$56,620	

Special crops—		
Potatoes, acres .....	439	
Sweet potatoes, acres.....	6	
All other vegetables, acres.....	160	
Sugar beets, acres.....	211	

Orchard fruits—	Number bearing trees.
Apples .....	3,067
Apricots .....	4,420
Cherries .....	223
Peaches and nectarines.....	4,075
Pears .....	2,432
Prunes and plums.....	57,468
Total .....	71,796

Tropical fruits—	Number bearing trees.
Figs .....	1,391
Lemons .....	199
Oranges .....	1,537
Pomeloes .....	70
Olives .....	336
Total .....	3,537

Grapevines—	
Number in bearing .....	482,417
Small fruits—	
Strawberries, acres .....	1
Blackberries and dewberries, acres	5
All others, acres.....	1
Total .....	7

Nuts—	Number bearing trees.
Almonds .....	16,078
Pecans .....	10
Walnuts .....	1,306
Total .....	17,409

## Irrigation.

Number of farms irrigated in 1909....	112
Acres irrigated in 1909.....	4,276
Acreage enterprises were capable of irrigating in 1910.....	16,541
Acreage included in projects.....	18,783
Main ditches, number.....	38
Length, miles .....	44
Laterals, number .....	10
Length, miles .....	7
Pumped wells, number.....	3
Cost of irrigation enterprises up to July 1, 1910.....	\$76,112
Average cost per acre irrigation en- terprises were capable of irrigating in 1910 .....	4.60

## Mineral Production in 1913.

Substance.	Amount.	Value.
Mineral water, gallons.....	132,720	\$32,931
Sandstone, cubic feet .....	34,927	15,550
Total .....		\$48,481
Number of mineral springs.....		12

## CONTRA COSTA COUNTY.

Date of creation, February 18, 1850.

	1890.	1900.	1910.
Land area, 714 square miles.	Population----- 13,515	18,046	31,674
County seat, Martinez (town).	Population----- 1,600	1,380	2,115
Population per square mile, 44.4.			

Contra Costa is one of the central counties, its shore line being within fourteen miles of San Francisco. It possesses unusually good traveling facilities, both by rail and by steamer. The county has seventy miles of water front, nearly all of which is upon deep water, navigable by all vessels engaged in commerce. Over three-fourths of its area is cultivated, the balance being used for grazing. The only mountain of any size is Mount Diablo, which is 3,896 feet in height, and almost in the geographical center of the county.

The farming lands in the eastern section are between the foothills and the San Joaquin River. The soil is of a rich, alluvial nature, and produces wheat, barley, alfalfa, fruit, and vines. To the northward and between the uplands and the San Joaquin River is a body of the tule lands, a large portion of which has been reclaimed, and is some of the most productive land in the State, being a rich deposit of sediment and decomposed vegetation. Alfalfa, asparagus, potatoes, beans, etc., are produced on the largest scale on such lands.

Grain raising is very important in this county. A large acreage is planted to barley and hay. The raising of sugar beets is a growing industry. Vegetables of all kinds are raised profitably.

Stock raising is a leading industry, and the reclaimed lowlands for summer grazing and the rolling hills for winter, close together, create conditions whereby a failure is impossible. The stock farms have produced some of the most famous trotting and pacing horses. Port Costa, the shipping point for the bulk of the grain raised in California, has extensive warehouses. Near Vallejo Junction is the largest smelting works in the State; at Vallona are extensive lumber yards, where ships from Oregon and Puget Sound discharge; at Crockett are flouring mills, also the refinery of the California and Hawaiian Sugar Company. At Richmond one of the largest oil refining plants in the State is situated.

## CONTRA COSTA COUNTY SUMMARY.

Number of Farms Classified by Size.		Value of All Farm Property.	
Under 3 acres.....	18	Total in 1910.....	\$31,812,192
3 to 9 acres.....	118	Total in 1900.....	18,874,387
10 to 19 acres.....	127	Per cent increase 1900-1910.....	68.5
20 to 49 acres.....	221	Land in 1910.....	26,586,160
50 to 99 acres.....	158	Land in 1900.....	15,553,110
100 to 174 acres.....	256	Buildings in 1910.....	2,493,375
175 to 259 acres.....	147	Buildings in 1900.....	1,675,790
260 to 499 acres.....	206	Implements and machinery in 1910.....	680,520
500 to 999 acres.....	140	Implements and machinery in 1900.....	404,590
1,000 acres and over.....	74	Domestic animals, poultry and bees, in 1910.....	2,052,137
Total.....	1,465	Domestic animals, poultry, and bees in 1900.....	1,240,897
Total in 1900.....	1,511	Domestic Animals on Farms and Ranges.	
Land and Farm Areas.		Cattle—	
Approximate land, acres.....	456,960	Dairy cows.....	9,469
Land in farms in 1910.....	406,433	Other cows.....	6,567
Land in farms in 1900.....	406,533	Yearling heifers.....	3,240
Improved land in farms in 1910.....	262,152	Calves.....	4,479
Improved land in farms in 1900.....	262,617	Yearling steers and bulls.....	1,123
Woodland in farms.....	28,766	Other steers and bulls.....	1,651
Other unimproved land.....	115,515	Total.....	26,529
		Value.....	\$647,877

## CONTRA COSTA COUNTY SUMMARY—Continued.

Domestic Animals on Farms and Ranges—Continued.		
<b>Horses—</b>		
Mature horses .....	9,494	
Yearling colts .....	1,095	
Spring colts .....	644	
Total .....	11,233	
Value .....	\$1,136,119	
<b>Mules—</b>		
Mature mules .....	564	
Yearling colts .....	63	
Spring colts .....	24	
Total .....	651	
Value .....	\$78,810	
<b>Asses and burros—</b>		
Number .....	6	
Value .....	\$4,265	
<b>Swine—</b>		
Mature hogs .....	3,887	
Spring pigs .....	3,054	
Total .....	6,941	
Value .....	\$44,330	
<b>Sheep—</b>		
Rams, ewes, and wethers .....	14,132	
Spring lambs .....	5,463	
Total .....	19,595	
Value .....	\$73,877	
<b>Goats—</b>		
Number .....	17	
Value .....	\$76	
Total value all domestic animals .....	\$1,985,354	
<b>Poultry and bees—</b>		
Poultry of all kinds .....	118,944	
Value .....	\$64,673	
Colonies of bees .....	698	
Value .....	\$2,110	

## Principal Crops.

Description.	Acres.	Bushels.
Corn .....	263	6,158
Oats .....	1,112	40,178
Wheat .....	2,443	53,332
Barley .....	18,665	731,970
Dry edible beans .....	2,156	61,498
Potatoes .....	12,687	2,226,695
Hay and forage—		Tons.
Clover alone .....	839	1,874
Alfalfa .....	3,477	8,163
Other tame and cultivated grasses .....	3,825	4,901
Wild, salt, or prairie grasses .....	1,050	1,215
Grains cut green .....	79,368	112,478
All other hay and forage .....	378	449
Total .....	88,937	129,080

<b>Poultry products—</b>		
Poultry raised, number .....	154,332	
Eggs produced, dozen .....	664,951	
Value poultry and eggs produced .....	247,618	
<b>Honey and wax—</b>		
Honey produced, pounds .....	15,950	
Wax produced, pounds .....	284	
Value of honey and wax produced .....	1,882	

<b>Wool—</b>	
Wool, fleeces shorn .....	14,715
Value wool and mohair produced .....	10,869
<b>Special crops—</b>	
Potatoes, acres .....	12,687
All other vegetables, acres .....	3,650
Sugar beets, acres .....	40

<b>Orchard fruits—</b>	
Apples .....	13,429
Apricots .....	38,812
Cherries .....	7,258
Peaches and nectarines .....	39,461
Pears .....	68,088
Prunes and plums .....	58,177

Total .....

Number bearing trees.

<b>Tropical fruits—</b>	
Figs .....	293
Lemons .....	148
Oranges .....	402
Olives .....	9,744

Total .....

Number bearing trees.

<b>Grapevines—</b>	
Number in bearing .....	2,972,130

<b>Small fruits—</b>	
Strawberries, acres .....	1
Blackberries and dewberries, acres .....	3
All others .....	2

Total .....

6

<b>Nuts—</b>	
Almonds .....	209,056
Pecans .....	25
Walnuts .....	110,088

Total .....

215,249

## Irrigation.

Number of farms irrigated in 1909 .....	78
Acres irrigated in 1909 .....	26,856
Acres enterprises were capable of irrigating in 1910 .....	32,562
Acres included in projects .....	32,640
Main ditches, number .....	176
Length, miles .....	172
Flowing wells, number .....	1
Pumped wells, number .....	26
Cost of irrigation enterprises up to July 1, 1910 .....	\$90,503
Average cost per acre irrigation enterprises were capable of irrigating in 1910 .....	2.78

## Mineral Production in 1913.

Substance.	Amount.	Value.
Brick, thousand .....	30,411	\$212,953
Lime, barrels .....	150,551	127,968
Limestone, tons .....	26,259	34,976
Mineral water, gallons .....	192,292	4,989
Stone industry .....		660,405
Other minerals .....		921,349

Total .....

\$1,962,640

Number of mineral springs .....	8
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## DEL NORTE COUNTY.

Date of creation, March 2, 1857.

Land area, 1,024 square miles.	Population-----	1890. 2,592	1900. 2,408	1910. 2,417
County seat, Crescent City.	Population-----	907	699	1,114
Population per square mile, 2.4.				

Elevation, 125 feet.	1914: Temperature---	Highest. 91	Lowest. 28	Rainfall--	Inches. 91.09	Snow--	Inches. 2.0
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Del Norte is the extreme northwestern county of California and has a coast line of about 35 miles. Crescent City, the county seat and principal harbor, is 280 miles from San Francisco.

Smith and Klamath are the principal streams, the former in the northern and the latter in the southern part of the county. Both are navigable near their mouths to the small ocean-going steamers. Dairying and lumbering are the principal industries. The mountains of the county prospect well in copper and gold-bearing formations.

Crescent City is the chief shipping point. Products usually are sent to the San Francisco market. The county is rich in undeveloped mineral resources.

With transportation facilities, Del Norte is destined to become one of the apple-producing regions of California.

## DEL NORTE COUNTY SUMMARY.

Number of Farms Classified by Size.		Domestic Animals on Farms and Ranges.	
3 to 9 acres.....	2	Cattle—	
10 to 19 acres.....	6	Dairy cows .....	3,575
20 to 49 acres.....	9	Other cows .....	620
50 to 99 acres.....	13	Yearling heifers .....	849
100 to 174 acres.....	31	Calves .....	1,306
175 to 259 acres.....	11	Yearling steers and bulls.....	273
260 to 499 acres.....	23	Other steers and bulls.....	234
500 to 999 acres.....	10		
1,000 acres and over.....	9	Total .....	6,857
Total .....	114	Value .....	\$137,380
Total in 1900.....	131	Horses—	
		Mature horses .....	382
		Yearling colts .....	45
		Spring colts .....	14
		Total .....	441
		Value .....	\$37,265
		Mules—	
		Mature mules .....	3
		Value .....	\$475
		Swine—	
		Mature hogs .....	1,153
		Spring pigs .....	617
		Total .....	1,770
		Value .....	\$8,451
		Sheep—	
		Rams, ewes, and wethers.....	1,341
		Spring lambs .....	500
		Total .....	1,841
		Value .....	\$5,063
		Goats—	
		Number .....	465
		Value .....	\$1,245
		Total value all domestic animals	\$189 879

Land and Farm Areas.	
Approximate land, acres.....	655,360
Land in farms in 1910.....	35,947
Land in farms in 1900.....	33,115
Improved land in farms in 1910.....	12,439
Improved land in farms in 1900.....	9,787
Woodland in farms.....	10,574
Other unimproved land.....	12,934

Value of All Farm Property.	
Total in 1910.....	\$1,770,222
Total in 1900.....	1,021,040
Per cent increase 1900-1910.....	73.4
Land in 1910.....	1,358,300
Land in 1900.....	687,830
Buildings in 1910.....	171,380
Buildings in 1900.....	121,840
Implements and machinery in 1910.....	48,265
Implements and machinery in 1900.....	35,130
Domestic animals, poultry, and bees in 1910.....	192,277
Domestic animals, poultry, and bees in 1900.....	176,240



## DEL NORTE COUNTY SUMMARY—Continued.

## Domestic Animals on Farms and Ranges—Continued.

Poultry and bees—		
Poultry of all kinds.....	3,911	
Value .....	\$2,175	
Colonies of bees.....	78	
Value .....	\$223	

## Principal Crops.

Description.	Acres.	Bushels.
Corn .....	1	12
Oats .....	216	12,078
Barley .....	32	840
Dry edible beans.....		10
Potatoes .....	69	9,800

Hay and forage—	Acres.	Tons.
Timothy alone .....	6	11
Timothy and clover mixed..	49	148
Clover alone .....	63	169
Alfalfa .....	33	90
Other tame and cultivated grasses .....	1,093	1,853
Wild, salt, or prairie grasses	50	50
Grains cut green.....	1,509	3,597
All other hay and forage....	249	4,213
Total .....	3,052	10,131

Poultry products—		
Poultry raised, number.....	3,357	
Eggs produced, dozen.....	13,767	
Value poultry and eggs produced..	\$4,651	

Honey and wax—		
Honey produced, pounds.....	1,395	
Value .....	\$152	

## Wool—

Wool, fleeces shorn.....	1,238
Mohair and goat hair, fleeces shorn	40
Value wool and mohair produced..	\$2,070

## Special crops—

Potatoes, acres .....	69
All other vegetables, acres.....	29

## Orchard fruits—

	Number bearing trees.
Apples .....	3,234
Cherries .....	48
Peaches and nectarines.....	42
Pears .....	129
Prunes and plums.....	96
Total .....	3,549

## Tropical fruits—

Figs .....	1
Total .....	1

## Small fruits—

Strawberries, acres .....	1
Total .....	1

## Nuts—

	Number bearing trees
Pecans .....	3
Walnuts .....	3
Total .....	6

## Mineral Production in 1913.

Substance.	Value.
Gold .....	\$2,498
Silver .....	16
Total .....	\$2,514

## EL DORADO COUNTY.

Date of creation, February 18, 1850.

Land area, 1,753 square miles.	Population-----	1890. 9,232	1900. 8,986	1910. 7,492
County seat, Placerville.	Population-----	1,690	1,748	1,914
Population per square mile, 4.3.				
Elevation, 1,875 feet.	Highest. Lowest.	Inches.	Inches.	
1914: Temperature---	98 24	Rainfall--42.45	Snow-- 4.0	

El Dorado County is situated on the western slope of the Sierra Nevada Mountains, in the eastern portion of the State. The county is about 75 miles long and about 30 miles in width. The western portion of the county borders the Sacramento Valley, and is used principally for grazing, stock raising, and wine vineyards. The central portion of the county includes the great mineral belt, known as the "mother lode," from which millions of dollars have been extracted on and near the surface in its infancy. In this belt, which is chiefly foothills, can be found some of the best fruit lands in the State.

The eastern portion, being at an altitude of from 3,000 to 7,000 feet, supplies summer pasturage for a number of cattle, sheep, and horses. In this region water is abundant, awaiting capital and labor to harness the everflowing streams. Most of this area is covered by a virgin growth of sugar and white pine, fir, and cedar timber.

## EL DORADO COUNTY SUMMARY.

Number of Farms Classified by Size.		Domestic Animals on Farms and Ranges.	
3 to 9 acres-----	26	Cattle-----	
10 to 19 acres-----	21	Dairy cows-----	2,823
20 to 49 acres-----	60	Other cows-----	4,338
50 to 99 acres-----	88	Yearling heifers-----	1,683
100 to 174 acres-----	212	Calves-----	2,154
175 to 259 acres-----	100	Yearling steers and bulls-----	1,138
260 to 499 acres-----	122	Other steers and bulls-----	912
500 to 999 acres-----	52		
1,000 acres and over-----	35	Total-----	13,048
Total-----	716	Value-----	\$254,093
Total in 1900-----	759		
Land and Farm Areas.		Horses-----	
Approximate land, acres-----	1,121,920	Mature horses-----	2,274
Land in farms in 1910-----	210,881	Yearling colts-----	180
Land in farms in 1900-----	209,320	Spring colts-----	90
Improved land in farms in 1910-----	41,682	Total-----	2,544
Improved land in farms in 1900-----	45,481	Value-----	\$202,610
Woodland in farms-----	137,057		
Other unimproved land-----	32,142	Mules-----	
		Mature mules-----	93
		Yearling colts-----	9
		Spring colts-----	10
		Total-----	112
		Value-----	\$10,130
Value of All Farm Property.		Asses and burros-----	
Total in 1910-----	\$3,775,358	Number-----	17
Total in 1900-----	2,500,574	Value-----	\$2,985
Per cent increase 1900-1910-----	45.7		
Land in 1910-----	2,343,931	Swine-----	
Land in 1900-----	1,543,240	Mature hogs-----	1,428
Buildings in 1910-----	749,745	Spring pigs-----	973
Buildings in 1900-----	566,120	Total-----	2,401
Implements and machinery in 1910-----	162,185	Value-----	\$16,502
Implements and machinery in 1900-----	116,320		
Domestic animals, poultry and bees in 1910-----	519,497		
Domestic animals, poultry and bees in 1900-----	361,894		

## EL DORADO COUNTY SUMMARY—Continued.

Domestic Animals on Farms and Ranges—Continued.				
Sheep—			Orchard fruits—	Number bearing trees.
Rams, ewes and wethers.....	1,763		Apples .....	31,929
Spring lambs .....	1,399		Apricots .....	3,051
			Cherries .....	3,259
Total .....	3,162		Peaches and nectarines.....	61,860
Value .....	\$11,580		Pears .....	49,672
			Prunes and plums.....	32,764
Goats—			Total .....	180,017
Number .....	3,315			
Value .....	\$7,133		Tropical fruits—	Number bearing trees
Total value all domestic animals	\$189,819		Figs .....	587
			Oranges .....	53
Poultry and bees—			Olives .....	37
Poultry of all kinds.....	24,308		Total .....	677
Value .....	\$12,697		Grapevines—	
Colonies of bees.....	434		Number in bearing.....	581,342
Value .....	\$1,079			
			Small fruits—	
Principal Crops.			Strawberries, acres .....	5
Description.	Acres.	Bushels.	Blackberries and dewberries, acres..	11
Corn .....	38	768	All others, acres.....	7
Oats .....	543	10,504	Total, acres .....	23
Wheat .....	193	3,261		
Barley .....	50	884	Nuts—	Number bearing trees.
Potatoes .....	113	18,513	Almonds .....	438
			Walnuts .....	880
Hay and forage—			Total .....	1,318
Timothy alone .....	13	14		
Timothy and clover mixed..	443	436	Irrigation.	
Clover alone .....	234	493	Number of farms irrigated in 1909...	244
Alfalfa .....	407	824	Acres irrigated in 1909.....	5,122
Other tame and cultivated			Acreage enterprises were capable of	
grasses .....	447	508	irrigating in 1910.....	5,501
Wild, salt, or prairie grasses	2,535	2,191	Acreage included in projects.....	20,224
Grains cut green.....	7,969	7,142	Main ditches, number.....	56
All other hay and forage....	47	47	Length, miles .....	285
Totals .....	12,115	11,685	Laterals, number .....	25
			Length, miles .....	55
Poultry products—			Cost of irrigation enterprises up to	
Poultry raised, number.....	28,499		July 1, 1910.....	\$346,939
Eggs produced, dozen.....	132,910		Average cost per acre irrigation en-	
Value poultry and eggs produced..	\$45,411		terprises were capable of irrigating	
Honey and wax—			in 1910 .....	\$63.07
Honey produced, pounds.....	8,105			
Wax produced, pounds.....	75		Mineral Production in 1913.	
Value of honey and wax produced..	696		Substance.	Amount.
Wool—			Copper, pounds .....	\$107
Wool, fleeces horn .....	3,808		Gold .....	62,688
Mohair and goat hair, fleeces shorn	933		Silver .....	250
Value wool and mohair produced..	\$3,504		Stone industry .....	4,678
Special crops—			Total .....	\$67,723
Potatoes, acres .....	113		Number of mineral springs.....	5
All other vegetables, acres.....	197			

## FRESNO COUNTY.

Date of creation, April 19, 1856.

Land area, 5,950 square miles.	Population-----	1890.	1900.	1910.
County seat, Fresno (city).	Population-----	32,025	37,862	75,657
Population per square mile, 12.7.	Population-----	10,818	12,470	24,892
Elevation, 293 feet.	Highest.	Lowest.	Inches.	Inches.
1914: Temperature---	106	27	Rainfall-- 9.67	Snow-- 0

Including vineyards, Fresno County is the greatest fruit and wine producer. It is situated in the center of the State and in the middle of the fertile San Joaquin Valley. There are only five counties which exceed Fresno in size—San Bernardino, Inyo, Kern, Riverside, and Siskiyou, in the order named. When Fresno was first formed it was considerably larger, but on the eleventh of March, 1893, a large slice, consisting of 2,121 square miles, was carved out of the northern part of the county and formed into Madera County; and still more recently, Fresno County was again mutilated by 202 square miles of the south-east portion being transferred to Kings County by an act of the legislature approved April 12, 1909. Before being partitioned, Fresno County comprised 8,214 square miles, but although the land area has been thus reduced to 5,950 square miles, the county ranks sixth of the fifty-eight in the State, and is one of the most productive. It is also the fifth largest in population, being only exceeded by San Francisco, Los Angeles, Alameda, and Santa Clara. The word "Fresno," in Spanish, signifies ash tree, and it was because of the abundance of mountain ash in the mountains of this county that it received its name.

Fresno County is naturally subdivided into two portions—plains and mountains. The plains are the bottom of the San Joaquin Valley, extending from the foot of the Coast Range on the west to the foothills of the Sierra Nevada on the east. From the first foothills the rise is rapid, the mountains culminating in peaks rising 10,000 to 12,000 feet high. The country about Fresno is a vast plain intersected by the San Joaquin and Kings rivers and their tributaries. Four natural soil divisions have been recognized—the foothill region, where agriculture was formerly confined to grazing; the plains of the valley, with red soils lying near the hills; the "white ash" soil found farther out in the plain, and the bottoms, or alluvial lands, along the Kings River.

There is a dry and a wet season, the former from about May to September, and the latter from the middle of October or early part of November. The rains, which are at irregular intervals during the winter, seldom last more than two or three days at a time. There are about 238 days of sunshine in the year. The atmosphere during the summer months is dry, and the heat not nearly so oppressive as in the East and other places where the humidity is great. Sunstroke is unknown.

The county has passed through four stages of development. First came mining in the early days before it was organized as a county, and this period extended to about 1860-64. Secondly, came the stock-raising period, which arose from the gradual disappearance of placer mining, and lasted until 1874, although sheep raising still continued on a large scale; thirdly, about 1868, the farming interests sprang up,



although prior to the advent of the railroad in 1870, agriculture amounted to very little. The fourth, and most important, may be called the viticultural and fruit era, which began to come into prominence early in the eighties, and has now become the leading feature of the county.

As California holds the first place among all the states in the Union in irrigation, so Fresno is the leading county in the State, both in number and extent of its canals and ditches, having more than double the acreage under irrigation than has any other county.

During the last ten years, the dairy industry has made great progress, except in the manufacture of cheese, which, however, was never produced on a very large scale.

Including grapes, Fresno produces more fruit than any other county in the State. Fresno County holds the first place in the production of grapes, raisins, figs, sweet wines, and brandy, and is one of the leading counties of the State in the production of peaches, apricots, and olives, and the acreage in citrus fruits is rapidly increasing.

Fresno is one of the largest producers of olive oil and pickled olives in the State, both being of a very high grade.

In figs, the county has been a large producer for many years, and is noted for the now well-known Smyrna, or "Calimyrna" figs, which were first introduced into this State by George C. Roeding, of Fresno. The quantity now packed in Fresno amounts to several thousand tons per annum.

The varieties of fish include salmon, black bass, trout, and catfish, all of which are plentiful.

There is an abundance of game, including quail, doves, a large variety of ducks and wild geese, but there is no means at present of ascertaining either the quantity or money value of either fish or game. The sums received for hunting licenses, however, are considerable.

The value of the lumber industry to the county is very large, varying from sixty to seventy-five million feet, board measure, with an average value of some two million dollars a year, comprising sugar pine, white pine, fir, and sequoia.

The great increase in the manufactures of Fresno is due chiefly to the increase in the canning and preserving of fruits and vegetables, the value of products for which amounted to \$6,942,440, and formed 70.5 per cent of the total value of all the manufacturing industries of the city. Most of the fruit preserving of Fresno is by the drying or evaporating process, and the greatest crop is in raisins, in which Fresno leads the world.

In recent years the production of petroleum in Fresno County has developed from a small beginning into one of the most important industries. In 1900 the wells in the county at Coalinga produced 532,000 barrels of the value of about \$547,960; in 1914, the production was 18,956,965 barrels valued at \$7,927,736. The county ranks second in the State in the value of minerals produced, the total in 1913 being \$8,438,810.

## FRESNO COUNTY SUMMARY.

Number of Farms Classified by Size.	
Under 3 acres.....	6
3 to 9 acres.....	267
10 to 19 acres.....	598
20 to 49 acres.....	3,240
50 to 99 acres.....	951
100 to 174 acres.....	609
175 to 259 acres.....	142
260 to 499 acres.....	202
500 to 999 acres.....	119
1,000 acres and over.....	111
Total .....	6,245
Total in 1900.....	3,290

## Land and Farm Areas.

Approximate land, acres.....	3,808,000
Land in farms in 1910.....	1,106,616
Land in farms in 1900.....	1,284,736
Improved land in farms in 1910.....	590,205
Improved land in farms in 1900.....	786,337
Woodland in farms.....	93,194
Other unimproved land.....	423,217

## Value of All Farm Property.

Total value in 1910.....	\$2,583,053
Total value in 1900.....	42,829,479
Per cent increase 1900-1910.....	*
Land in 1910.....	75,133,654
Land in 1900.....	34,201,530
Buildings in 1910.....	6,861,289
Buildings in 1900.....	3,092,140
Implements and machinery in 1910.....	3,223,706
Implements and machinery in 1900.....	1,593,890
Domestic animals, poultry, and bees in 1910.....	7,356,409
Domestic animals, poultry, and bees in 1900.....	3,941,919

## Domestic Animals on Farms and Ranges.

Cattle—	
Dairy cows .....	22,241
Other cows .....	42,001
Yearling heifers .....	13,117
Calves .....	12,682
Yearling steers and bulls.....	15,354
Other steers and bulls.....	22,230
Total .....	127,625
Value .....	\$3,258,420

## Horses—

Mature horses .....	22,033
Yearling colts .....	1,899
Spring colts .....	1,047
Total .....	25,009
Value .....	\$2,583,216

## Mules—

Mature mules .....	3,498
Yearling colts .....	293
Spring colts .....	183
Total .....	3,979
Value .....	\$534,660

## Asses and burros—

Number .....	101
Value .....	\$34,883

## Swine—

Mature hogs .....	20,134
Spring pigs .....	13,016
Total .....	33,150
Value .....	\$230,325

## Sheep—

Rams, ewes, and wethers.....	94,757
Spring lambs .....	47,254
Total .....	142,011
Value .....	\$555,057

## Goats—

Number .....	4,558
Value .....	\$8,485

Total value all domestic animals \$7,205,046

## Poultry and bees—

Poultry of all kinds.....	213,108
Value .....	\$116,504
Colonies of bees .....	9,242
Value .....	\$34,859

## Principal Crops.

Description.	Acres.	Bushels.
Corn .....	1,422	37,726
Oats .....	1,554	20,027
Wheat .....	7,329	97,391
Barley .....	32,132	694,234
Kafir corn and milo maize.....	1,689	37,506
Dry edible beans.....	9	155
Potatoes .....	218	23,891
Hay and forage—		
Timothy and clover mixed..	3	6
Clover alone .....	10	62
Alfalfa .....	47,776	167,217
Other tame and cultivated grasses .....	243	208
Wild, salt, or prairie grasses ..	2,741	2,343
Grains cut green.....	44,159	43,863
All other hay and forage....	333	960
Totals .....	95,265	214,659

## Poultry products—

Poultry raised, number.....	266,221
Eggs produced, dozen.....	1,267,840
Value of poultry and eggs produced ..	\$419,265

## Honey and wax—

Honey produced, pounds.....	616,609
Wax produced, pounds.....	7,261
Value of honey and wax produced.....	\$33,356

## Wool—

Wool, fleeces shorn.....	107,802
Mohair and goat hair, fleeces shorn ..	1,900
Value of wool and mohair produced ..	\$109,982

## Special crops—

Potatoes, acres .....	218
Sweet potatoes, acres.....	.57
All other vegetables, acres.....	1,391
Sugar beets, acres.....	228

\*In comparing the data secured in 1910 with that for 1900, it should be remembered that a part of the county was transferred to Kings County in 1909.



## GLENN COUNTY.

Date of creation, March 11, 1891.

	1890.	1900.	1910.
Land area, 1,259 square miles.	Population-----	5,150	7,172
County seat, Willows (town).	Population-----	893	1,139
Population per square mile, 5.7.			
	Highest.	Lowest.	Inches.
Elevation, 136 feet.	1914: Temperature---111	27	Rainfall---21.31
			Snow-- 0

Glenn County occupies a central position in the Sacramento Valley, extending from the summit of the Coast Range across the Sacramento eastward, one-third being mountainous, but affording good summer pasturage for stock. About the same area is in the foothills, with many fertile ranches, and the remaining third practically a level valley floor of wonderfully fertile soil, which has for the past forty years been continuously cropped to grain and still continues to produce good crops.

The United States Reclamation Service has installed a system to irrigate 14,000 acres of the fertile lands about the town of Orland. This project is designed as a model irrigation system, and was undertaken by the reclamation service to demonstrate the benefits of irrigation under perfect conditions of soil and climate. The works consist of an impounding dam, situated at East Park in Colusa County, a diversion dam at the Buttes in Tehama County, and 99 miles of canals and main laterals, about 100 miles of small field ditches.

Owing to the extensive system of grain farming, and the very limited number of small irrigated farms, the average farm in Glenn County up to recent years was large.

The county roads are excellent. They are graded, graveled, and kept in splendid condition, the gravel in all parts of the county being particularly adapted to road making.

Glenn County is the hunter's paradise. Black bass, striped bass, salmon, perch, catfish, trout, and many other varieties abound in the Sacramento River, and the mountain streams are full of speckled trout, while the heavy growth of brush along the river banks and in the foothills is full of quail, deer, squirrels, and other game, whereas from the middle of November to the first of March, when the wild geese and ducks come into winter quarters, good sport is enjoyed, the hunters killing them by the hundreds.

## GLENN COUNTY SUMMARY.

## Number of Farms Classified by Size.

Under 3 acres-----	
3 to 9 acres-----	40
10 to 19 acres-----	33
20 to 49 acres-----	106
50 to 99 acres-----	65
100 to 174 acres-----	79
175 to 259 acres-----	31
260 to 499 acres-----	101
500 to 999 acres-----	89
1,000 acres and over-----	119
Total-----	663
Total in 1900-----	529

## Land and Farm Areas.

Approximate land, acres-----	805,760
Land in farms in 1910-----	491,198
Land in farms in 1900-----	577,363
Improved land in farms in 1910-----	309,765
Improved land in farms in 1900-----	355,781
Woodland in farms-----	67,665
Other unimproved land-----	113,768

## Value of All Farm Property.

Total value in 1910-----	\$16,581,419
Total value in 1900-----	10,299,300
Per cent increase 1900-1910-----	61.0
Land in 1910-----	13,425,220
Land in 1900-----	8,473,830
Buildings in 1910-----	1,110,215
Buildings in 1900-----	719,510
Implements and machinery in 1910-----	390,333
Implements and machinery in 1900-----	299,620
Domestic animals, poultry, and bees in 1910-----	1,655,651
Domestic animals, poultry, and bees in 1900-----	806,340



## GLENN COUNTY SUMMARY—Continued.

## Domestic Animals on Farms and Ranges.

<b>Cattle*—</b>		
Dairy cows .....	3,688	
Other cows .....	3,601	
Yearling heifers .....	1,410	
Calves .....	2,409	
Yearling steers and bulls .....	1,925	
Other steers and bulls .....	2,051	
Total .....	16,214	
Value .....	\$363,093	
<b>Horses—</b>		
Mature horses .....	3,319	
Yearling colts .....	339	
Spring colts .....	262	
Total .....	3,946	
Value .....	\$357,207	
<b>Mules—</b>		
Mature mules .....	3,033	
Yearling colts .....	207	
Spring colts .....	122	
Total .....	3,362	
Value .....	\$407,327	
<b>Asses and burros—</b>		
Number .....	29	
Value .....	\$17,625	
<b>Swine—</b>		
Mature hogs .....	12,483	
Spring pigs .....	5,827	
Total .....	18,310	
Value .....	\$106,475	
<b>Sheep—</b>		
Rams, ewes, and wethers .....	70,210	
Spring lambs .....	41,153	
Total .....	111,363	
Value .....	\$363,893	
<b>Goats—</b>		
Number .....	2,813	
Value .....	\$5,976	
Total value all domestic animals .....	\$1,623,596	
<b>Poultry and bees—</b>		
Poultry of all kinds .....	50,336	
Value .....	\$30,715	
Colonies of bees .....	420	
Value .....	\$1,340	

## Principal Crops.

Description.	Acres.	Bushels.
Corn .....	671	21,999
Oats .....	1,283	32,620
Wheat .....	17,541	232,911
Barley .....	53,513	1,002,587
Kafir corn and milo maize .....	162	4,972
Dry edible beans .....	—	—
Potatoes .....	24	1,435
<b>Hay and forage—</b>		
Timothy alone .....	6	8
Timothy and clover mixed .....	18	22
Clover alone .....	5	4
Alfalfa .....	3,211	10,848
Other tame and cultivated grasses .....	799	1,045
Wild, salt, or prairie grasses .....	265	198
Grains cut green .....	20,824	25,332
All other hay and forage .....	15	137
Totals .....	25,143	37,594

## Poultry products—

Poultry raised, number .....	67,529
Eggs produced, dozen .....	252,286
Value poultry and eggs produced .....	\$110,010
<b>Honey and wax—</b>	
Honey produced, pounds .....	10,982
Wax produced, pounds .....	250
Value of honey and wax produced .....	\$1,194

## Wool—

Wool, fleeces shorn .....	131,612
Mohair and goat hair, fleeces shorn .....	5,177
Value wool and mohair produced .....	\$101,749

## Special crops—

Potatoes, acres .....	24
Sweet potatoes, acres .....	1
All other vegetables, acres .....	115
Sugar beets, acres .....	1,264

## Orchard fruits—

	Number bearing trees.
Apples .....	4,617
Apricots .....	6,830
Cherries .....	78
Peaches and nectarines .....	6,420
Pears .....	1,655
Prunes and plums .....	24,860

Total .....	44,565
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## Tropical fruits—

	Number bearing trees
Figs .....	879
Lemons .....	593
Oranges .....	4,860
Pomeloes .....	5
Olives .....	445

Total .....	6,783
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## Grapevines—

Number in bearing .....	20,416
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## Small fruits—

Strawberries, acres .....	2
Blackberries and dewberries, acres .....	4
All others, acres .....	2

Total .....	8
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## Nuts—

	Number bearing trees.
Almonds .....	25,739
Pecans .....	15
Walnuts .....	220

Total .....	26,336
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## Irrigation.

Number of farms irrigated in 1909 .....	196
Acres irrigated in 1909 .....	5,661
Acreage enterprises were capable of irrigating in 1910 .....	16,804
Acreage included in projects .....	220,664
Main ditches, number .....	50
Length, miles .....	136
Laterals, number .....	554
Length, miles .....	1,073
Flowing wells, number .....	—
Pumped wells, number .....	105
Cost of irrigation enterprises up to July 1, 1910 .....	\$1,519,561
Average cost per acre irrigation enterprises were capable of irrigating in 1910 .....	90.43

## Mineral Production in 1913.

Substance.	Value.
Stone industry .....	\$27,776.00
Number of mineral springs .....	3

\*Includes animals, age or sex not specified.

## HUMBOLDT COUNTY.

Date of creation, May 2, 1853.

Land area 3,634 square miles.	Population.....	1890.	1900.	1910.
County seat, Eureka.	Population.....	23,469	27,101	33,857
Population per square mile, 9.3.	Population.....	4,858	7,327	11,845
Elevation, 64 feet.	Highest.	Lowest.	Inches.	Inches.
1914: Temperature...	78	32	Rainfall...37.91	Snow 0

Humboldt County has long laid virtually undisturbed in the north-western part of California. There is no section in the State today where natural resources give so great an opportunity for development.

While the greater portion of the county's surface is hilly, there is considerable level land around Humboldt Bay and along the numerous rivers which flow down from the mountains to the ocean. All of this land, both hill and dale, is very fertile and productive, and is principally utilized for farming, dairying, and fruit raising. The fact has been well established that here can be raised as good fruit of all kinds as in the State. Fruit grown here is nearly altogether free from insect pests; the codling moth, which is so ruinous to the apple business in a great many localities, is wholly unknown here.

Considerably over one hundred thousand boxes of choice apples are annually shipped out of the county. A great variety of berries grows in profusion in all parts where cultivated, and immense quantities of wild blackberries, huckleberries, and strawberries grow in almost every section of the county.

There are abundant streams and springs throughout the county, which furnish plenty of pure water to its inhabitants the year round and render irrigation absolutely unnecessary.

Humboldt for several years was the leading county in the State in the production of butter and cheese.

Lumbering is the chief industry of the county, the output of the lumber and shingle mills, and sash and door factories being very large.

Stock raising is carried on extensively throughout the county, and is one of its most important industries. Gold mining is carried on to some extent along the Klamath and Trinity rivers.

The railway has recently been extended through the county to Eureka, which will greatly help its development.

## HUMBOLDT COUNTY SUMMARY.

Number of Farms Classified by Size.		Value of All Farm Property.	
Under 3 acres.....	10	Total value in 1910.....	\$21,230,881
3 to 9 acres.....	78	Total value in 1900.....	13,241,799
10 to 19 acres.....	107	Per cent increase 1900-1910.....	60.3
20 to 49 acres.....	280	Land in 1910.....	16,378,032
50 to 99 acres.....	245	Land in 1900.....	9,524,850
100 to 174 acres.....	334	Buildings in 1910.....	2,054,525
175 to 259 acres.....	118	Buildings in 1900.....	1,282,880
260 to 499 acres.....	147	Implements and machinery in 1910.....	444,280
500 to 999 acres.....	84	Implements and machinery in 1900.....	311,020
1,000 acres and over.....	131	Domestic animals, poultry, and bees in 1910.....	2,354,044
Total.....	1,534	Domestic animals, poultry, and bees in 1900.....	2,123,049
Total in 1900.....	1,500		
Land and Farm Areas.			
Approximate land, acres.....	2,325,760		
Land in farms in 1910.....	642,536		
Land in farms in 1900.....	648,511		
Improved land in farms in 1910.....	105,248		
Improved land in farms in 1900.....	77,238		
Woodland in farms.....	174,354		
Other unimproved land.....	362,934		

## HUMBOLDT COUNTY SUMMARY—Continued.

## Domestic Animals on Farms and Ranges.

<b>Cattle*—</b>		
Dairy cows .....	21,572	
Other cows .....	7,837	
Yearling heifers .....	5,531	
Calves .....	8,334	
Yearling steers and bulls .....	3,413	
Other steers and bulls .....	6,590	
Total .....	53,277	
Value .....		*\$1,363,050
<b>Horses—</b>		
Mature horses .....	5,851	
Yearling colts .....	421	
Spring colts .....	131	
Total .....	6,403	
Value .....		\$591,639
<b>Mules—</b>		
Mature mules .....	189	
Value .....		\$13,940
<b>Asses and burros—</b>		
Number .....	11	
Value .....		\$350
<b>Swine—</b>		
Mature hogs .....	7,688	
Spring pigs .....	4,945	
Total .....	12,633	
Value .....		\$58,457
<b>Sheep—</b>		
Rams, ewes, and wethers .....	62,423	
Spring lambs .....	24,650	
Total .....	87,073	
Value .....		\$278,763
<b>Goats—</b>		
Number .....	3,747	
Value .....		\$12,477
Total value all domestic animals	\$2,318,676	

<b>Poultry and bees—</b>		
Poultry of all kinds .....	54,834	
Value .....		\$30,037
Colonies of bees .....	1,803	
Value .....		\$5,331

## Principal Crops.

Description.	Acres.	Bushels.
Corn .....	253	7,633
Oats .....	2,823	75,803
Wheat .....	134	3,370
Barley .....	1,296	65,991
Dry edible beans .....	18	392
Potatoes .....	1,108	156,437
<b>Hay and forage—</b>		
Timothy alone .....	174	194
Timothy and clover mixed .....	109	363
Clover alone .....	2,459	6,479
Alfalfa .....	974	3,287
Other tame and cultivated grasses .....	4,065	9,707
Wild, salt, or prairie grasses .....	901	1,368
Grains cut green .....	18,773	35,805
All other hay and forage .....	2,563	62,410
Total .....	30,018	119,613

<b>Poultry products—</b>		
Poultry raised, number .....	67,310	
Eggs produced, dozens .....	332,115	
Value poultry and eggs produced .....		\$115,116
<b>Honey and wax—</b>		
Honey produced, pounds .....	23,481	
Wax produced, pounds .....	367	
Value of honey and wax produced .....		\$2,602
<b>Wool—</b>		
Wool, fleeces shorn .....	85,212	
Mohair and goat hair, fleeces shorn .....	2,540	
Value of wool and mohair produced .....		\$104,430
<b>Special crops—</b>		
Potatoes, acres .....	1,108	
All other vegetables, acres .....	675	
<b>Orchard fruits—</b>		
Apples .....	73,010	Number bearing trees.
Apricots .....	235	
Cherries .....	3,733	
Peaches and nectarines .....	9,471	
Pears .....	3,804	
Prunes and plums .....	26,950	
Total .....	117,203	
<b>Tropical fruits—</b>		
Figs .....	82	
Oranges .....	1	
Total .....	83	
<b>Grapevines—</b>		
Number in bearing .....	4,035	
<b>Small fruits—</b>		
Strawberries, acres .....	58	
Blackberries and dewberries .....	4	
All others .....	25	
Total .....	87	
<b>Nuts—</b>		
Almonds .....	304	Number bearing trees.
Walnuts .....	498	
Total .....	802	

## Irrigation.

Number of farms irrigated in 1909 .....	33
Acres irrigated in 1909 .....	208
Acres enterprises were capable of irrigating in 1910 .....	333
Acres included in projects .....	966
Main ditches, number .....	33
Length, miles .....	26
Laterals, number .....	4
Length, miles .....	2
Flowing wells, number .....	
Pumped wells, number .....	2
Cost of irrigation enterprises up to July 1, 1910 .....	\$29,027
Average cost per acre irrigation enterprises were capable of irrigating in 1910 .....	\$87.17

## Mineral Production in 1913.

Substance.	Amount.	Value.
Brick, thousand .....	500	\$4,150 00
Copper, pounds .....	7,750	1,201 00
Gold .....		25,611 00
Natural gas .....		150 00
Silver .....		132 00
Stone industry† .....		439,806 00
Total .....		\$471,052 00
Number of mineral springs .....		5

\*Includes animals, age or sex not specified.



## IMPERIAL COUNTY.

Date of creation, August 15, 1907.

(Organized from part of San Diego County.)

Land area, 4,089 square miles.	Population.....	1890.	1900.	1910.
County seat, El Centro (city).	Population.....	-----	-----	13,591
Population per square mile, 3.3.				1,610
Calxico (Station):	Highest.	Lowest.	Inches.	Inches.
Elevation, 0 feet.	1914: Temperature...	113	26	Rainfall... 2.83
				Snow... 0

Imperial is the youngest county in the State, having been formed in 1907, from the eastern part of San Diego County, formerly known as the "Colorado Desert, or Imperial Valley." The progress of the county is practically confined to the central part of the valley.

Dairying is very profitable, owing to the fact that alfalfa grows throughout the winter, furnishing an abundant supply of green pasturage. Modern creameries, with latest appliances, are located in different sections. The stock used for dairying purposes is of a high grade, mostly pure-bred representatives of the milk strains.

Imperial Valley is one of the best stock, hog, and poultry-producing counties.

The cultivation of cotton holds a most important part in the industrial development of Imperial County.

There is about 45,000 bales of cotton grown in Imperial Valley this season, *i. e.*, the season of 1914-15. The average yield per acre this year has been even better than in previous years and will probably average 500 pounds to the acre. So far as price is concerned, the first part of the year was very depressing, on account of the great decline in the cotton market due to the situation brought about by the European War. Prices have recovered considerably, however, and today, cotton is practically normal, good cotton selling at about 9 cents per pound in the valley.

In Imperial Valley the farmers have practically stopped growing long staple cotton, 90 per cent of the present crop being Mebane or other varieties of short staple cotton. This is due to the fact that they find a larger production of short staple cotton to the acre, which offsets the difference in price. Palo Verde Valley, in Riverside County, about 150 miles north of Imperial Valley, is also becoming identified with cotton growing, and this year will probably turn out 2,500 bales of short staple cotton, the larger percentage of which is shipped direct to the cotton mills at Oakland. We have also secured a good proportion of the Imperial Valley crop this season.

Imperial Valley is 110 miles long by 40 miles wide, half in California, half in Mexico. The present irrigated area is 40 by 25 miles in California. Irrigated from the Colorado River, from which 50,000 miner's inches are available. The surface appears to be perfectly level, but slopes gradually northward, affording a sufficient fall for the waters of the irrigation system. In addition to cotton, alfalfa is now largely grown, the acreage being about 110,000 acres; barley is also a large crop, and about 12,000 acres are in cantaloupes.



At Brawley there is a large ostrich farm containing some 1,300 birds. The acreage in cotton in 1914 was about 55,000 acres, and 45,000 bales were ginned. The average grade was Strict Low Middling, against Strict Middling for all previous years. The average price was 8 cents compared with 13.5 cents for 1913-14. The principal reason for the crop being lower grade was that cotton declined on August 1 to 9 cents when picking practically ceased until October, consequently the grade was much lower than in any previous year.

At El Centro, a plant has been established for the manufacture of cotton seed oil, and cotton seed cake on which a large number of cattle are fattened.

## IMPERIAL COUNTY SUMMARY.

Number of Farms Classified by Size.	
Under 3 acres.....	51
3 to 9 acres.....	46
10 to 19 acres.....	56
20 to 49 acres.....	182
50 to 99 acres.....	227
100 to 174 acres.....	400
175 to 259 acres.....	98
260 to 499 acres.....	201
500 to 999 acres.....	51
1,000 acres and over.....	10
Total .....	1,322
Total in 1900.....	†
Land and Farm Areas.	
Approximate land, acres.....	2,616,960
Land in farms in 1910.....	223,662
Land in farms in 1900.....	†
Improved land in farms in 1910.....	176,069
Improved land in farms in 1900.....	†
Woodland in farms.....	1,138
Other unimproved farms.....	46,395
Value of All Farm Property.	
Total value in 1910.....	\$23,646,067
Total value in 1900.....	†
Per cent increase 1900-1910.....	†
Land in 1910.....	19,832,660
Land in 1900.....	†
Buildings in 1910.....	764,665
Buildings in 1900.....	†
Implements and machinery in 1910.....	459,535
Implements and machinery in 1900.....	†
Domestic animals, poultry, and bees in 1910 .....	2,589,207
Domestic animals, poultry, and bees in 1900 .....	†
Domestic Animals on Farms and Ranges.	
Cattle*—	
Dairy cows .....	9,653
Other cows .....	2,728
Yearling heifers .....	2,560
Calves .....	2,772
Yearling steers and bulls.....	1,379
Other steers and bulls.....	1,817
Total .....	22,741
Value .....	*\$865,001

Horses—		
Mature horses .....	6,277	
Yearling colts .....	580	
Spring colts .....	372	
Total .....	7,229	
Value .....	\$798,317	
Mules—		
Mature mules .....	1,583	
Yearling colts .....	69	
Spring colts .....	20	
Total .....	1,672	
Value .....	\$233,196	
Asses and burros—		
Number .....	56	
Value .....	\$1,569	
Swine—		
Mature hogs .....	45,764	
Spring pigs .....	24,798	
Total .....	70,562	
Value .....	\$503,164	
Sheep—		
Rams, ewes, and wethers.....	13,786	
Spring lambs .....	9,553	
Total .....	23,339	
Value .....	\$108,504	
Goats—		
Number .....	147	
Value .....	\$463	
Total value all domestic animals	\$2,510,214	
Poultry and bees—		
Poultry of all kinds.....	72,252	
Value .....	\$54,117	
Colonies of bees.....	4,740	
Value .....	\$24,876	
Principal Crops.		
Description.	Acres.	Bushels.
Corn .....	690	14,419
Oats .....	30	372
Wheat .....	125	2,559
Barley .....	36,986	908,916
Kafir corn and milo maize....	9,789	213,781
Potatoes .....	60	3,347

†Organized from San Diego County August 15, 1907.

\*Includes animals, age or sex not specified.

## IMPERIAL COUNTY SUMMARY—Continued.

## Principal Crops—Continued.

Hay and forage—	Acres.	Tons.
Alfalfa .....	30,847	72,201
Other tame and cultivated		
grasses .....	240	210
Wild, salt, or prairie grasses	55	100
Grains cut green.....	20,995	25,105
All other hay and forage....	4,927	4,147
<b>Totals .....</b>	<b>57,064</b>	<b>101,763</b>

<b>Poultry products—</b>	
Poultry raised, number.....	84,062
Eggs produced, dozen.....	264,826
Value of poultry and eggs produced	\$135,526

<b>Honey and wax—</b>	
Honey produced, pounds.....	514,125
Wax produced, pounds.....	4,453
Value of honey and wax produced.	\$27,124

<b>Wool—</b>	
Wool, fleeces shorn.....	12,755
Mohair and goat hair, fleeces shorn	26
Value of wool and mohair produced	\$17,667

<b>Special crops—</b>	
Potatoes, acres .....	60
Sweet potatoes, acres.....	9
All other vegetables, acres.....	3,672

<b>Orchard fruits—</b>	Number bearing trees.
Apples .....	86
Apricots .....	1,922
Peaches and nectarines.....	432
Prunes and plums.....	347

<b>Total .....</b>	<b>3,170</b>
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<b>Tropical fruits—</b>	Number bearing trees.
Figs .....	606
Lemons .....	36
Oranges .....	1,410
Olives .....	41

<b>Total .....</b>	<b>2,411</b>
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<b>Grapevines—</b>	
Number in bearing.....	298,813
<b>Small fruits—</b>	
Blackberries and dewberries, acres..	1
<b>Total .....</b>	<b>1</b>

<b>Nuts—</b>	Number bearing trees.
Almonds .....	29
Walnuts .....	24
<b>Total .....</b>	<b>53</b>

## Irrigation.

Number of farms irrigated in 1909..	1,250
Acres irrigated in 1909.....	190,711
Acresage enterprises were capable of irrigating in 1910.....	242,000
Acresage included in projects.....	375,000
Main ditches, number.....	12
Length, miles .....	117
Laterals, number .....	179
Length, miles .....	890
Cost of irrigation enterprises up to July 1, 1910.....	\$4,955,272
Average cost per acre irrigation enterprises were capable of irrigating in 1910.....	20.48

## Mineral Production in 1913.

Substance.	Amount.	Value.
Brick, thousand .....	5,500	\$44,000
Gold .....		21,700
Marble, cubic feet.....	750	7,260
Silver .....		94
Stone industry .....		12,000
<b>Total .....</b>		<b>\$95,054</b>
Number of mineral springs.....		8

## INYO COUNTY.

Date of creation, March 22, 1866.

Land area, 10,019 square miles.	Population-----	1890. 3,544	1900. 4,377	1910. 6,974
County seat, Independence (township).	Population-----	662	820	701
Population per square mile, 0.7.				

Elevation, 3,907 feet.		Highest.	Lowest.	Inches.	Inches.
1914: Temperature---101		3	Rainfall--	9.30	Snow-- T

Inyo County lies on the eastern side of the Sierra Nevada Range and adjoins Esmeralda and Nye counties, Nevada. On the extreme western edge of the county are the high peaks of the Sierra, rising to altitudes of 14,000 feet and upward and covered throughout the year with snow. From these come numerous streams, which, descending rapidly, unite to form Owens River, flowing southerly along the base of the range to Owens Lake. To the east of this is a succession of ranges and deep valleys of what is known as the Great Basin type, similar to those in southern Nevada. The most noted among these lowlands between the mountains is Death Valley, the bottom of which is reported to be upward of 350 feet below sea level. Borax and similar substances are obtained in these depressions, but beyond these products the desert area has little present value.

Inyo, the second largest county, has the most diversified topography in the State, claiming as it does Mount Whitney, the highest elevation, and Death Valley, the lowest depression. The Sierras, which form its western border, here attain their greatest altitude, there being many towering peaks scarcely inferior to Whitney itself.

All the agricultural land is contained in Owens Valley. This valley is about 100 miles long; at its northern end it is about 15 miles wide, narrowing to 2 miles half way down its length, where a spur of the Sierra almost divides it, and south of that broadening to an average of 6 to 8 miles.

The soil of Owens Valley is especially fertile. Fruits attaining maturity are of quality second to none, either in size or flavor. Grains and garden produce of all kinds are grown to perfection.

### INYO COUNTY SUMMARY.

Number of Farms Classified by Size.		Value of All Farm Property.	
Under 3 acres-----	2	Total value in 1910-----	\$7,112,903
3 to 9 acres-----	28	Total value in 1900-----	2,571,629
10 to 19 acres-----	28	Per cent increase 1900-1910-----	176.6
20 to 49 acres-----	55	Land in 1910-----	5,210,586
50 to 99 acres-----	75	Land in 1900-----	1,584,750
100 to 174 acres-----	113	Buildings in 1910-----	558,740
175 to 259 acres-----	41	Buildings in 1900-----	317,000
260 to 499 acres-----	54	Implements and machinery in 1910--	189,810
500 to 999 acres-----	22	Implements and machinery in 1900--	95,590
1,000 acres and over-----	20	Domestic animals, poultry and bees in 1910-----	1,153,767
Total-----	438	Domestic animals, poultry and bees in 1900-----	574,229
Total in 1900-----	424	Domestic Animals on Farms and Ranges.	
Land and Farm Areas.		Cattle--	
Approximate land, acres-----	6,412,160	Dairy cows-----	2,267
Land in farms in 1910-----	116,142	Other cows-----	8,970
Land in farms in 1900-----	141,059	Yearling heifers-----	2,583
Improved land in farms in 1910-----	38,098	Calves-----	2,255
Improved land in farms in 1900-----	43,740	Yearling steers and bulls-----	2,445
Woodland in farms-----	1,631	Other steers and bulls-----	1,788
Other unimproved land-----	69,813	Total-----	20,308
		Value-----	\$428,853

## INYO COUNTY SUMMARY—Continued.

Domestic Animals on Farms and Ranges—Continued.			Honey and wax—		
Horses—			Honey produced, pounds.....	312,620	
Mature horses .....	7,074		Wax produced, pounds.....	2,131	
Yearling colts .....	555		Value honey and wax produced....	\$29,944	
Spring colts .....	463		Wool—		
Total .....	5,032		Wool, fleeces shorn.....	17,847	
Value .....	\$453,277		Mohair and goat hair, fleeces shorn	505	
Mules—			Value wool and mohair produced..	\$27,761	
Mature mules .....	249		Special crops—		
Yearling colts .....	55		Potatoes, acres .....	323	
Spring colts .....	33		All other vegetables, acres.....	240	
Total .....	337		Orchard fruits—		Number
Value .....	\$31,940		Apples .....	19,611	bearing trees.
Asses and burros—			Apricots .....	342	
Number .....	369		Cherries .....	539	
Value .....	\$5,845		Peaches and nectarines.....	4,602	
Swine—			Pears .....	2,633	
Mature hogs .....	1,795		Prunes and plums.....	2,349	
Spring pigs .....	1,560		Total .....	30,164	
Total .....	3,355		Tropical fruits—		Number
Value .....	\$21,631		Figs .....	14	bearing trees
Sheep—			Grapevines—		
Rams, ewes, and wethers.....	17,240		Number in bearing.....	39,478	
Spring lambs .....	26,106		Small fruits—		
Total .....	43,346		Strawberries, acres .....	5	
Value .....	\$156,319		Blackberries and dewberries, acres	8	
Goats—			All others, acres.....	8	
Number .....	2,843		Total .....	21	
Value .....	\$3,506		Nuts—		Number
Total value all domestic animals	\$1,104,481		Almonds .....	28	bearing trees.
Poultry and bees—			Pecans .....	9	
Poultry of all kinds.....	30,132		Walnuts .....	35	
Value .....	\$20,590		Total .....	72	
Colonies of bees.....	5,868		Irrigation.		
Value .....	\$28,693		Number of farms irrigated in 1909...	408	
Principal Crops.			Acres irrigated in 1909.....	65,163	
Description.	Acres.	Bushels.	Acreage enterprises were capable of		
Corn .....	1,883	57,917	irrigating in 1910.....	71,815	
Oats .....	573	28,875	Acreage included in projects.....	92,319	
Wheat .....	1,715	50,858	Main ditches, number.....	184	
Barley .....	678	19,381	Length, miles .....	39.3	
Dry edible beans.....	70	1,055	Laterals, number .....	323	
Potatoes .....	326	52,894	Length, miles .....	193	
Hay and forage—	Acres.	Tons.	Flowing wells, number.....	10	
Timothy alone .....	22	43	Pumped wells, number.....	1	
Timothy and clover mixed..	1,906	3,589	Cost of irrigation enterprises up to		
Clover alone .....	12	15	July 1, 1910.....	\$92,693	
Alfalfa .....	12,440	37,059	Average cost per acre irrigation en-		
Other tame and cultivated			terprises were capable of irrigating		
grasses .....	697	893	in 1910 .....	\$13.41	
Wild, salt or prairie grasses	1,076	1,681	Mineral Production in 1913.		
Grains cut green.....	28	49	Substance.	Amount.	Value.
All other hay and forage..	28	276	Copper, pounds .....	113,860	\$17,648
Totals .....	16,209	43,605	Gold .....		237,310
Poultry products—			Lead, pounds .....	3,322,308	146,182
Poultry raised, number.....	50,007		Marble, cubic feet.....	3,200	11,500
Eggs produced, dozens.....	146,932		Salt, tons .....	13,500	54,000
Value poultry and eggs produced.	\$67,836		Silver .....		136,854
			Soapstone, tons .....	1,000	4,400
			Stone industry .....		835
			Other minerals .....		1,333,550
			Total .....		\$1,942,309
			Number of mineral springs.....		36



## KERN COUNTY.

Date of creation, April 2, 1866.

Land area, 8,003 square miles.	Population-----	1890. 9,808	1900. 16,480	1910. 37,715
County seat, *Bakersfield (city).	Population-----	2,626	4,836	12,727
Population per square mile, 4.7.				

	Highest.	Lowest.	Inches.	Inches.
Elevation, 404 feet.	1914: Temperature---108	24	Rainfall-- 6.50	Snow 0

Kern County, situated at the extreme southern end of the San Joaquin Valley, its easterly boundary extending on to the Mojave Desert over the extreme southerly end of the Sierra Nevada Mountains, is the third largest county in the State.

At Randsburg, on the eastern border, is one of the largest gold mines on this coast, and the country around Randsburg has many smaller mines.

Along the southern border where the line crosses the San Emidio Mountains are large deposits of iron ore and antimony, which are yet undeveloped. Along the western side of the county are the Sunset, Midway, McKittrick and Lost Hills oil fields, lying along the eastern base of the Coast Range Mountains.

In the northern part of the county, and surrounding the town of Delano, is a large body of good land. Rice has been successfully grown in the county for several years. One grower near Wasco, last year, realized \$128.66 per acre; 731 sacks of 110 pounds sold at 4 cents a pound.

In the northeastern part is the mining town of Kernville, surrounded by mines, and near it on the south fork of the Kern River is the South Fork Valley, where numerous stockmen have their alfalfa fields that furnish feed to the stock that pasture in the high Sierra in the summer time.

In the center, and surrounding the town of Bakersfield, the county seat, lie thousands of acres of fertile land that are irrigated by Kern River, and which are mostly used to raise stock and alfalfa, but large quantities of fruit, including oranges, are also raised in the county. The acreage in apricots, peaches, prunes, pears, olives, and oranges has increased very considerably in the last five years.

In the oil fields the development work is continuous. Lost Hills is being developed, and the discoveries there indicate that the petroleum-bearing territory is continuous from Sunset to the north line of the county.

Kern county is a long way ahead of all others in the value of minerals produced, amounting in 1913 to \$28,406,193. The greater part of this sum is derived from the extensive oil fields.

\*Kern City annexed to Bakersfield in 1909.

## KERN COUNTY SUMMARY.

Number of Farms Classified by Size.	
Under 3 acres.....	11
3 to 9 acres.....	46
10 to 19 acres.....	57
20 to 49 acres.....	320
50 to 99 acres.....	173
100 to 174 acres.....	222
175 to 259 acres.....	55
260 to 499 acres.....	116
500 to 999 acres.....	82
1,000 acres and over.....	85
Total .....	1,167
Total in 1900.....	1,098

Land and Farm Areas.	
Approximate land, acres.....	5,121,920
Land in farms in 1910.....	1,403,350
Land in farms in 1900.....	1,571,106
Improved land in farms in 1910.....	315,387
Improved land in farms in 1900.....	324,031
Woodland in farms.....	235,014
Other unimproved land.....	852,949

Value of All Farm Property.	
Total value in 1910.....	\$30,405,013
Total value in 1900.....	14,246,125
Per cent increase 1900-1910.....	113.4
Land in 1910.....	23,962,202
Land in 1900.....	10,404,540
Buildings in 1910.....	1,252,139
Building in 1900.....	664,120
Implements and machinery in 1910.....	614,028
Implements and machinery in 1900.....	347,640
Domestic animals, poultry, and bees in 1910.....	4,576,644
Domestic animals, poultry, and bees in 1900.....	2,829,825

## Domestic Animals on Farms and Ranges.

Cattle*—	
Dairy cows .....	6,917
Other cows .....	38,101
Yearling heifers .....	8,441
Calves .....	7,372
Yearling steers and bulls.....	6,459
Other steers and bulls.....	24,271
Total .....	118,320
Value .....	*\$3,051,957

Horses—	
Mature horses .....	8,670
Yearling colts .....	987
Spring colts .....	530
Total .....	10,347
Value .....	\$1,013,562

Mules—	
Mature mules .....	1,099
Yearling colts .....	103
Spring colts .....	46
Total .....	1,248
Value .....	\$146,095

Asses and burros—	
Number .....	130
Value .....	\$12,543
Swine—	
Mature hogs .....	13,376
Spring pigs .....	7,137
Total .....	20,513
Value .....	\$167,439
Sheep—	
Rams, ewes, and wethers.....	19,801
Spring lambs .....	10,516
Total .....	30,317
Value .....	\$114,137

Goats—	
Number .....	930
Value .....	\$3,305

Total value all domestic animals \$4,509,038

Poultry and bees—	
Poultry of all kinds.....	75,900
Value .....	\$51,438
Colonies of bees.....	4,501
Value .....	\$16,168

## Principal Crops.

Description.	Acres.	Bushels.
Corn .....	466	7,132
Oats .....	82	770
Wheat .....	12,924	139,375
Barley .....	32,492	517,029
Kafir corn and milo maize.....	2,813	45,828
Dry edible beans.....	26	648
Potatoes .....	339	51,666

Description.	Acres.	Tons.
Hay and forage—		
Alfalfa .....	23,000	73,219
Other tame and cultivated grasses .....	12	12
Wild, salt, or prairie grasses .....	148	105
Grains cut green.....	30,069	35,441
All other hay and forage.....	5,126	4,178
Totals .....	58,955	112,995

Poultry products—	
Poultry raised, number.....	89,520
Eggs produced, dozens.....	394,130
Value poultry and eggs produced..	\$148,062

Honey and wax—	
Honey produced, pounds.....	204,920
Wax produced, pounds.....	2,832
Value of honey and wax produced..	\$12,159

Wool—	
Wool, fleeces shorn.....	24,177
Mohair and goat hair, fleeces shorn .....	355
Value wool and mohair produced .....	\$26,540

Special crops—	
Potatoes, acres .....	339
Sweet potatoes, acres.....	31
All other vegetables, acres.....	589

\*Includes animals, age or sex not specified.

## KERN COUNTY SUMMARY—Continued.

Principal Crops—Continued.		Irrigation.	
Orchard fruits—	Number bearing trees.	Number of farms irrigated in 1909--	876
Apples -----	7,725	Acres irrigated in 1909-----	190,034
Apricots -----	33,573	Acreage enterprises were capable of irrigating in 1910-----	217,418
Cherries -----	163	Acreage included in projects-----	402,806
Peaches and nectarines-----	35,149	Main ditches, number-----	178
Pears -----	1,057	Length, miles -----	441
Prunes and plums-----	58,075	Laterals, number -----	118
Total -----	136,088	Length, miles -----	257
		Flowing wells, number-----	25
		Pumped wells, number-----	140
Tropical fruits—	Number bearing trees	Cost of irrigation enterprises up to July 1, 1910-----	\$1,788,635
Figs -----	1,475	Average cost per acre irrigation enterprises were capable of irrigating in 1910-----	8.23
Lemons -----	54		
Oranges -----	80,940		
Pomeloes -----	16		
Olives -----	393		
Total -----	82,888		
Grapevines—		Mineral Production in 1913.	
Number in bearing-----	419,582	Substance.	Amount. Value.
Small fruits—		Brick, M -----	1,625 \$22,000
Strawberries, acres -----	2	Clay, tons -----	208 104
Blackberries and dewberries, acres-----	26	Copper, pounds -----	3,498 542
All others, acres -----	6	Gold -----	649,712
Total, acres -----	34	Gypsum, tons -----	10,000 22,750
Nuts—	Number bearing trees.	Lead, pounds -----	1,376 61
Almonds -----	3,101	Lime, barrels -----	135,000 91,200
Pecans -----	563	Natural gas, M -----	7,111,237 568,899
Walnuts -----	127	Petroleum, barrels -----	58,698,432 27,038,474
Total -----	3,819	Silver -----	11,851
		Other minerals -----	600
		Totals -----	\$28,406,193
		Number of mineral springs-----	26

## KINGS COUNTY.

Date of creation, March 22, 1893; organized from part of Tulare County; extended in 1909 by annexation of part of Fresno County.

Land area, 1,159 square miles.	Population-----	1890.	1900.	1910.
County seat, Hanford, city.	Population-----	942	9,871	16,230
Population per square mile, 14.0.			2,929	4,829
Elevation, 249 feet.	Highest.	Lowest.	Inches.	Inches.
1914: Temperature---	---	---	Rainfall---	Snow 0

In the very heart of the great fertile valley of the San Joaquin lies Kings County, one of the smallest, one of the youngest, but one of the richest counties of this State.

There are no rocks to contend with, no land to clean, no hills and hollows to level.

Wheat and other kinds of grain were in former years the most important products of Kings County soil. Immense tracts of land were originally sown and great crops gathered in, but with the subdividing of the land into smaller holdings, the growing of grain is not so extensive an industry at the present time.

Viticulture is an industry that has assumed large proportions. There are nearly 5,000,000 grapevines in the county.

Barley and alfalfa form two of the leading products.

Sugar beets are a great factor in Kings County prosperity. The discovery a few years ago that a great deal of what seemed to be almost waste land is particularly well adapted to the raising of this product has changed the whole face of the county in some parts. About Corcoran, where the erection of a large sugar factory has opened up a market, the growing of beets is being prosecuted very extensively.

Dairying ranks secondary to fruit and grape culture. There are many creameries and skimming stations located so as to be in convenient touch with all sections of the county, and there is a constant and ever-increasing demand for butter fat.

The Kings River supplies most of the water required for irrigation, but Cross Creek or Kaweah River, at the easterly end of the county, a stream of lesser proportions, does its full share in this work of irrigation. It was in 1872 that the plan of irrigating from these streams was first put into practical operation. The principal irrigating companies at present operating in the county are the People's Ditch Company, the Last Chance Ditch Company, the Lemoore Canal and Irrigation Company, the Lakeside Ditch Company, and other smaller ones are also in operation.



## KINGS COUNTY SUMMARY.

## Number of Farms Classified by Size.

Under 3 acres.....	7
3 to 9 acres.....	69
10 to 19 acres.....	159
20 to 49 acres.....	643
50 to 99 acres.....	377
100 to 174 acres.....	287
175 to 259 acres.....	77
260 to 499 acres.....	133
500 to 999 acres.....	42
1,000 acres and over.....	43
Total*.....	1,837
Total in 1900.....	932

## Land and Farm Areas.

Approximate land, acres.....	741,760
Land in farms in 1910.....	373,823
Land in farms in 1900.....	387,505
Improved land in farms in 1910.....	196,569
Improved land in farms in 1900.....	262,148
Woodland in farms.....	6,724
Other unimproved land.....	170,530

## Value of All Farm Property.

Total value in 1910.....	\$33,312,292
Total value in 1900.....	5,921,907
Per cent increase 1900-1910.....	*
Land in 1910.....	26,007,591
Land in 1900.....	3,420,410
Buildings in 1910.....	2,145,975
Buildings in 1900.....	811,920
Implements and machinery in 1910.....	654,971
Implements and machinery in 1900.....	348,330
Domestic animals, poultry, and bees in 1910.....	4,503,755
Domestic animals, poultry, and bees in 1900.....	1,341,247

## Domestic Animals on Farms and Ranges.

## Cattle—

Dairy cows.....	18,593
Other cows.....	21,655
Yearling heifers.....	7,281
Calves.....	8,793
Yearling steers and bulls.....	3,745
Other steers and bulls.....	14,908

Total.....	74,975
Value.....	\$2,481,281

## Horses—

Mature horses.....	9,417
Yearling colts.....	1,174
Spring colts.....	882

Total.....	11,473
Value.....	\$1,256,415

## Mules—

Mature mules.....	855
Yearling colts.....	142
Spring colts.....	72

Total.....	1,069
Value.....	\$148,430

## Asses and burros—

Number.....	23
Value.....	\$10,077

## Swine—

Mature hogs.....	22,775
Spring pigs.....	17,858
Total.....	40,633
Value.....	\$295,301

## Sheep—

Rams, ewes and wethers.....	40,483
Spring lambs.....	21,891

Total.....	62,374
Value.....	\$233,005

## Goats—

Number.....	507
Value.....	\$1,902

Total value all domestic animals \$4,426,411

## Poultry and bees—

Poultry of all kinds.....	102,747
Value.....	\$59,708
Colonies of bees.....	4,690
Value.....	\$17,630

## Principal Crops.

Description.	Acres.	Bushels.
Corn.....	2,274	43,688
Oats.....	109	4,490
Wheat.....	8,684	141,978
Barley.....	19,287	402,432
Kafir corn and milo maize.....	3,931	95,010
Dry edible beans.....	21	576
Potatoes.....	194	17,658
	Acres.	Tons.
Hay and forage—		
Clover alone.....	13	61
Alfalfa.....	36,778	123,112
Other tame and cultivated grasses.....	2,023	2,025
Wild, salt, or prairie grasses.....	833	734
Grains cut green.....	17,629	23,629
All other hay and forage.....	473	3,755

Totals..... 57,749 158,306

## Poultry products—

Poultry raised, number.....	153,839
Eggs produced, dozens.....	687,052
Value poultry and gees produced..	\$248,495

## Honey and wax—

Honey produced, pounds.....	238,791
Wax produced, pounds.....	3,148
Value of honey and wax produced..	\$12,028

## Wool—

Wool, fleeces shorn.....	73,393
Mohair and goat hair, fleeces shorn	261
Value of wool and mohair produced	\$58,836

## Special crops—

Potatoes, acres.....	194
Sweet potatoes, acres.....	19
All other vegetables, acres.....	674
Sugar beets, acres.....	604

\*202 miles of Fresno and 96 miles of Tulare counties were annexed in 1909.

## KINGS COUNTY SUMMARY—Continued.

Principal Crops—Continued.		Irrigation.	
Orchard fruits—	Number bearing trees.	Number of farms irrigated in 1909—	1,126
Apples -----	4,106	Acres irrigated in 1909 -----	190,949
Apricots -----	124,007	Acceage enterprises were capable of irrigating in 1910 -----	289,523
Cherries -----	11	Acceage included in projects -----	310,523
Peaches and nectarines -----	777,697	Main ditches, number -----	27
Pears -----	4,379	Length, miles -----	137
Prunes and plums -----	132,192	Laterals, number -----	51
Total -----	1,048,506	Length, miles -----	159
Tropical fruits—	Number bearing trees	Flowing wells, number -----	75
Figs -----	391	Pumped wells, number -----	20
Oranges -----	24	Cost of irrigation enterprises up to July 1, 1910 -----	\$687,381
Olives -----	5	Average cost per acre irrigation enterprises were capable of irrigating in 1910 -----	\$2.37
Total -----	425		
Grapevines—			
Number in bearing -----	4,538,732		
Small Fruits—			
Strawberries, acres -----	15		
Blackberries and dewberries, acres -----	13		
All others, acres -----	3		
Total -----	31		
Nuts—	Number bearing trees		
Almonds -----	1,721		
Pecans -----	2		
Walnuts -----	24		
Total -----	1,747		
		Mineral Production in 1913.	
		Substance.	Amount.
		Gypsum, tons -----	100
		Mineral paint, tons -----	20
		Natural gas, thousand -----	1,916
		Other minerals -----	400
		Total -----	\$1,835

## LAKE COUNTY.

Date of creation, May 20, 1861.

Land area, 1,278 square miles.	Population-----	1890. 7,101	1900. 6,017	1910. 5,526
County seat, Lakeport, town.	Population-----	991	726	870
Population per square mile, 4.3.				
Upper Lake (Station):	Highest.	Lowest.	Inches.	Inches.
Elevation, 1,350 feet.	1914. Temperature---104	24	Rainfall---33.79	Snow--- 0

The county is located in the heart of the Coast Range, about 100 miles north of San Francisco, and is about 75 miles long and 25 miles wide. Mount St. Helena guards the southern extremity. Clear Lake is a splendid sheet of fresh water 25 miles long and from 2 to 10 miles broad, with the lake surface at an elevation of 1,350 feet above sea level. It is stocked with a large quantity of fish. Clear Lake is the pride of Lake County, as well as the source of its name.

Although classed as mountainous, Lake County has a number of very fertile valleys, some of them being of large area. The acreage in farm crops is small compared with most other counties, but a considerable quantity of peas and beans are raised for canning purposes. Artesian water is obtainable in profuse quantities.

The rocky hillsides furnish pasturage for flocks of Angora goats. Large bodies of sugar and yellow pine, fir, cedar, and oak give employment to several sawmills and furnish the home market a good quality of lumber.

The minerals have heretofore been represented by the quicksilver industry. Besides quicksilver, immense quantities of mineral water have been bottled at the many mineral springs and shipped to all parts of the country. Lake County has fifty-six mineral springs, or more than any other county in the State.

## LAKE COUNTY SUMMARY.

Number of Farms Classified by Size.		Value of All Farm Property.	
Under 3 acres-----	1	Total value in 1910-----	\$6,271,615
3 to 9 acres-----	10	Total value in 1900-----	3,495,090
10 to 19 acres-----	38	Per cent increase 1900-1910-----	79.4
20 to 49 acres-----	85	Land in 1910-----	4,792,480
50 to 99 acres-----	80	Land in 1900-----	2,419,280
100 to 174 acres-----	144	Buildings in 1910-----	782,735
175 to 259 acres-----	60	Buildings in 1900-----	524,180
260 to 499 acres-----	84	Implements and machinery in 1910---	207,211
500 to 999 acres-----	53	Implements and machinery in 1900---	111,420
1,000 acres and over-----	48	Domestic animals, poultry, and bees	
		in 1910-----	489,189
Total-----	603	Domestic animals, poultry, and bees	
Total in 1900-----	723	in 1900-----	440,210
		Domestic Animals on Farms and Ranges.	
		Cattle—	
		Dairy cows-----	1,487
		Other cows-----	2,113
		Yearling heifers-----	821
		Calves-----	1,133
		Yearling steers and bulls-----	574
		Other steers and bulls-----	1,286
		Total-----	7,414
		Value-----	\$148,781
Land and Farm Areas.			
Approximate land, acres-----	817,920		
Land in farms in 1910-----	217,464		
Land in farms in 1900-----	212,176		
Improved land in farms in 1910-----	42,768		
Improved land in farms in 1900-----	41,414		
Woodland in farms-----	71,388		
Other unimproved land-----	103,308		

## LAKE COUNTY SUMMARY—Continued.

## Domestic Animals on Farms and Ranges—Continued.

<b>Horses—</b>		
Mature horses .....	2,172	
Yearling colts .....	216	
Spring colts .....	104	
Total .....	2,492	
Value .....	\$210,382	
<b>Mules—</b>		
Mature mules .....	182	
Yearling colts .....	45	
Spring colts .....	36	
Total .....	263	
Value .....	\$22,015	
<b>Asses and burros—</b>		
Number .....	10	
Value .....	\$2,730	
<b>Swine—</b>		
Mature hogs .....	5,301	
Spring pigs .....	2,737	
Total .....	8,038	
Value .....	\$39,239	
<b>Sheep—</b>		
Rams, ewes, and wethers .....	7,436	
Spring lambs .....	3,511	
Total .....	10,947	
Value .....	\$27,167	
<b>Goats—</b>		
Number .....	9,018	
Value .....	\$21,114	
Total value all domestic animals .....	\$471,428	
<b>Poultry and bees—</b>		
Poultry of all kinds .....	27,435	
Value .....	\$17,066	
Colonies of bees .....	276	
Value .....	\$675	

## Principal Crops.

Description.	Acres.	Bushels.
Corn .....	981	26,317
Oats .....	843	19,914
Wheat .....	2,563	46,131
Barley .....	2,825	54,758
Potatoes .....	182	21,773
<b>Hay and forage—</b>		
Timothy alone .....	50	60
Timothy and clover mixed .....	104	180
Clover alone .....	330	452
Alfalfa .....	2,795	7,260
Other tame and cultivated grasses .....	385	391
Wild, salt, or prairie grasses .....	1,152	1,316
Grains cut green .....	7,810	9,351
All other hay and forage .....	27	79
Total .....	12,653	19,089

<b>Poultry products—</b>		
Poultry raised, number .....	37,976	
Eggs produced, dozen .....	135,001	
Value poultry and eggs produced .....	\$56,581	

<b>Honey and wax—</b>	
Honey produced, pounds .....	5,105
Wax produced, pounds .....	43
Value of honey and wax produced .....	\$455
<b>Wool—</b>	
Wool, fleeces shorn .....	10,372
Mohair and goat hair, fleeces shorn .....	6,693
Value wool and mohair produced .....	\$12,922

<b>Special crops—</b>	
Potatoes, acres .....	182
All other vegetables, acres .....	353

Orchard fruits—	Number bearing trees.
Apples .....	22,254
Apricots .....	1,463
Cherries .....	590
Peaches and nectarines .....	9,288
Pears .....	39,075
Prunes and plums .....	47,244
Total .....	120,037

Tropical fruits--	Number bearing trees.
Figs .....	1,062
Lemons .....	8
Oranges .....	72
Olives .....	3,198
Total .....	4,340

Grapevines—	
Number in bearing .....	296,752

<b>Small fruits—</b>	
Strawberries, acres .....	6
Blackberries and dewberries, acres .....	15
All others, acres .....	4
Total .....	25

Nuts—	Number bearing trees.
Almonds .....	8,281
Pecans .....	6
Walnuts .....	564
Total .....	8,920

## Irrigation.

Number of farms irrigated in 1909 .....	43
Acres irrigated in 1909 .....	582
Acceage enterprises were capable of irrigating in 1910 .....	828
Acceage included in projects .....	1,268
Main ditches, number .....	44
Length, miles .....	26
Laterals, number .....	21
Length, miles .....	2
Flowing wells, number .....	1
Pumped wells, number .....	3
Cost of irrigation enterprises up to July 1, 1910 .....	\$12,124
Average cost per acre irrigation enterprises were capable of irrigating in 1910 .....	14.64

## Mineral Production in 1913.

Substance.	Amount.	Value.
Mineral water, gallons .....	209,750	\$109,933
Quicksilver, flasks .....	395	15,891
Total .....		\$125,829
Number of mineral springs .....		56



LASSEN COUNTY.

Date of creation, April 1, 1864.

Land area, 4,531 square miles.	Population-----	1890. 4,239	1900. 4,511	1910. 4,802
County seat, Susanville, town.	Population-----	-----	-----	688
Population per square mile, 1.1.				
	Highest.	Lowest.	Inches.	Inches.
Elevation, 4,175 feet. 1914: Temperature---	102	4	Rainfall--18.06	Snow-- 60.3

Lassen County lies in the northeastern part of California along the Nevada line. It is traversed from south to north by the Nevada-California-Oregon Railway (narrow gauge), which connects at Reno, Nevada, with the Southern Pacific system. Susanville, the county seat, is in Honey Lake Valley, a little south of the center of the county. Lassen embraces large areas, comprising rich valley lands, suited to agriculture; rolling hills and uplands, affording splendid range for stock, and mountain tablelands covered with timber.

The principal present industries are farming and stock raising.

The altitude of the largest, most fertile, and most productive valleys, such as Honey Lake Valley, Big Valley, and Long Valley, is a little over 4,000 feet. Other large valleys, like Madeline Plains, Willow Creek Valley, and Secret Valley, are in the neighborhood of 5,000 feet above sea level. While the high valleys are not as well adapted to general farming as the lower ones, they are quite productive, and well suited to the stock-raising business. The climate generally is similar to that of the northeastern states, so far as range of temperature is concerned, but the summer season is quite dry, making irrigation necessary as a rule. Of farm products, alfalfa is probably the most important, though native grasses, timothy, and redtop are extensively raised.

Good hay and grass and pure cold water make the county an ideal one for dairying. There are a number of creameries in the county.

LASSEN COUNTY SUMMARY.

Number of Farms Classified by Size.		Value of All Farm Property.	
3 to 9 acres-----	9	Total value in 1910-----	\$9,376,809
10 to 19 acres-----	4	Total value in 1900-----	5,365,615
20 to 49 acres-----	12	Per cent increase 1900-1910-----	74.8
50 to 99 acres-----	32	Land in 1910-----	6,331,882
100 to 174 acres-----	117	Land in 1900-----	2,949,510
175 to 259 acres-----	51	Buildings in 1910-----	765,460
260 to 499 acres-----	130	Buildings in 1900-----	708,010
500 to 999 acres-----	84	Implements and machinery in 1910---	289,287
1,000 acres and over-----	63	Implements and machinery in 1900---	255,220
Total-----	502	Domestic animals, poultry, and bees in 1910-----	1,990,230
Total in 1900-----	555	Domestic animals, poultry, and bees in 1900-----	1,452,875
Land and Farm Areas.		Domestic Animals on Farms and Ranges.	
Approximate land, acres-----	2,899,840	Cattle-----	
Land in farms in 1910-----	295,728	Dairy cows-----	2,890
Land in farms in 1900-----	381,109	Other cows-----	18,444
Improved land in farms in 1910-----	122,057	Yearling heifers-----	5,975
Improved land in farms in 1900-----	133,266	Calves-----	4,906
Woodland in farms-----	27,688	Yearling steers and bulls-----	5,456
Other unimproved land-----	145,983	Other steers and bulls-----	6,161
		Total-----	43,832
		Value-----	\$871,941

## LASSEN COUNTY SUMMARY—Continued.

Domestic Animals on Farms and Ranges—Continued.		Honey and wax—	
Horses—		Honey produced, pounds.....	5,642
Mature horses .....	7,548	Wax produced, pounds.....	5
Yearling colts .....	1,406	Value of honey and wax produced	\$643
Spring colts .....	561	Wool—	
Total .....	9,515	Wool, fleeces shorn.....	36,768
Value .....	\$702,420	Mohair and goat hair, fleeces shorn	2,088
Mules—		Value wool and mohair produced	\$55,154
Mature mules .....	414	Special crops—	
Yearling colts .....	185	Potatoes, acres.....	25
Spring colts .....	103	Sugar beets, acres.....	2
Total .....	702	All other vegetables, acres.....	184
Value .....	\$20,681	Orchard fruits—	
Asses and burros—		Number bearing trees.	
Number .....	119	Apples .....	12,679
Value .....	\$20,220	Apricots .....	70
Swine—		Cherries .....	439
Mature hogs .....	3,070	Peaches and nectarines.....	1,455
Spring pigs .....	1,955	Pears .....	632
Total .....	5,034	Prunes and plums.....	2,223
Value .....	\$30,513	Total .....	17,511
Sheep—		Grapevines—	Number in bearing.....
Rams, ewes, and wethers.....	42,400	Small fruits—	31
Spring lambs .....	30,235	Strawberries, acres .....	3
Total .....	72,725	Blackberries and dewberries, acres	2
Value .....	\$291,592	All others, acres.....	15
Goats—		Total .....	20
Number .....	586	Nuts—	
Value .....	\$1,832	Number bearing trees.	
Total value all domestic animals	\$1,979,199	Almonds .....	8
Poultry and bees—		Walnuts .....	8
Poultry of all kinds.....	19,297	Total .....	16
Value .....	\$9,957	Irrigation.	
Colonies of bees.....	298	Number of farms irrigated in 1909...	355
Value .....	\$1,074	Acres irrigated in 1909.....	77,079
Principal Crops.		Acres enterprises were capable of irrigating in 1910.....	89,815
Description.	Acres.	Acres included in projects.....	149,530
Corn .....	4	Main ditches, number .....	295
Oats .....	977	Length, miles .....	368
Wheat .....	9,938	Laterals, number .....	263
Barley .....	3,244	Length, miles .....	116
Potatoes .....	259	Cost of irrigation enterprises up to July 1, 1910.....	\$884,965
Hay and forage—		Average cost per acre irrigation enterprises were capable of irrigating in 1910 .....	9.85
Timothy alone .....	295	Mineral Production in 1913.	
Timothy and clover mixed...	9,475	Substance.	Amount.
Alfalfa .....	11,709	Copper, pounds.....	2,259
Other tame and cultivated grasses .....	1,723	Silver .....	2
Wild, salt or prairie grasses	36,879	Stone industry .....	2,030
Grain cut green.....	2,677	Total .....	\$2,382
Total .....	62,758	Number of mineral springs.....	19
Poultry products—			
Poultry raised, number.....	28,907		
Eggs produced, dozen.....	106,897		
Value of poultry and eggs produced	\$161,289		

## LOS ANGELES COUNTY.

Date of creation, February 18, 1850.

	1890.	1900.	1910.
Land area, 4,067 square miles.	Population-----101,454	170,298	504,131
County seat, Los Angeles.	Population-----50,395	102,479	319,198
Population per square mile, 124.0.			
	Highest.	Lowest.	Inches.
Elevation, 293 feet.	1914: Temperature---	97	40
	Rainfall---	23.21	Inches.
			Snow---
			0

In wealth, population, and resources Los Angeles is the most important county in southern California. There are two rivers in the county, the Los Angeles and the San Gabriel. During a large part of the year these are dry beds of sand, what little water they contain finding its way through the porous sand to the bedrock. In the winter they are dangerous streams. The Los Angeles River rises in the western part of the San Fernando Valley, about 12 miles northwest of the city, and flows easterly 18 miles to the Los Angeles Pass. Its stream is fed all along by springs. Turning south, it flows through the Los Angeles Pass, and on through the city.

Los Angeles County embraces within its limits a great variety of scenery and climate. Within its territory may be found the climate and scenery of almost every part of the State, from the cool and breezy seashore to the warm inland plains and bracing mountain tops. Of the area of the county, about four-fifths is capable of cultivation, the remainder being mountainous. The shore line is 85 miles in length. Nine-tenths of the population is within thirty miles of the ocean.

The chief industry is horticulture, the list of products including everything that can be grown in the State. The area of land devoted to horticultural purposes is being rapidly extended as the large tracts are subdivided and improved.

Perhaps the most important enterprise for Los Angeles is the big breakwater by the Federal Government at San Pedro. Other shipping points of the county are Port Los Angeles, near Santa Monica, and Redondo.

The San Gabriel Valley, a choice section of Los Angeles County, has the Sierra Madre Range on the north. The mountains are grand and precipitous, enclosing the valley like a wall. This valley is the best known of any portion of southern California.

The valley contains 100 square miles of territory. The San Gabriel contains some of the choicest fruit lands in southern California, and is largely devoted to the raising of oranges and lemons, as well as deciduous fruits.

Pasadena, a beautiful city, is located at the foot of the Sierra Madre Range, about seven miles from Los Angeles. Within twenty years Pasadena has grown from a sheep pasture to a city of beautiful homes.

Adjoining San Gabriel Valley on the east is Pomona Valley. Irrigation is cheaply supplied to this section from the San Antonio River. The soil and climate are particularly adapted to the culture of citrus fruits. It contains a number of flourishing towns, the chief of which is Pomona, one of the most thriving cities in southern California.

The development of the horticultural industry during the past few years has been remarkable. The most important horticultural product is the orange. Besides the orange and lemon, the principal fruits raised



are the almond, fig, prune, apricot, walnut, peach, pear, and berries. Deciduous fruits are shipped fresh, canned, dried, and crystallized.

Ostriches are raised for their plumes, and the industry is profitable. There is a large ostrich farm at South Pasadena.

San Pedro is the headquarters of the tunny fish industry which was only established three or four years ago but the pack has steadily increased. In 1911, 42,000 cases were packed; in 1913, 115,000, and in 1914, 325,000 cases.

## LOS ANGELES COUNTY SUMMARY.

Number of Farms Classified by Size.		Mules—	
Under 3 acres.....	438	Mature mules .....	2,459
3 to 9 acres.....	2,125	Yearling colts .....	76
10 to 19 acres.....	1,820	Spring colts .....	35
20 to 49 acres.....	1,709	Total .....	2,570
50 to 99 acres.....	698	Value .....	\$390,200
100 to 174 acres.....	531	Asses and burros—	
175 to 259 acres.....	192	Number .....	84
260 to 499 acres.....	207	Value .....	\$3,836
500 to 999 acres.....	114	Swine—	
1,000 acres and over.....	85	Mature hogs .....	18,418
Total .....	7,919	Spring pigs .....	10,524
Total in 1900.....	6,577	Total .....	28,942
Land and Farm Areas.		Value .....	\$230,390
Approximate land, acres.....	2,602,880	Sheep—	
Land in farms in 1910.....	757,985	Rams, ewes, and wethers.....	22,261
Land in farms in 1900.....	895,663	Spring lambs .....	8,830
Improved land in farms in 1910.....	418,998	Total .....	31,091
Improved land in farms in 1900.....	518,744	Value .....	\$136,536
Woodland in farms.....	18,051	Goats—	
Other unimproved land.....	320,936	Number .....	8,238
Value of All Farm Property.		Value .....	\$20,839
Total value in 1910.....	\$199,998,200	Total value all domestic animals	\$4,734,487
Total value in 1900.....	74,817,646	Poultry and bees—	
Per cent increase 1900-1910.....	167.3	Poultry of all kinds.....	513,965
Land in 1910.....	180,354,798	Value .....	\$547,968
Land in 1900.....	64,189,220	Colonies of bees.....	25,930
Buildings in 1910.....	11,798,273	Value .....	99,762
Buildings in 1900.....	6,702,710	Principal Crops.	
Implements and machinery in 1910.....	2,462,387	Description.....	Acres.
Implements and machinery in 1900.....	1,433,050	Corn .....	9,084
Domestic animals, poultry, and bees		Oats .....	973
in 1910.....	*5,382,742	Wheat .....	6,760
Domestic animals, poultry, and bees		Barley .....	32,804
in 1900.....	2,492,666	Kafir corn and milo maize.....	106
Domestic Animals on Farms and Ranges.		Dry edible beans.....	3,874
Cattle—		Potatoes .....	4,140
Dairy cows .....	20,524	Hay and forage—	Acres.
Other cows .....	8,027	Timothy alone .....	25
Yearling heifers .....	5,561	Clover alone .....	52
Calves .....	6,211	Alfalfa .....	19,027
Yearling steers and bulls.....	1,666	Other tame and cultivated	
Other steers and bulls.....	1,106	grasses .....	2,160
Total .....	43,095	Wild, salt, or prairie grasses	651
Value .....	\$1,473,509	Grain cut green.....	129,978
Horses—		All other hay and forage.....	2,155
Mature horses .....	20,375	Total .....	154,048
Yearling colts .....	1,376	Poultry products—	
Spring colts .....	673	Poultry raised, number.....	586,566
Total .....	22,424	Eggs produced, dozen.....	2,332,397
Value .....	\$2,479,207	Value poultry and eggs produced..	951,299

\*Including Belgian hares valued at \$525.



## LOS ANGELES COUNTY SUMMARY—Continued.

## Principal Crops—Continued.

Honey and wax—	
Honey produced, pounds.....	1,289,820
Wax produced, pounds.....	15,501
Value of honey and wax produced..	\$93,569

Wool—	
Wool, fleeces shorn.....	31,754
Mohair and goat hair, fleeces shorn	230
Value wool and mohair produced..	\$32,366

Special crops—	
Potatoes, acres .....	4,140
Sweet potatoes, acres.....	342
All other vegetables, acres.....	13,385
Sugar beets, acres.....	14,191

Orchard fruits—	Number
	bearing trees.
Apples .....	101,433
Apricots .....	122,769
Cherries .....	795
Peaches and nectarines.....	160,197
Pears .....	16,149
Prunes and plums.....	43,592

Total ..... 446,698

Tropical fruits—	Number
	bearing trees
Figs .....	15,736
Lemons .....	219,149
Oranges .....	1,674,695
Pomeloes .....	6,853
Olives .....	84,934

Total ..... 1,994,402

Grapevines—	
Number in bearing.....	4,923,877

Small fruits—	
Strawberries, acres .....	1,380
Blackberries and dewberries, acres.	280
All others, acres.....	315

Total ..... 1,975

## Nuts—

	Number
	bearing trees.
Almonds .....	76,949
Pecans .....	313
Walnuts .....	281,837
Total .....	359,349

## Irrigation.

Number of farms irrigated in 1909...	4,669
Aeres irrigated in 1909.....	145,586
Acreage enterprises were capable of	
irrigating in 1910.....	183,506
Acreage included in projects.....	241,794
Main ditches, number.....	601
Length, miles .....	800
Laterals, number .....	494
Length, miles .....	500
Flowing wells, number.....	376
Pumped wells, number.....	1,673
Cost of irrigation enterprises up to	
July 1, 1910.....	\$7,817,023
Average cost per acre irrigation	
enterprises were capable of irrigat-	
ing in 1910.....	\$42.60

## Mineral Production in 1913.

Substance.	Amount.	Value.
Brick, thousand .....	204,912	\$1,752,106
Clay, tons .....	7,425	20,135
Gems .....		2,500
Gold .....		2,322
Mineral water, gallons.....	255,095	15,140
Natural gas, thousand.....	1,287,794	77,578
Petroleum, barrels .....	4,143,690	2,672,680
Salt, tons .....	10,000	40,000
Sand-glass, tons .....	1,800	2,000
Silver .....		27
Stone industry .....		1,008,810
Other minerals .....		240,000
Total .....		\$5,833,298

Number of mineral springs..... 14

## MADERA COUNTY.

Date of creation, March 11, 1893.

	1890.	1900.	1910.
Land area, 2,112 square miles.	Population.....	6,364	8,368
County seat, Madera, city.	Population.....	-----	2,404
Population per square mile, 4.0.			
Storey (Station):			

	Highest.	Lowest.	Inches.	Inches.
Elevation, 296 feet.	1914: Temperature...106	25	Rainfall.....	Snow.... 0

Madera County is in the center of the San Joaquin Valley, bounded on the north by Merced and Mariposa counties, on the southeast and west by Fresno County; from which it was formed in 1893. The eastern portion of the county extends far up in the Sierra Nevada Mountains. From the foothills to the San Joaquin River, a distance of about forty miles, the land is level and adapted to all kinds of agricultural pursuits. The melting snows of the mountains flow through numerous small creeks into the San Joaquin River, or serve to supply the farming section with water for irrigation. The higher mountains are heavily timbered with valuable wood, principally sugar and white pine. Lumbering, stock raising, quarrying, mining, fruit growing, and farming are the principal industries. There are two large wineries in the county. The power plant of the San Joaquin Light and Power Company is near North Fork, in this county. The granite quarries at Knowles furnish employment to a large number of men.

San Francisco post office and many other public and business buildings in various cities of the State are built of the granite from these quarries.

## MADERA COUNTY SUMMARY.

Number of Farms Classified by Size.		Implements and machinery in 1910...	
Under 3 acres.....	-----	Implements and machinery in 1900...	441,455
3 to 9 acres.....	13	Domestic animals, poultry, and bees	214,100
10 to 19 acres.....	21	in 1910.....	1,507,707
20 to 49 acres.....	76	Domestic animals, poultry, and bees	-----
50 to 99 acres.....	23	in 1900.....	680,974
100 to 174 acres.....	151	Domestic Animals on Farms and Ranges.	
175 to 259 acres.....	27	Cattle*—	
260 to 499 acres.....	66	Dairy cows.....	1,592
500 to 999 acres.....	59	Other cows.....	12,403
1,000 acres and over.....	137	Yearling heifers.....	2,425
Total.....	573	Calves.....	2,975
Total in 1900.....	523	Yearling steers and bulls.....	2,252
Land and Farm Areas.		Other steers and bulls.....	3,946
Approximate land, acres.....	1,351,680	Total.....	27,905
Land in farms in 1910.....	620,663	Value.....	*\$582,792
Land in farms in 1900.....	484,659	Horses—	
Improved land in farms in 1910.....	391,086	Mature horses.....	3,498
Improved land in farms in 1900.....	277,721	Yearling colts.....	334
Woodland in farms.....	41,612	Spring colts.....	238
Other unimproved land.....	187,965	Total.....	4,070
Value of All Farm Property.		Value.....	\$386,856
Total value in 1910.....	\$14,984,895	Mules—	
Total value in 1900.....	5,916,894	Mature mules.....	2,928
Per cent increase 1900-1910.....	153.3	Yearling colts.....	154
Land in 1910.....	12,263,638	Spring colts.....	59
Land in 1900.....	4,583,770	Total.....	3,141
Buildings in 1910.....	771,595	Value.....	\$454,606
Buildings in 1900.....	433,050		

\*Includes animals, age or sex not specified.

## MADERA COUNTY SUMMARY—Continued.

## Domestic Animals on Farms and Ranges—Continued.

Asses and burros—		
Number .....	49	
Value .....	\$9,301	
Swine—		
Mature hogs .....	4,444	
Spring pigs .....	2,400	
Total .....	6,853	
Value .....	\$36,151	
Sheep—		
Rams, ewes, and wethers .....	6,269	
Spring lambs .....	3,837	
Total .....	10,106	
Value .....	\$23,145	
Goats—		
Number .....	278	
Value .....	\$717	

Total value all domestic animals \$1,493,568

Poultry and bees—		
Poultry of all kinds .....	23,246	
Value .....	\$13,024	
Colonies of bees .....	375	
Value .....	\$1,115	

## Principal Crops.

Description.	Acres.	Bushels.
Corn .....	1	50
Oats .....	10,569	175,047
Wheat .....	39,468	370,499
Barley .....	90,341	1,170,945
Kafir corn and milo maize .....	343	4,948
Dry edible beans .....	15	333
Potatoes .....	75	6,662

Hay and forage—		
Timothy alone .....	5	6
Alfalfa .....	5,735	16,717
Other tame and cultivated grasses .....	60	73
Wild, salt, or prairie grasses .....	516	423
Grain cut green .....	11,283	12,757
All other hay and forage .....	7	2
Total .....	17,606	29,978

Poultry products—		
Poultry raised, number .....	28,137	
Eggs produced, dozen .....	67,932	
Value of poultry and eggs produced .....	\$29,336	

Honey and wax—		
Honey produced, pounds .....	16,439	
Wax produced, pounds .....	370	
Value of honey and wax produced .....	\$1,052	

Wool—		
Wool fleeces shorn .....	4,905	
Mohair and goat hair, fleeces shorn .....	60	
Value wool and mohair produced .....	\$2,272	

Special crops—		
Potatoes, acres .....	75	
Sweet potatoes, acres .....	2	
All other vegetables, acres .....	256	

Orchard fruits—		Number bearing trees.
Apples .....		20,576
Apricots .....		9,408
Cherries .....		40
Peaches and nectarines .....		40,989
Pears .....		1,185
Prunes and plums .....		7,570
Total .....		80,156

Tropical fruits—		Number bearing trees.
Figs .....		4,321
Lemons .....		15
Oranges .....		184
Pomeloes .....		2
Olives .....		18,010
Total .....		22,532

Grape vines—		
Number in bearing .....	1,530,630	

Small fruits—		
Strawberries, acres .....	2	
Blackberries and dewberries, acres .....	3	
All others, acres .....	2	
Total .....	7	

Nuts—		Number bearing trees.
Almonds .....		2,778
Pecans .....		5
Walnuts .....		14
Total .....		2,797

## Irrigation.

Number of farms irrigated in 1909 ..	158
Acres irrigated in 1909 ..	38,705
Acres enterprises were capable of irrigating in 1910 ..	51,230
Acres included in projects ..	82,321
Main ditches, number ..	34
Length, miles ..	79
Laterals, number ..	30
Length, miles ..	294
Pumped wells, number ..	33
Cost of irrigation enterprises up to July 1, 1910 ..	\$512,098
Average cost per acre irrigation enterprises were capable of irrigating in 1910 ..	\$10.00

## Mineral Production in 1913.

Substance.	Amount.	Value.
Brick, thousand .....	315	\$1,650
Copper, pounds .....	532,403	82,522
Gold .....		14,489
Silver .....		1,617
Stone industry .....		271,589
Total .....		\$371,867
Number of mineral springs .....		10

## MARIN COUNTY.

Date of creation, February 18, 1850.

Land area, 529 square miles.	Population-----	1890.	1900.	1910.
County seat, San Rafael, city.	Population-----	13,072	15,702	25,114
Population per square mile, 47.5.		3,290	3,879	5,934
Point Reyes (Station):	Highest.	Lowest.	Inches.	Inches.
Elevation, 490 feet.	1914: Temperature---	88	37	Rainfall--16.68
				Snow----- 0

Marin County is decidedly one of water frontage, being bounded on the west and south by the Pacific Ocean and by the Golden Gate, which separates it from San Francisco by only a mile and a half at its nearest point, and on the east by San Francisco Bay.

The topographical features are rolling hills and numerous small valleys. A part of the Coast Range crosses Marin in a northwesterly and southeasterly direction, and much of the surface of the county is broken and hilly, but a considerable portion immediately on the shore is composed of marsh and overflowed lands. The highest land is Mount Tamalpais, which has an elevation of 2,608 feet.

The principal industry is dairying, but of late years attention has been paid to fruit growing.

At Tomales are located the largest oyster beds in the State.

## MARIN COUNTY SUMMARY.

Number of Farms Classified by Size.		Domestic Animals on Farms and Ranges.	
Under 3 acres.....	6	Cattle*—	
3 to 9 acres.....	35	Dairy cows .....	24,803
10 to 19 acres.....	54	Other cows .....	3,564
20 to 49 acres.....	36	Yearling heifers .....	2,880
50 to 99 acres.....	30	Calves .....	6,509
100 to 174 acres.....	35	Yearling steers and bulls.....	567
175 to 259 acres.....	40	Other steers and bulls.....	641
260 to 499 acres.....	72		
500 to 999 acres.....	111	Total .....	39,266
1,000 acres and over.....	79	Value .....	*\$1,046,404
Total .....	498	Horses—	
Total in 1900.....	462	Mature horses .....	2,338
		Yearling colts .....	166
		Spring colts .....	54
		Total .....	2,558
		Value .....	\$248,075
		Mules—	
		Mature mules .....	11
		Total .....	11
		Value .....	\$80
		Swine—	
		Mature hogs .....	8,812
		Spring pigs .....	7,287
		Total .....	16,099
		Value .....	\$126,509
		Sheep—	
		Rams, ewes, and wethers.....	1,930
		Spring lambs .....	1,025
		Total .....	2,955
		Value .....	\$14,391
Land and Farm Areas.			
Approximate land, acres.....	338,560		
Land in farms in 1910.....	263,442		
Land in farms in 1900.....	322,374		
Improved land in farms in 1910.....	93,115		
Improved land in farms in 1900.....	47,533		
Woodland in farms.....	49,978		
Other unimproved land.....	120,349		
Value of All Farm Property.			
Total value in 1910.....	\$12,426,158		
Total value in 1900.....	10,866,511		
Per cent increase 1900-1910.....	14.4		
Land in 1910.....	9,384,625		
Land in 1900.....	8,330,450		
Buildings in 1910.....	1,156,830		
Buildings in 1900.....	914,020		
Implements and machinery in 1910.....	343,482		
Implements and machinery in 1900.....	207,110		
Domestic animals, poultry, and bees in 1910.....	1,541,221		
Domestic animals, poultry, and bees in 1900.....	1,414,931		

\*Includes animals, age or sex not specified.



## MARIN COUNTY SUMMARY—Continued.

Domestic Animals on Farms and Ranges—Continued.					
Goats—			Orchard fruits—		
Number .....	147		Apples .....		Number bearing trees. 15,995
Value .....	\$556		Apricots .....		1,689
Total value all domestic animals \$1,433,975			Cherries .....		165
			Peaches and nectarines.....		6,313
			Pears .....		4,151
			Prunes and plums.....		3,775
			Total .....		32,263
Poultry and bees—			Tropical fruits—		
Poultry of all kinds.....	203,277		Figs .....		Number bearing trees. 201
Value .....	\$104,178		Lemons .....		26
Colonies of bees.....	20		Oranges .....		79
Value .....	\$68		Pomelos .....		5
			Olives .....		48
			Total .....		387
Principal Crops.			Grapevines—		
Description.	Acres.	Bushels.	Number in bearing.....		115,198
Corn .....	52	2,061	Small fruits—		
Oats .....	850	31,430	Strawberries, acres.....		1
Wheat .....	57	1,155	All others .....		2
Barley .....	16	231	Total .....		3
Dry edible beans.....	1	8	Nuts—		
Potatoes .....	435	33,469	Almonds .....		Number bearing trees. 151
			Walnuts .....		61
			Total .....		212
Hay and forage—			Irrigation.		
Timothy alone .....	80	200	Number of farms irrigated in 1909...		6
Clover alone .....	80	80	Acres irrigated in 1909.....		67
Alfalfa .....	25	86	Acres enterprises were capable of irrigating in 1910.....		71
Other tame and cultivated grasses .....	3,428	5,600	Acres included in projects.....		71
Wild, salt, or prairie grasses .....	169	179	Main ditches, number.....		5
Grains cut green.....	13,055	20,787	Length, miles .....		5
All other hay and forage...	623	11,040	Pumped wells, number.....		1
Total .....	17,460	37,972	Cost of irrigation enterprises up to July 1, 1910.....		\$3,380
			Average cost per acre irrigation enterprises were capable of irrigating in 1910 .....		\$47.61
Poultry products—			Mineral Production in 1913.		
Poultry raised, number.....	141,629		Substance.	Amount.	Value.
Eggs produced, dozens.....	1,465,911		Brick, thousand .....	16,000	\$70,500
Value poultry and eggs produced.	\$422,837		Mineral water, gallons.....	60,000	9,000
			Stone industry .....		198,953
Honey and wax—			Total .....		\$278,453
Honey produced, pounds.....	205		Number of mineral springs.....		4
Wax produced, pounds.....	55				
Value of honey and wax produced	\$49				
Wool—					
Wool, fleeces shorn.....	2,823				
Value wool and mohair produced..	\$2,816				
Special crops—					
Potatoes, acres .....	435				
All other vegetables, acres.....	117				

## MARIPOSA COUNTY.

Date of creation, February 18, 1850.

Land area, 1,463 square miles.	Population-----	1890.	1900.	1910.
County seat, Mariposa, township.	Population-----	3,787	4,720	3,956
Population per square mile, 2.7.		697	1,009	654

Yosemite (Station):	Highest.	Lowest.	Inches.	Inches.
Elevation, 3,945 feet.	1914: Temperature---	110	0	Rainfall--32.83
				Snow--90.5

The county reaches eastward from the edge of the San Joaquin plains across the foothills far into the Sierra Nevada Mountains, its altitude varying from 300 to 13,000 feet, Mount Dana, the highest point of land, reaching an elevation of 13,627 feet.

There are about 300,000 acres of plains and lower foothills together, the latter predominating, and the balance consists of high hills and mountains; bare of timber on the plains, then scattering oak and scrub pines, then rising to immense tracts of sugar and yellow pine, fir, spruce, and cedar, and the giant sequoias of Mariposa Big Tree Grove, which contains some 427 trees, many of 35 feet in diameter and 150 to 300 feet high. The county is well provided with natural water in the Merced, Mariposa, and Chowchilla rivers. The famous Yosemite Valley is located in the eastern part of this county, at an elevation of 4,060 feet, with walls 5,000 feet higher. The Merced River flows through the valley.

Mariposa County is noted on account of its yield of gold from its quartz veins and placers, and this industry will rank first for years to come.

There are three mining belts in the county—the Mother Lode with its offshoots, the east belt, and the copper belt.

Irrigation is practiced to some extent, water being taken from streams and mining ditches, and used with good results.

Lumbering is of considerable importance, the splendid forests of pine and fir being extensive.

Stock raising is a thriving enterprise. The cattle and sheep are ranged in the mountains in the summer and in the valleys and plains during the winter.

## MARIPOSA COUNTY SUMMARY.

Number of Farms Classified by Size.			
3 to 9 acres-----	1		
10 to 19 acres-----	4		
20 to 49 acres-----	4		
50 to 99 acres-----	21		
100 to 174 acres-----	97		
175 to 259 acres-----	15		
260 to 499 acres-----	101		
500 to 999 acres-----	51		
1,000 acres and over-----	36		
Total -----	330		
Total in 1900-----	381		
Land and Farm Areas.		Value of All Farm Property.	
Approximate land, acres-----	936,320	Total value in 1910-----	\$2,829,235
Land in farms in 1910-----	206,059	Total value in 1900-----	1,328,151
Land in farms in 1900-----	160,156	Per cent increase 1900-1910-----	113.0
Improved land in farms in 1910-----	37,017	Land in 1910-----	1,817,100
Improved land in farms in 1900-----	14,003	Land in 1900-----	752,090
Woodland in farms-----	85,150	Buildings in 1910-----	276,180
Other unimproved land-----	83,892	Buildings in 1900-----	207,640
		Implements and machinery in 1910-----	79,403
		Implements and machinery in 1900-----	59,960
		Domestic animals, poultry, and bees	
		in 1910 -----	656,552
		Domestic animals, poultry, and bees	
		in 1900 -----	308,461

## MARIPOSA COUNTY SUMMARY—Continued.

## Domestic Animals on Farms and Ranges.

Cattle*—		
Dairy cows .....	905	
Other cows .....	7,477	
Yearling heifers .....	1,602	
Calves .....	2,115	
Yearling steers and bulls .....	1,683	
Other steers and bulls .....	2,876	
Total .....	16,671	
Value .....	\$370,521	

Horses—		
Mature horses .....	1,896	
Yearling colts .....	218	
Spring colts .....	126	
Total .....	2,240	
Value .....	\$182,986	

Mules—		
Mature mules .....	201	
Yearling colts .....	46	
Spring colts .....	49	
Total .....	296	
Value .....	\$30,565	

Asses and burros—		
Number .....	83	
Value .....	\$10,183	

Swine—		
Mature hogs .....	6,160	
Spring pigs .....	2,722	
Total .....	8,882	
Value .....	\$46,704	

Sheep—		
Rams, ewes, and wethers .....	877	
Spring lambs .....	304	
Total .....	1,181	
Value .....	\$4,409	

Goats—		
Number .....	981	
Value .....	\$2,365	
Total value all domestic animals .....	\$647,733	

Poultry and bees—		
Poultry of all kinds .....	12,217	
Value .....	\$8,668	
Colonies of bees .....	34	
Value .....	\$151	

## Principal Crops.

Description.	Acres.	Bushels.
Corn .....	174	2,330
Oats .....	55	1,100
Wheat .....	124	1,298
Barley .....	1,434	19,130
Dry edible beans .....	62	409
Potatoes .....	76	8,537
Hay and forage—		
Timothy alone .....	65	100
Timothy and clover mixed .....	29	34
Clover alone .....	25	6
Alfalfa .....	28	97
Other tame and cultivated grasses .....	177	223
Wild, salt, or prairie grasses .....	685	659
Grains cut green .....	5,472	4,884
All other hay and forage .....	40	46
Total .....	6,521	6,049

Poultry products—		
Poultry raised, number .....	19,583	
Eggs produced, dozens .....	49,728	
Value poultry and eggs produced .....	\$28,844	

Honey and wax—		
Honey produced, pounds .....	300	
Wax produced, pounds .....	25	
Value of honey and wax produced .....	\$51	

Wool—		
Wool, fleeces shorn .....	355	
Mohair and goat hair, fleeces shorn .....	154	
Value wool and mohair produced .....	\$376	

Special crops—		
Potatoes, acres .....	76	
All other vegetables, acres .....	193	

Orchard fruits—		
	Number bearing trees.	
Apples .....	16,001	
Apricots .....	233	
Cherries .....	120	
Peaches and nectarines .....	1,618	
Pears .....	701	
Prunes and plums .....	762	
Total .....	19,461	

Tropical fruits—		
	Number bearing trees.	
Figs .....	461	
Lemons .....	35	
Oranges .....	1,169	
Pomelos .....	1	
Olives .....	2,711	
Total .....	4,378	

Grapevines—		
Number in bearing .....	28,647	
Small fruits—		
Strawberries, acres .....	1	
Blackberries and dewberries, acres .....	2	
All others, acres .....	4	
Total .....	7	

Nuts—		
	Number bearing trees.	
Almonds .....	159	
Walnuts .....	91	
Total .....	262	

## Irrigation.

Number of farms irrigated in 1909 .....	56
Acres irrigated in 1909 .....	376
Acres enterprises were capable of irrigating in 1910 .....	546
Acres included in projects .....	767
Main ditches, number .....	49
Length, miles .....	21
Pumped wells, number .....	2
Cost of irrigation enterprises up to July 1, 1910 .....	\$13,440
Average cost per acre irrigation enterprises were capable of irrigating in 1910 .....	24.62

## Mineral Production in 1913.

Substance.	Amount.	Value.
Copper, pounds .....	416,031	\$64,485
Gold .....		171,034
Silver .....		7,430
Other mineral .....		3,130
Total .....		\$246,079
Number of mineral springs .....		4

\*Includes animals, age or sex not specified.

## MENDOCINO COUNTY.

Date of creation, February 18, 1850.

	Highest.	Lowest.	Inches.	Inches.
Land area, 3,453 square miles.	Population-----	17,612	20,465	23,929
County seat, Ukiah, city.	Population-----	1,627	1,850	2,136
Population per square mile, 6.9.				

	1890.	1900.	1910.
Elevation, 620 feet. 1914: Temperature---108	23	Rainfall--43.44	Snow--- 0

Mendocino County has 100 miles of coast line. In general topography it is mountainous, with valleys lying between the mountain chains and along the coast. It, together with the counties of Humboldt and Trinity, embodies the greater part of the northern Coast Range Mountains, and contains their highest peaks and deepest canyons, fertile valleys, wooded slopes, rushing rivers, and picturesque scenery. It shares with Sonoma, Humboldt, and Del Norte the glory of the great redwood belt.

The county has a length of 85 miles from north to south, and the width is 45 miles from east to west. It is traversed the entire length by the Coast Range, which is composed of two parallel ridges. These mountains vary in height from 1,000 feet to 3,000 feet. Their lower slopes have a gentle declivity, while the higher portions are generally precipitous and furrowed with ravines and gulches. There are many small productive valleys throughout the county.

Mendocino is well watered with the numerous streams which take their rise in the mountain chain which intersects her territory. The Eel River, running north, and the Russian River, running south, have their sources in this county, and are the principal streams.

Stock raising, grazing, and wool growing are very much in evidence.

The Angora goat thrives well, the mountains being an ideal pasture.

Hops are a very prolific crop.

No irrigation is required, and crops do not suffer from drought at any time.

In the county are large tracts of redwood, and it also has a large number of mineral springs.

## MENDOCINO COUNTY SUMMARY.

Number of Farms Classified by Size.		Value of All Farm Property.	
3 to 9 acres-----	42	Total value in 1910-----	\$14,659,467
10 to 19 acres-----	61	Total value in 1900-----	8,587,516
20 to 49 acres-----	166	Per cent increase 1900-1910-----	70.7
50 to 99 acres-----	151	Land in 1910-----	10,774,439
100 to 174 acres-----	334	Land in 1900-----	5,840,250
175 to 259 acres-----	131	Buildings in 1910-----	1,816,135
260 to 499 acres-----	193	Buildings in 1900-----	1,081,090
500 to 999 acres-----	124	Implements and machinery in 1910-----	375,049
1,000 acres and over-----	154	Implements and machinery in 1900-----	219,630
Total-----	1,356	Domestic animals, poultry, and bees in 1910-----	1,633,844
Total in 1900-----	1,452	Domestic animals, poultry, and bees in 1900-----	1,446,546
Land and Farm Areas.		Domestic Animals on Farms and Ranges.	
Approximate land, acres-----	2,209,920	Cattle--	
Land in farms in 1910-----	721,325	Dairy cows-----	6,454
Land in farms in 1900-----	742,924	Other cows-----	9,280
Improved land in farms in 1910-----	82,578	Yearling heifers-----	3,054
Improved land in farms in 1900-----	73,907	Calves-----	3,980
Woodland in farms-----	247,758	Yearling steers and bulls-----	2,503
Other unimproved land-----	390,989	Other steers and bulls-----	4,883
		Total-----	30,154
		Value-----	\$597,588



## MENDOCINO COUNTY SUMMARY—Continued.

Domestic Animals on Farms and Ranges—Continued.				
<b>Horses—</b>			<b>Honey and wax—</b>	
Mature horses .....	5,300		Honey produced, pounds.....	6,090
Yearling colts .....	510		Wax produced, pounds.....	34
Spring colts .....	184		Value of honey and wax produced..	\$367
Total .....	5,994		<b>Wool—</b>	
Value .....	\$541,605		Wool, fleeces shorn.....	149,260
<b>Mules—</b>			Mohair and goat hair, fleeces shorn	2,315
Mature mules .....	298		Value wool and mohair produced..	\$158,918
Yearling colts .....	10		<b>Special crops—</b>	
Spring colts .....	1		Potatoes, acres.....	616
Total .....	309		All other vegetables, acres.....	594
Value .....	\$27,421		<b>Orchard fruits—</b>	
<b>Asses and burros—</b>				Number bearing trees
Number .....	29		Apples .....	63,263
Value .....	\$1,240		Apricots .....	187
<b>Swine—</b>			Cherries .....	1,181
Mature hogs .....	14,600		Peaches and nectarines.....	6,928
Spring pigs .....	7,469		Pears .....	15,829
Total .....	22,069		Prunes and plums.....	37,197
Value .....	\$102,615		Total .....	125,282
<b>Sheep—</b>			<b>Tropical fruits—</b>	
Rams, ewes, and wethers.....	88,760			Number bearing trees
Spring lambs .....	41,010		Figs .....	358
Total .....	129,770		Oranges .....	4
Value .....	\$377,121		Olives .....	7
<b>Goats—</b>			Total .....	369
Number .....	3,927		<b>Grapevines—</b>	
Value .....	\$10,215		Number in bearing.....	924,191
Total value all domestic animals	\$1,657,895		<b>Small fruits—</b>	
<b>Poultry and bees—</b>			Strawberries, acres.....	22
Poultry of all kinds.....	56,897		Blackberries and dewberries, acres	14
Value .....	\$34,065		All others .....	21
Colonies of bees.....	441		Total .....	57
Value .....	\$1,374		<b>Nuts—</b>	
<b>Principal Crops.</b>				Number bearing trees
Description.	Acres.	Bushels.	Almonds .....	229
Corn .....	533	14,454	Walnuts .....	360
Oats .....	3,087	81,950	Total .....	589
Wheat .....	3,906	59,195	<b>Irrigation.</b>	
Barley .....	1,904	43,370	Number of farms irrigated in 1909....	39
Dry edible beans.....	5	44	Acres irrigated in 1909.....	371
Potatoes .....	616	78,909	Acres enterprises were capable of irrigating in 1910.....	590
<b>Hay and forage—</b>			Acres included in projects.....	1,335
Timothy alone .....	180	228	Main ditches, number.....	33
Timothy and clover mixed..	489	578	Length, miles .....	19
Clover alone .....	350	556	Laterals, number .....	8
Alfalfa .....	2,401	6,253	Length, miles .....	6
Other tame and cultivated grasses .....	5,895	6,884	Pumped wells, number.....	6
Wild, salt, or prairie grasses	1,164	1,178	Cost of irrigation enterprises up to July 1, 1910.....	\$30,297
Grains cut green.....	16,429	21,856	Average cost per acre irrigation enterprises were capable of irrigating in 1910 .....	51.35
All other hay and forage...	107	1,052	<b>Mineral Production in 1913.</b>	
Total .....	27,015	38,085	Substance.	Value.
<b>Poultry products—</b>			Stone industry .....	\$9,450
Poultry raised, number.....	64,935		Total .....	\$9,450
Eggs produced, dozens.....	337,781		Number of mineral springs.....	35
Value of poultry and eggs produced	\$121,577			

## MERCED COUNTY.

Date of creation, April 19, 1855.

		1890.	1900.	1910.
Land area, 1,995 square miles.	Population-----	8,085	9,215	15,148
County seat, Merced, city.	Population-----	2,009	1,969	3,102
Population per square mile, 7.6.				
	Highest.	Lowest.	Inches.	Inches.
Elevation, 173 feet.	1914: Temperature---106	26	Rainfall---14.72	Snow--- 0

Merced County possesses as good land as is to be found anywhere in the San Joaquin Valley for fruit and alfalfa, but its development has been retarded by large land holdings, and grain growing has been the principal occupation. Within recent years, however, thousands of acres have been subdivided into colony lots and placed on the market.

The good roads movement is receiving its due amount of consideration in the county, and the different supervisorial districts have built several miles of new roads, with the expectation of extending them as fast as possible. The county is particularly fortunate in being able to secure a high grade of road material from the near by rock crusher at Jasper, on the line of the Yosemite Valley Railroad, and at reasonable cost.

The creamery industry has developed so rapidly that Merced County is now one of the leading counties in the production of cream.

Merced County excels in the quantity and quality of its sweet potatoes. The fig industry is yet in its infancy, but it has been proven that the soil and climatic conditions are favorable for figs and olives, peaches and grapes.

Numerous rivers and creeks traverse the county, furnishing a natural water supply. There are two irrigation systems, one on the east side and the other on the west side of the San Joaquin River. The main canal on the east side is 65 feet wide at the bottom and 100 feet wide on top and 10 feet deep, the carrying capacity being 4,000 cubic feet per second.

## MERCED COUNTY SUMMARY.

Number of Farms Classified by Size.		Value of All Farm Property.	
Under 3 acres.....	1	Total value in 1910.....	\$49,520,913
3 to 9 acres.....	86	Total value in 1900.....	22,636,859
10 to 19 acres.....	213	Per cent increase 1900-1910.....	118.8
20 to 49 acres.....	694	Land in 1910.....	40,047,324
50 to 99 acres.....	295	Land in 1900.....	18,449,650
100 to 174 acres.....	165	Buildings in 1910.....	2,338,587
175 to 259 acres.....	46	Buildings in 1900.....	984,040
260 to 499 acres.....	89	Implements and machinery in 1910.....	804,625
500 to 999 acres.....	160	Implements and machinery in 1900.....	501,480
1,000 acres and over.....	167	Domestic animals, poultry, and bees in 1910.....	6,330,377
Total.....	1,856	Domestic animals, poultry, and bees in 1900.....	2,701,689
Total in 1900.....	999		
Land and Farm Areas.		Domestic Animals on Farms and Ranges.	
Approximate land, acres.....	1,276,800	Cattle†—	
Land in farms in 1910.....	1,162,167	Dairy cows.....	19,678
Land in farms in 1900*.....	1,702,967	Other cows.....	43,250
Improved land in farms in 1910.....	607,742	Yearling heifers.....	14,838
Improved land in farms in 1900.....	613,376	Calves.....	14,625
Woodland in farms.....	49,818	Yearling steers and bulls.....	11,036
Other unimproved land.....	504,607	Other steers and bulls.....	34,767
		Total.....	150,467
		Value.....	\$4,343,845

\*By an error the acreage was reported in 1900 as 1,702,967, instead of 1,666,973.

†Includes animals, age or sex not specified.

## MERCED COUNTY SUMMARY—Continued.

## Domestic Animals on Farms and Ranges—Continued.

<b>Horses—</b>		
Mature horses .....	10,308	
Yearling colts .....	1,453	
Spring colts .....	795	
Total .....	12,556	
Value .....	\$1,063,537	
<b>Mules—</b>		
Mature mules .....	3,673	
Yearling colts .....	198	
Spring colts .....	204	
Total .....	4,075	
Value .....	\$482,209	
<b>Asses and burros—</b>		
Number .....	107	
Value .....	\$17,432	
<b>Swine—</b>		
Mature hogs .....	19,414	
Spring pigs .....	10,121	
Total .....	29,535	
Value .....	\$185,474	
<b>Sheep—</b>		
Rams, ewes, and wethers .....	28,044	
Spring lambs .....	11,724	
Total .....	39,768	
Value .....	\$152,708	
<b>Goats—</b>		
Number .....	5,246	
Value .....	\$21,272	
Total value all domestic animals .....	\$6,266,477	

<b>Poultry and bees—</b>		
Poultry of all kinds .....	83,998	
Value .....	\$51,943	
Colonies of bees .....	4,072	
Value .....	\$11,957	

## Principal Crops.

Description.	Acres.	Bushels.
Corn .....	1,877	52,778
Oats .....	19,843	338,041
Wheat .....	10,399	115,938
Barley .....	88,145	2,009,531
Kafir corn and milo maize .....	2,206	45,770
Dry edible beans .....	523	5,839
Potatoes .....	246	18,882
<b>Hay and forage—</b>		
Timothy alone .....	5	7
Clover alone .....	79	317
Alfalfa .....	37,842	144,357
Other tame and cultivated grasses .....	784	680
Wild, salt, or prairie grasses .....	10,308	7,228
Grains cut green .....	19,751	20,293
All other hay and forage .....	148	453
Total .....	68,917	173,335

<b>Poultry products—</b>		
Poultry raised, number .....	136,305	
Eggs produced, dozens .....	454,115	
Value poultry and eggs produced .....	\$184,810	
<b>Honey and wax—</b>		
Honey produced, pounds .....	204,098	
Wax produced, pounds .....	3,150	
Value of honey and wax produced .....	\$10,993	

<b>Wool—</b>	
Wool, fleeces shorn .....	46,908
Mohair and goat hair, fleeces shorn .....	8,400
Value wool and mohair produced .....	\$89,400

<b>Special crops—</b>	
Potatoes, acres .....	246
Sweet potatoes, acres .....	2,114
All other vegetables, acres .....	380
Sugar beets, acres .....	2

<b>Orchard fruits—</b>	
Apples .....	8,941
Apriots .....	7,381
Cherries .....	343
Peaches and nectarines .....	134,991
Pears .....	5,704
Prunes and plums .....	5,401

Total .....

163,013

<b>Tropical fruits—</b>	
Figs .....	9,837
Lemons .....	209
Oranges .....	1,572
Pomelos .....	11
Olives .....	6,981

Total .....

18,613

<b>Grapevines—</b>	
Number in bearing .....	1,281,342

<b>Small fruits—</b>	
Strawberries, acres .....	5
Blackberries and dewberries, acres .....	21
All others, acres .....	8

Total .....

34

<b>Nuts—</b>	
Almonds .....	17,132
Pecans .....	31
Walnuts .....	633

Total .....

17,845

## Irrigation.

Number of farms irrigated in 1909 .....	1,417
Acres irrigated in 1909 .....	151,998
Acceage enterprises were capable of irrigating in 1910 .....	248,670
Acceage included in projects .....	281,719
Main ditches, number .....	45
Length, miles .....	261
Laterals, number .....	353
Length, miles .....	352
Flowing wells, number .....	29
Pumped wells, number .....	78
Cost of irrigation enterprises up to July 1, 1910 .....	\$3,748,211
Average cost per acre irrigation enterprises were capable of irrigating in 1910 .....	15.07

## Mineral Production in 1913.

Substance.	Amount.	Value.
Copper, pounds .....	19,240	\$2,982
Gold† .....		2,255
Silver† .....		92
Stone industry .....		30,000
Total .....		\$35,329

†Production from dredging operation included in Stanislaus County.

## MODOC COUNTY.

Date of creation, February 17, 1874.

Land area, 3,823 square miles.	Population-----	1890. 4,986	1900. 5,076	1910. 6,191
County seat, Alturas, town.	Population-----	-----	-----	916
Population per square mile, 1.6.				

	Highest.	Lowest.	Inches.	Inches.
Elevation, 4,400 feet. 1914: Temperature--	102	-9	Rainfall-- 8.88	Snow-- 22.2

Modoc County is in the extreme northeastern corner of California. The county is a succession of mountain ranges and valleys branching off from the Sierra Nevada Mountains, the principal spur of which is the Warner Range. It is principally drained by Pit River, which flows into the Sacramento, near Redding, Shasta County. The lava bed section occupies over one-half the total area. The county has two large lakes, but barring the lakes and the large cattle ranges, it is sparsely settled.

The valleys are the principal features, the leading ones being the Surprise, Goose Lake, Hot Springs, Jess, Big, and the Little Hot Springs.

Wheat, barley, apples, vegetables, and hay are the leading staples. Thousands of acres are in alfalfa, and the stock and dairying industries are thriving. Snow falls in the valleys and much deeper in the mountains, forming the principal supply of moisture for the development of the country. Stock is usually fed for several months through the winter, although it is not always necessary to do so.

The county is well watered. Surprise Valley has nearly twenty streams, which run both winter and summer. Goose Lake Valley is equally fortunate, which Pit River supplies with water for many farms and ranches. Many springs exist, especially in the mountains, and in Surprise Valley there are many artesian wells.

The timber of the county is pine and fir in the Warner Range, and sugar pine in the western part.

Horticulture has had but a small place in the industries, only sufficient fruit for home uses being raised. The wild plum is about the only native fruit.

## MODOC COUNTY SUMMARY.

## Number of Farms Classified by Size.

Under 3 acres.....	5
3 to 9 acres.....	18
10 to 19 acres.....	13
20 to 49 acres.....	21
50 to 99 acres.....	44
100 to 174 acres.....	229
175 to 259 acres.....	68
260 to 499 acres.....	171
500 to 999 acres.....	92
1,000 acres and over.....	75
Total.....	736
Total in 1900.....	638

## Value of All Farm Property.

Total value in 1910.....	\$11,376,263
Total value in 1900.....	5,363,827
Per cent increase 1900-1910.....	112.1
Land in 1910.....	7,379,085
Land in 1900.....	2,825,360
Buildings in 1910.....	1,004,180
Buildings in 1900.....	521,900
Implements and machinery in 1910.....	365,550
Implements and machinery in 1900.....	174,200
Domestic animals, poultry, and bees in 1910.....	2,627,448
Domestic animals, poultry, and bees in 1900.....	1,842,367

## Domestic Animals on Farms and Ranges.

## Land and Farm Areas.

Approximate land, acres.....	2,446,720
Land in farms in 1910.....	410,134
Land in farms in 1900.....	298,755
Improved land in farms in 1910.....	164,784
Improved land in farms in 1900.....	122,647
Woodland in farms.....	75,668
Other unimproved land.....	169,682

Cattle—	
Dairy cows.....	2,903
Other cows.....	18,502
Yearling heifers.....	6,937
Calves.....	4,608
Yearling steers and bulls.....	6,517
Other steers and bulls.....	7,449
Total.....	46,916
Value.....	\$1,005,026



## MODOC COUNTY SUMMARY—Continued.

Domestic Animals on Farms and Ranges—Continued.		
<b>Horses*—</b>		
Mature horses .....	12,247	
Yearling colts .....	2,212	
Spring colts .....	976	
Total .....	15,636	
Value .....	\$1,145,563	
<b>Mules—</b>		
Mature mules .....	565	
Yearling colts .....	441	
Spring colts .....	126	
Total .....	1,132	
Value .....	\$38,005	
<b>Asses and burros—</b>		
Number .....	98	
Value .....	\$26,511	
<b>Swine—</b>		
Mature hogs .....	5,328	
Spring pigs .....	3,160	
Total .....	8,488	
Value .....	\$53,595	
<b>Sheep—</b>		
Rams, ewes, and wethers .....	46,078	
Spring lambs .....	30,484	
Total .....	76,562	
Value .....	\$286,882	
<b>Goats—</b>		
Number .....	549	
Value .....	\$2,331	
Total value all domestic animals .....	\$2,612,918	

<b>Poultry and bees—</b>		
Poultry of all kinds .....	23,789	
Value .....	\$11,466	
Colonies of bees .....	839	
Value .....	\$3,064	

**Principal Crops.**

Description.	Acres.	Bushels.
Corn .....	6	209
Oats .....	728	22,138
Wheat .....	9,362	195,924
Barley .....	8,650	227,473
Dry edible beans .....	88	1,567
Potatoes .....	346	44,614
<b>Hay and forage—</b>		
Timothy alone .....	1,512	3,662
Timothy and clover mixed .....	5,754	10,195
Alfalfa .....	10,869	24,480
Other tame and cultivated grasses .....	3,227	5,373
Wild, salt, or prairie grasses .....	50,579	70,143
Grains cut green .....	3,496	4,992
All other hay and forage .....	42	61
Total .....	75,479	118,906

<b>Poultry products—</b>		
Poultry raised, number .....	38,112	
Eggs produced, dozen .....	134,731	
Value of poultry and eggs produced .....	\$48,337	
<b>Honey and wax—</b>		
Honey produced, pounds .....	19,796	
Wax produced, pounds .....	232	
Value of honey and wax produced .....	\$2,055	
<b>Wool—</b>		
Wool, fleeces shorn .....	39,538	
Mohair and goat hair, fleeces shorn .....	1,356	
Value wool and mohair produced .....	\$55,583	
<b>Special crops—</b>		
Potatoes, acres .....	346	
All other vegetables, acres .....	549	
Sugar beets, acres .....	9	
<b>Orchard fruits—</b>		
Number bearing trees .....		
Apples .....	28,969	
Apricots .....	652	
Cherries .....	993	
Peaches and nectarines .....	2,113	
Pears .....	1,888	
Prunes and plums .....	3,182	
Total .....	37,776	
<b>Grapevines—</b>		
Number in bearing .....	795	
<b>Small fruits—</b>		
Strawberries, acres .....	9	
Blackberries and dewberries, acres .....	9	
All others .....	19	
Total .....	37	
<b>Nuts—</b>		
Number bearing trees .....		
Walnuts .....	3	

**Irrigation.**

Number of farms irrigated in 1909 .....	437
Acres irrigated in 1907 .....	82,075
Acres enterprises were capable of irrigating in 1910 .....	89,476
Acres included in projects .....	124,166
Main ditches, number .....	446
Length, miles .....	637
Laterals, number .....	490
Length, miles .....	175
Flowing wells, number .....	45
Pumped wells, number .....	2
Cost of irrigation enterprises up to July 1, 1910 .....	\$301,040
Average cost per acre irrigation enterprises were capable of irrigating in 1910 .....	3.36

**Mineral Production in 1913.**

Substance.	Amount.	Value.
Gold .....		\$6,061
Salt, tons .....	40	720
Silver .....		94
Total .....		\$6,875
Number of mineral springs .....		18

\*Includes animals, age or sex not specified.

## MONO COUNTY.

Date of creation, April 24, 1861.

		1890.	1900.	1910.
Land area, 3,030 square miles.	Population-----	2,002	2,167	2,042
County seat, Bridgeport, township.	Population-----	335	373	312
Population per square mile, 0.7.				
		Highest.	Lowest.	Inches.
Elevation, 6,500 feet.	1914: Temperature---	90	-21	Rainfall--11.47
				Snow-- 30.0

Mono is a long, narrow county lying on the eastern slope of the Sierra, its greatest length bordering on the state of Nevada, which forms its northeastern boundary, its general direction being northeast and northwest.

The general contour is mountainous and very rough, all but 400 square miles, or less, being mountainous. The western portion lies among the Sierra Nevada Mountains, along their summit, the heights being clad in snow, and the slopes of the range being covered with forest trees.

Among the highest peaks are Mount Dana, 13,627 feet; Mount Lyell, 13,217 feet, and Castle Pass, 13,000 feet. The greater portion of the population is in the eastern part, in the valleys and the mining camps in the surrounding mountains. This portion, which has always been considered a strange, mysterious country, is of a desert-like, volcanic character, abounding in salt pools, alkali, and volcanic table-lands.

Mono Lake, the "Dead Sea of America," is one of the attractions, and situated in the center of the county; it is about 12 miles long and 8 miles wide; its waters are somewhat unusually compound, various chemical substances being found in solution in them. The lake has a number of small streams flowing into it, but is without perceptible outlet.

Owens River in the south, which takes its rise in a high peak in the Sierra, and Kitten and Walker rivers in the north, are the principal streams. One passes through the southern part into Inyo County. The other, after rising in Mono County, continues its course into the state of Nevada. These two streams with their branches, together with the small streams that flow into Mono Lake, furnish the principal water supply for irrigation.

Grazing is the leading industry, and the pasturage is good and plentiful. Herds of dairy cattle are moved from the valleys during the summer. Large bands of sheep are also driven to its mountains for summer pasturage.

The timber belt is very large and the product of good marketable quality, but as there is no means of transportation, the development of the lumber interests is retarded, although considerable quantities are used for local mining purposes.

Mining for gold is carried on, the leading camp being Bodie.

## MONO COUNTY SUMMARY.

Number of Farms Classified by Size.			
3 to 9 acres.....	3	Asses and burros—	
10 to 19 acres.....	1	Number .....	62
20 to 49 acres.....	1	Value .....	\$1,630
50 to 99 acres.....	4	Swine—	
100 to 174 acres.....	27	Mature hogs .....	179
175 to 259 acres.....	12	Spring pigs .....	244
260 to 499 acres.....	16	Total .....	423
500 to 999 acres .....	10	Value .....	\$2,766
1,000 acres and over.....	17	Sheep—	
Total .....	91	Rams, ewes, and wethers.....	40,805
Total in 1900.....	112	Spring lambs .....	22,241
Land and Farm Areas.		Total .....	63,046
Approximate land, acres.....	1,939,200	Value .....	\$256,477
Land in farms in 1910.....	115,672	Goats—	
Land in farms in 1900.....	186,063	Number .....	25
Improved land in farms in 1910.....	43,382	Value .....	\$77
Improved land in farms in 1900.....	65,238	Total value all domestic animals	\$556,310
Woodland in farms.....	8,303	Poultry and bees—	
Other unimproved land.....	63,987	Poultry of all kinds.....	2,515
Value of All Farm Property.		Value .....	\$1,584
Total value in 1910.....	\$2,347,797	Colonies of bees.....	438
Total value in 1900.....	1,175,743	Value .....	\$2,045
Per cent increase 1900-1910.....	99.7	Principal Crops.	
Land in 1910.....	1,587,813	Description.	Acres.
Land in 1900.....	519,040	Corn .....	4
Buildings in 1910.....	154,700	Oats .....	42
Buildings in 1900.....	87,380	Wheat .....	167
Implements and machinery in 1910.....	45,345	Dry edible beans.....	5
Implements and machinery in 1900.....	26,340	Potatoes .....	97
Domestic animals, poultry, and bees			
in 1910 .....	559,939	Hay and forage—	Acres.
Domestic animals, poultry and bees		Timothy and clover mixed..	2,278
in 1900 .....	542,983	Clover alone .....	4
Domestic Animals on Farms and Ranges.		Alfalfa .....	2,086
Cattle—		Other tame and cultivated	
Dairy cows .....	450	grasses .....	70
Other cows .....	2,270	Wild, salt, or prairie grasses	2,494
Yearling heifers .....	803	All other hay and forage.....	15
Calves .....	666	Total .....	6,947
Yearling steers and bulls.....	685		
Other steers and bulls.....	427		
Total .....	5,301	Poultry products—	
Value .....	\$107,941	Poultry raised, number.....	2,559
Horses—		Eggs produced, dozens.....	4,541
Mature horses .....	1,655	Value poultry and eggs produced..	\$2,988
Yearling colts .....	310	Honey and Wax—	
Spring colts .....	132	Honey produced, pounds.....	20,355
Total .....	2,097	Wax produced, pounds.....	425
Value .....	\$175,884	Value honey and wax produced....	\$2,049
Mules—		Wool—	
Mature mules .....	73	Wool, fleeces shorn.....	29,160
Yearling colts .....	46	Value wool and mohair produced..	\$41,209
Spring colts .....	17	Special crops—	
Total .....	136	Potatoes, acres .....	97
Value .....	\$11,535	All other vegetables, acres.....	36

## MONO COUNTY SUMMARY—Continued.

Principal Crops—Continued.		Irrigation.	
Orchard fruits—	Number bearing trees	Number of farms irrigated in 1909..	76
Apples .....	1088	Acres irrigated in 1909.....	49,027
Apricots .....	6	Acreage enterprises were capable of irrigating in 1910.....	50,007
Cherries .....	197	Acreage included in projects.....	84,973
Peaches and nectarines.....	91	Main ditches, number.....	85
Pears .....	123	Main ditches, number.....	85
Prunes and plums.....	86	Length, miles .....	172
Total .....	1,595	Laterals, number .....	101
Grapevines—		Length, miles .....	65
Number in bearing.....	2,000	Cost of irrigation enterprises up to July 1, 1810.....	\$64,282
Small fruits, acres.....	1	Average cost per acre irrigation enterprises were capable of irrigating in 1910.....	1.29
Mineral Production in 1913.			
Substance.		Amount.	Value.
Copper, pounds .....		79,319	\$12,294
Gold .....			147,271
Lime, barrels .....		2,135	1,600
Silver .....			23,263
Total .....			\$184,428
Number of mineral springs.....			20



## MONTEREY COUNTY.

Date of creation, February 18, 1850.

Date of creation, February 18, 1850.		1890.	1900.	1910.
Land area, 3,330 square miles.	Population-----	18,637	19,380	24,146
County seat, Salinas, city.	Population-----	2,339	3,304	3,736
Population per square mile, 7.3.				
	Highest.	Lowest.	Inches.	Inches.
Elevation, 40 feet.	1914: Temperature---	91	30	Rainfall-----
				Snow----- 0

Monterey County is situated about 100 miles south of San Francisco and 300 miles north of Los Angeles, on the Pacific Ocean. It is 124 miles long and 45 miles wide, its extreme length being from north to south.

The county is divided into three sections—the mountains and hills on the east, mountains and hills on the west, and the great Salinas Valley situated between these ranges of mountains.

The portion of Pajaro Valley lying south of the Pajaro River and running to Monterey Bay on the southwest is in Monterey County, and is about 15 miles long and from 6 to 8 miles wide. The land is exceedingly fertile and under a thorough system of cultivation, producing large crops of all kinds of vegetables, grain, fruit, and berries.

There is a considerable acreage in sugar beets, and the largest sugar factory in the State is situated near Salinas City, having a daily slicing capacity of 3,000 tons.

Going south, barley excels, and prunes, apricots, cherries, and almonds grow to perfection in the foothills, canyons, and small valleys.

Currants, gooseberries, blackberries, loganberries and raspberries grow well. Strawberries are in the market most of the year, and are shipped from Pajaro by carloads.

Dairying is very important, if not a leading industry. Some of the finest dairies in the State are in Monterey County, and some of the best cheese and butter in the State are made here.

In the harbor of Monterey Bay the largest battleships of our navy find anchorage within 100 feet of the shore. The fishing industry is an important one, especially for sardines. The two packing houses at Monterey packed 7,500,000 pounds of these fish in 1914. More than two thirds of the abalone catch of the State also comes from this bay.

### MONTEREY COUNTY SUMMARY.

Number of Farms Classified by Size.		Value of All Farm Property.	
Under 3 acres-----	11	Total value in 1910-----	\$35,021,930
3 to 9 acres-----	69	Total value in 1900-----	19,409,742
10 to 19 acres-----	71	Per cent increase 1900-1910-----	80.4
20 to 49 acres-----	182	Land in 1910-----	27,885,000
50 to 99 acres-----	185	Land in 1900-----	15,632,700
100 to 174 acres-----	263	Buildings in 1910-----	2,178,728
175 to 259 acres-----	127	Buildings in 1900-----	1,353,700
260 to 499 acres-----	282	Implements and machinery in 1910---	811,886
500 to 999 acres-----	225	Implements and machinery in 1900---	502,400
1,000 acres and over-----	243	Domestic animals, poultry, and bees in 1910-----	4,146,316
Total-----	1,658	Domestic animals, poultry, and bees in 1900-----	1,920,942
Total in 1900-----	1,850	Domestic Animals on Farms and Ranges.	
Land and Farm Areas.		Cattle—	
Approximate land, acres-----	2,131,200	Dairy cows-----	14,066
Land in farms in 1910-----	1,147,416	Other cows-----	27,626
Land in farms in 1900-----	1,087,032	Yearling heifers-----	11,046
Improved land in farms in 1910-----	371,509	Calves-----	13,806
Improved land in farms in 1900-----	373,605	Yearling steers and bulls-----	7,502
Woodland in farms-----	140,377	Other steers and bulls-----	13,133
Other improved land-----	635,530	Total-----	88,889
		Value-----	\$2,079,939

## MONTEREY COUNTY SUMMARY—Continued.

Domestic Animals on Farms and Ranges—Continued.				Wool—			
<b>Horses*—</b>				Wool, fleeces shorn.....		24,884	
Mature horses .....	14,172			Mohair and goat hair, fleeces shorn		3,000	
Yearling colts .....	1,993			Value wool and mohair produced..		\$26,549	
Spring colts .....	1,268			<b>Special crops—</b>			
Total .....	17,444			Potatoes, acres .....		5,393	
Value .....	\$*1,676,690			All other vegetables, acres .....		658	
<b>Mules—</b>				Sugar beets, acres .....		9,900	
Mature mules .....	546			<b>Orchard fruits—</b>			
Yearling colts .....	66			Apples .....	Number bearing trees	290,404	
Spring colts .....	30			Apricots .....		27,996	
Total .....	642			Cherries .....		1,729	
Value .....	\$85,550			Peaches and nectarines.....		7,381	
<b>Asses and burros—</b>				Pears .....		5,194	
Number .....	26			Prunes and plums .....		6,189	
Value .....	\$5,256			Total .....		339,105	
<b>Swine—</b>				<b>Tropical fruits—</b>			
Mature hogs .....	12,567			Figs .....	Number bearing trees	217	
Spring pigs .....	7,464			Lemons .....		7	
Total .....	20,031			Oranges .....		29	
Value .....	\$119,455			Olives .....		657	
<b>Sheep—</b>				Total .....		913	
Rams, ewes, and wethers .....	17,029			<b>Grapevines—</b>			
Spring lambs .....	11,345			Number in bearing.....		79,935	
Total .....	28,374			<b>Small fruits—</b>			
Value .....	\$91,991			Strawberries, acres .....		263	
<b>Goats—</b>				Blackberries and dewberries, acres..		56	
Number .....	3,983			All others, acres .....		88	
Value .....	\$10,976			Total .....		407	
Total value all domestic animals	\$4,069,857			<b>Nuts—</b>			
<b>Poultry and bees—</b>				Almonds .....	Number bearing trees	2,196	
Poultry of all kinds .....	128,325			Pecans .....		3	
Value .....	\$83,260			Walnuts .....		306	
Colonies of bees .....	3,669			Total .....		2,505	
Value .....	\$13,199			<b>Irrigation.</b>			
<b>Principal Crops.</b>				Number of farms irrigated in 1909....		258	
Description.....	Acres.	Bushels.		Acres irrigated in 1909.....		15,056	
Corn .....	845	15,552		Acresage enterprises were capable of			
Oats .....	8,734	240,760		irrigating in 1910.....		27,176	
Wheat .....	22,924	298,080		Acresage included in projects.....		29,914	
Barley .....	98,923	2,026,334		Main ditches, number .....		106	
Kafir corn and milo maize.....	2	40		Length, miles .....		223	
Dry edible beans .....	1,504	29,532		Laterals, number .....		23	
Potatoes .....	5,393	364,468		Length, miles .....		32	
Hay and forage—	Acres.	Tons.		Pumped wells, number.....		102	
Clover alone .....	60	90		Cost of irrigation enterprises up to			
Alfalfa .....	2,819	8,251		July 1, 1910.....		\$495,916	
Other tame and cultivated				Average cost per acre irrigation			
grasses .....	610	1,215		enterprises were capable of irrigating			
Wild, salt, or prairie grasses	6,211	5,582		in 1910 .....		18.25	
Grains cut green.....	73,492	93,147		<b>Mineral Production in 1913.</b>			
All other hay and forage.....	455	1,563		Substance.....	Amount.	Value.	
Total .....	83,647	109,848		Clay, tons .....	35,000	\$12,000	
<b>Poultry products—</b>				Gold .....		6,491	
Poultry raised, number.....	123,743			Gypsum, tons .....	11,000	35,000	
Eggs produced, dozens.....	751,177			Infusorial earth, tons.....	1,700	6,800	
Value of poultry and eggs produced	\$231,683			Limestone, tons .....	6,500	13,000	
<b>Honey and wax—</b>				Mineral water, gallons.....	20,000	7,000	
Honey produced, pounds.....	177,279			Sand-glass, tons .....	8,901	7,473	
Wax produced, pounds.....	2,619			Silver .....		27	
Value of honey and wax produced..	\$14,708			Stone industry .....		12,556	
				Other minerals .....		78,332	
				Total .....		\$178,679	
				Number of mineral springs.....		8	

\*Includes animals, age or sex not specified.

## NAPA COUNTY.

Date of creation, February 18, 1850.

Land area, 783 square miles.	Population-----	1890.	1900.	1910.
County seat, Napa, city.	Population-----	16,411	16,451	19,800
Population per square mile, 25.3.		4,395	4,036	5,791

Elevation, 20 feet.	Highest.	Lowest.	Inches.	Inches.
1914: Temperature---	101	---	Rainfall-----	Snow--- 0

The principal resources of Napa County are the raising of grapes, the making of wine and of grape juice; raising of prunes, peaches, pears, plums, and other fruit, and growing of grain. The value of mineral products is also considerable. There is a large cement manufactory at Napa Junction.

Napa County has the great advantage of river transportation to the bay of San Francisco, passenger and freight steamers making daily trips between Napa and San Francisco.

No irrigation is required to produce any crops.

Its southern boundary reaches down to within twenty-nine miles of San Francisco. The Napa River, a short tidal stream which drains the great Napa Valley, is navigable to the heart of the city of Napa.

There are many large creeks, brooks, and many springs in the hills, both mineral and otherwise.

## NAPA COUNTY SUMMARY.

Number of Farms Classified by Size.		Domestic Animals on Farms and Ranges.	
Under 3 acres-----	14	Cattle*—	
3 to 9 acres-----	136	Dairy cows-----	6,270
10 to 19 acres-----	223	Other cows-----	3,945
20 to 49 acres-----	355	Yearling heifers-----	1,403
50 to 99 acres-----	226	Calves-----	2,518
100 to 174 acres-----	223	Yearling steers and bulls-----	758
175 to 259 acres-----	92	Other steers and bulls-----	937
260 to 499 acres-----	112		
500 to 999 acres-----	84	Total-----	15,866
1,000 acres and over-----	72	Value-----	*\$395,721
Total-----	1,537	Horses—	
Total in 1900-----	1,336	Mature horses-----	5,145
		Yearling colts-----	528
		Spring colts-----	237
		Total-----	5,910
		Value-----	\$540,055
		Mules--	
		Mature mules-----	345
		Yearling colts-----	18
		Spring colts-----	9
		Total-----	372
		Value-----	\$37,970
		Asses and burros--	
		Number-----	10
		Value-----	\$1,315
		Swine—	
		Mature hogs-----	5,160
		Spring pigs-----	3,184
		Total-----	8,344
		Value-----	\$51,330

## Land and Farm Areas.

Approximate land, acres-----	501,120
Land in farms in 1910-----	360,580
Land in farms in 1900-----	319,327
Improved land in farms in 1910-----	101,114
Improved land in farms in 1900-----	111,966
Woodland in farms-----	193,578
Other unimproved land-----	65,888

## Value of All Farm Property.

Total value in 1910-----	\$18,082,006
Total value in 1900-----	12,337,046
Per cent increase 1900-1910-----	46.6
Land in 1910-----	13,086,656
Land in 1900-----	8,925,780
Buildings in 1910-----	3,365,470
Buildings in 1900-----	2,181,590
Implements and machinery in 1910-----	500,921
Implements and machinery in 1900-----	357,980
Domestic animals, poultry, and bees in 1910-----	1,128,959
Domestic animals, poultry, and bees in 1900-----	871,696

\*Includes animals, age or sex not specified

## NAPA COUNTY SUMMARY—Continued.

Domestic Animals on Farms and Ranges—Continued.					
Sheep—			Orchard fruits—		
Rams, ewes, and wethers.....	5,794		Apples .....		bearing trees Number 41,301
Spring lambs .....	5,084		Apricots .....		16,953
Total .....	10,878		Cherries .....		16,955
Value .....	\$37,076		Peaches and nectarines.....		71,080
Goats—			Pears .....		50,210
Number .....	556		Prunes and plums.....		299,613
Value .....	\$1,873		Total .....		497,391
Total value all domestic animals	\$1,065,340		Tropical fruits—		
Poultry and bees—			Number bearing trees		
Poultry of all kinds.....	108,777		Figs .....		1,234
Value .....	\$61,777		Lemons .....		258
Colonies of bees.....	524		Oranges .....		1,192
Value .....	\$1,842		Pomeloes .....		9
Principal Crops.			Olives .....		20,176
Description.	Acres.	Bushels.	Total .....		23,251
Corn .....	2,389	59,579	Grapevines—		
Oats .....	1,366	32,155	Number in bearing.....		
Wheat .....	4,134	50,671	8,595,338		
Barley .....	3,048	58,800	Small fruits—		
Kafir corn and milo maize.....	2	35	Strawberries, acres .....		
Dry edible beans.....	6	61	Blackberries and dewberries, acres.....		
Potatoes .....	530	81,659	All others, acres.....		
Hay and forage—			Total .....		
Timothy and clover mixed..	10	15	59		
Clover alone .....	29	55	Nuts—		
Alfalfa .....	1,204	3,423	Number bearing trees		
Other tame and cultivated grasses .....	496	413	Almonds .....		
Wild, salt, or prairie grasses	393	627	Pecans .....		
Grains cut green.....	23,764	34,503	Walnuts .....		
All other hay and forage.....	165	295	Total .....		
Total .....	26,061	39,331	2,768		
Poultry products—			Irrigation.		
Poultry raised, number.....	105,428		Number of farms irrigated in 1909....		
Eggs produced, dozens.....	662,159		Acres irrigated in 1909.....		
Value poultry and eggs produced..	\$218,003		Acreage enterprises were capable of irrigating in 1910.....		
Honey and wax—			Acreage included in projects.....		
Honey produced, pounds.....	8,939		Main ditches, number.....		
Wax produced, pounds.....	204		Length, miles .....		
Value of honey and wax produced..	\$942		Laterals, number .....		
Wool—			Length, miles .....		
Wool, fleeces shorn.....	9,955		Pumped wells, number.....		
Mohair and goat hair, fleeces shorn	153		Cost of irrigation enterprises up to July 1, 1910.....		
Value wool and mohair produced..	\$7,196		Average cost per acre irrigation enterprises were capable of irrigat- ing in 1910.....		
Special crops—			Mineral Production in 1913.		
Potatoes, acres .....	530		Substance.		
All other vegetables, acres.....	428		Amount.		
			Value.		
			Mineral water, gallons.....		
			Pumice stone, cubic feet.....		
			Quicksilver, flasks .....		
			Sandstone, cubic feet .....		
			Stone industry .....		
			Other minerals .....		
			Total .....		
			Number of mineral springs.....		



## NEVADA COUNTY.

Date of creation, April 25, 1851.

Land area, 974 square miles.	Population.....	1890. 17,369	1900. 17,789	1910. 14,955
County seat, Nevada City.	Population.....	2,524	3,250	2,689
Population per square mile, 15.4.				

	Highest.	Lowest.	Inches.	Inches.
Elevation, 2,580 feet. 1914: Temperature...	100	19	Rainfall...48.10	Snow... 9.0

Nevada County is situated in that portion of the State generally known as northern California, although its county seat, Nevada City, is but 60 miles from Sacramento. It is bounded on the north by Sierra County, on the east by the state line between California and Nevada, on the south by Placer County, and on the west by Yuba County. From the Yuba County line, Nevada County is hemmed in by the Yuba and Bear rivers until their sources are reached. The South Yuba River heads in the high Sierra and runs across the country almost its entire length from east to west.

On the rolling foothills of the western portion, where snow and frost are seldom seen, the elevation is slightly above the sea level, while along the eastern boundaries rise the snow-capped peaks of the Sierra Nevada to an elevation of nearly 8,000 feet.

In the Chicago Park section, between Colfax and Grass Valley, the soil is particularly adapted to the culture of Bartlett pears, and Hungarian prunes, both of which are grown without irrigation.

In the southwestern portion of the county, where there is an abundance of water, the farmers are turning their attention to dairying.

In the production of gold, Nevada County since 1849 has been a continual producer. Some of the mines are working at a depth of 4,000 feet, and have proven conclusively that in every instance where depth has been attained the ore bodies and the values are equally distributed.

## NEVADA COUNTY SUMMARY.

Date of creation, April 25, 1851.

Number of Farms Classified by Size.		Value of All Farm Property.	
Under 3 acres.....	7	Total value in 1910.....	\$3,022,685
3 to 9 acres.....	61	Total value in 1900.....	1,947,540
10 to 19 acres.....	36	Per cent increase 1900-1910.....	55.2
20 to 49 acres.....	77	Land in 1910.....	1,817,417
50 to 99 acres.....	69	Land in 1900.....	1,116,960
100 to 174 acres.....	88	Buildings in 1910.....	664,400
175 to 259 acres.....	53	Buildings in 1900.....	447,640
260 to 499 acres.....	84	Implements and machinery in 1910.....	132,857
500 to 999 acres.....	41	Implements and machinery in 1900.....	102,910
1,000 acres and over.....	28	Domestic animals, poultry, and bees in 1910.....	408,011
Total.....	544	Domestic animals, poultry, and bees in 1900.....	280,030
Total in 1900.....	522		
Land and Farm Areas.		Domestic Animals on Farms and Ranges.	
Approximate land, acres.....	623,860	Cattle—	
Land in farms in 1910.....	175,898	Dairy cows.....	2,395
Land in farms in 1900.....	120,743	Other cows.....	2,950
Improved land in farms in 1910.....	24,542	Yearling heifers.....	832
Improved land in farms in 1900.....	24,898	Calves.....	1,069
Woodland in farms.....	48,449	Yearling steers and bulls.....	495
Other unimproved land.....	102,407	Other steers and bulls.....	865
		Total.....	8,606
		Value.....	\$174,067

## NEVADA COUNTY SUMMARY—Continued.

Domestic Animals on Farms and Ranges—Continued.					
<b>Horses*—</b>			<b>Wool—</b>		
Mature horses .....	1,830		Wool, fleeces shorn .....	10,607	
Yearling colts .....	124		Mohair and goat hair, fleeces shorn .....	1,043	
Spring colts .....	70		Value wool and mohair produced .....	\$8,382	
Total .....	2,074		<b>Special crops—</b>		
Value .....	*\$161,139		Potatoes, acres .....	106	
<b>Mules—</b>			Sweet potatoes, acres .....	1	
Mature mules .....	57		All other vegetables, acres .....	231	
Yearling colts .....	11		Sugar beets, acres .....	39	
Spring colts .....			<b>Orchard fruits—</b>		
Total .....	68		Apples .....	Number bearing trees 20,223	
Value .....	\$5,945		Apricots .....	193	
<b>Asses and burros—</b>			Cherries .....	1,727	
Number .....	10		Peaches and nectarines .....	17,873	
Value .....	\$205		Pears .....	36,800	
<b>Swine—</b>			Prunes and plums .....	6,955	
Mature hogs .....	1,067		Total .....	84,259	
Spring pigs .....	749		<b>Tropical fruits—</b>		
Total .....	1,816		Figs .....	1,468	
Value .....	\$12,602		Lemons .....	6	
<b>Sheep—</b>			Oranges .....	364	
Rams, ewes, and wethers .....	6,853		Pomeloes .....	2	
Spring lambs .....	4,309		Olives .....	419	
Total .....	11,162		Total .....	2,311	
Value .....	\$34,960		<b>Grapevines—</b>		
<b>Goats—</b>			Number in bearing .....	94,338	
Number .....	2,198		<b>Small fruits—</b>		
Value .....	\$4,736		Strawberries, acres .....	4	
Total value all domestic animals .....	\$393,204		Blackberries and dewberries, acres .....	15	
<b>Poultry and bees—</b>			All others, acres .....	36	
Poultry of all kinds .....	23,482		Total, acres .....	55	
Value .....	\$13,731		<b>Nuts—</b>		
Colonies of bees .....	263		Almonds .....	Number bearing trees 1,325	
Value .....	\$1,076		Pecans .....	10	
<b>Principal Crops.</b>			Walnuts .....	1,105	
Description.	Acres.	Bushels.	Total .....	2,768	
Corn .....	5	208	<b>Irrigation.</b>		
Oats .....	119	1,559	Number of farms irrigated in 1909 .....	300	
Wheat .....	95	1,279	Acres irrigated in 1909 .....	3,839	
Barley .....	30	249	Acraee enterprises were capable of irrigating in 1910 .....	4,259	
Dry edible beans .....	1	18	Acraee included in projects .....	5,267	
Potatoes .....	106	12,733	Main ditches, number .....	110	
Description.	Acres.	Tons.	Length, miles .....	236	
Hay and forage—			Laterals, number .....	46	
Timothy alone .....	55	56	Length, miles .....	32	
Timothy and clover mixed .....	267	390	Pumped wells, number .....	5	
Clover alone .....	221	459	Cost of irrigation enterprises up to July 1, 1910 .....	\$1,569,028	
Alfalfa .....	492	1,114	Average cost per acre irrigation enterprises were capable of irrigating in 1910 .....	368.40	
Other tame and cultivated grasses .....	887	1,489	<b>Mineral Production in 1913.</b>		
Wild, salt, or prairie grasses .....	1,706	1,085	Substance.	Amount.	Value.
Grains cut green .....	5,068	4,191	Gold .....		\$2,918,733
All other hay and forage .....	29	113	Lead, pounds .....	2,090	92
Total .....	8,725	9,497	Silver .....		26,542
<b>Poultry products—</b>			Stone industry .....		5,000
Poultry raised, number .....	35,776		Total .....		\$2,950,367
Eggs produced, dozen .....	150,596		Number of mineral springs .....		1
Value poultry and eggs produced .....	\$63,612				
<b>Honey and wax—</b>					
Honey produced, pounds .....	5,452				
Wax produced, pounds .....	42				
Value of honey and wax produced .....	\$779				

\*Includes animals, age or sex not specified.

## ORANGE COUNTY.

Date of creation, March 11, 1889.

	Date of creation, March 11, 1889.		1890.	1900.	1910.
Land area, 795 square miles.	Population-----		13,589	19,696	34,436
County seat, Santa Ana, city.	Population-----		1,456	3,628	8,429
Population per square mile, 43.3.					
Yorba Linda (Station):	Highest.	Lowest.	Inches.		Inches.
Elevation, 405 feet.	1914: Temperature---	98	34	Rainfall--19.33	Snow--- 0

Orange County is bounded on the north by Los Angeles County, on the east by San Bernardino and Riverside counties, on the south by San Diego County, and on the west by the Pacific Ocean. The Santa Ana River enters the county on the northeast boundary and empties into Newport Bay, furnishing irrigating water to the Anaheim Union Water Company and Santa Ana Valley Irrigating Company. The Santiago Creek furnishes water to and along the foothills east of Orange.

San Juan by the Sea, Arch Beach, and Laguna Beach are open coast resorts. Corona del Mar, East Newport, Balboa, Newport Beach, and Port Orange are situated on Newport Bay, which is the best shipping point of the county. The county is one of the largest producers of oranges, of which a large acreage has been planted in recent years. There is also a considerable acreage in olives. The first raisin grape vines in southern California were planted in this county by McPherson Bros. in 1872, and the first raisins produced in 1875, but the vines were killed in 1888 by the Anaheim disease.

The county is one of the largest producers of Lima beans, and also of sugar beets and celery, the acreage in the latter is being reduced, as growers find that beans and sugar beets pay better.

## ORANGE COUNTY SUMMARY.

Number of Farms Classified by Size.		Value of All Farm Property.	
Under 3 acres.....	28	Total value in 1910.....	\$64,357,852
3 to 9 acres.....	531	Total value in 1900.....	22,346,595
10 to 19 acres.....	802	Per cent increase 1900-1910.....	188.0
20 to 49 acres.....	1,043	Land in 1910.....	55,952,755
50 to 99 acres.....	351	Land in 1900.....	18,533,640
100 to 174 acres.....	175	Buildings in 1910.....	4,660,795
175 to 259 acres.....	60	Buildings in 1900.....	2,177,040
260 to 499 acres.....	86	Implements and machinery in 1910.....	1,148,222
500 to 999 acres.....	52	Implements and machinery in 1900.....	456,500
1,000 acres and over.....	37	Domestic animals, poultry, and bees in 1910.....	2,596,080
Total.....	3,165	Domestic animals, poultry, and bees in 1900.....	1,179,415
Total in 1900.....	2,388		
Land and Farm Areas.		Domestic Animals on Farms and Ranges.	
Approximate land, acres.....	508,800	Cattle—	
Land in farms in 1910.....	371,692	Dairy cows.....	6,184
Land in farms in 1900*.....	599,436	Other cows.....	4,473
Improved land in farms in 1910.....	189,463	Yearling heifers.....	2,124
Improved land in farms in 1900.....	236,847	Calves.....	2,231
Woodland in farms.....	4,476	Yearling steers and bulls.....	1,168
Other unimproved land.....	177,753	Other steers and bulls.....	2,040
		Total.....	18,220
		Value.....	\$506,811

\*By an error the acreage was reported in 1900 as 599,436, instead of 425,277.

## ORANGE COUNTY SUMMARY—Continued.

Domestic Animals on Farms and Ranges—Continued.		
<b>Horses—</b>		
Mature horses .....	9,580	
Yearling colts .....	760	
Spring colts .....	225	
Total .....	10,565	
Value .....	\$1,338,440	
<b>Mules—</b>		
Mature mules .....	2,223	
Yearling colts .....	38	
Spring colts .....	7	
Total .....	2,268	
Value .....	\$396,360	
<b>Asses and burros—</b>		
Number .....	25	
Value .....	\$1,195	
<b>Swine—</b>		
Mature hogs .....	2,265	
Spring pigs .....	2,183	
Total .....	4,448	
Value .....	\$32,959	
<b>Sheep—</b>		
Rams, ewes, and wethers .....	31,802	
Spring lambs .....	11,876	
Total .....	43,678	
Value .....	\$176,893	
<b>Goats—</b>		
Number .....	423	
Value .....	\$1,220	
Total value all domestic animals .....	\$2,453,878	
<b>Poultry and bees—</b>		
Poultry of all kinds .....	186,746	
Value .....	\$125,423	
Colonies of bees .....	5,159	
Value .....	\$16,779	

## Principal Crops.

Description.	Acres.	Bushels.
Corn .....	3,054	91,643
Oats .....	995	30,858
Wheat .....	793	10,797
Barley .....	27,384	671,526
Kafir corn and milo maize .....	189	3,557
Dry edible beans .....	21,186	402,951
Potatoes .....	1,770	127,367
Description.	Acres.	Tons.
<b>Hay and forage—</b>		
Alfalfa .....	5,304	23,139
Other tame and cultivated grasses .....	6,123	8,177
Wild, salt, or prairie grasses .....	65	65
Grains cut green .....	35,753	53,045
All other hay and forage .....	401	3,229
Total .....	47,651	87,655
<b>Poultry products—</b>		
Poultry raised, number .....	239,563	
Eggs produced, dozens .....	1,198,290	
Value poultry and eggs produced .....	\$414,692	
<b>Honey and wax—</b>		
Honey produced, pounds .....	325,656	
Wax produced, pounds .....	2,764	
Value of honey and wax produced .....	\$18,525	

<b>Wool—</b>	
Wool, fleeces shorn .....	62,072
Value of wool and mohair produced .....	\$51,474
<b>Special crops—</b>	
Potatoes, acres .....	1,770
Sweet potatoes, acres .....	484
All other vegetables, acres .....	3,785
Sugar beets, acres .....	10,275
<b>Orchard fruits—</b>	
Number bearing trees	
Apples .....	11,902
Apricots .....	129,352
Cherries .....	23
Peaches and nectarines .....	12,461
Pears .....	2,100
Prunes and plums .....	4,569
Total .....	160,667
<b>Tropical fruits—</b>	
Figs .....	1,066
Lemons .....	46,954
Oranges .....	478,272
Pomeloes .....	677
Olives .....	67,046
Total .....	597,383
<b>Grapevines—</b>	
Number in bearing .....	282,682
<b>Small fruits—</b>	
Strawberries, acres .....	76
Blackberries and dewberries .....	43
All others .....	86
Total .....	205
<b>Nuts—</b>	
Number bearing trees	
Almonds .....	11,539
Pecans .....	2
Walnuts .....	535
Total .....	12,076

## Irrigation.

Number of farms irrigated in 1909 .....	2,215
Acres irrigated in 1909 .....	55,056
Acres enterprises were capable of irrigating in 1910 .....	63,486
Acres included in projects .....	71,444
Main ditches, number .....	309
Length, miles .....	180
Laterals, number .....	115
Length, miles .....	246
Flowing wells, number .....	588
Pumped wells, number .....	580
Cost of irrigation enterprises up to July 1, 1910 .....	\$1,948,246
Average cost per acre irrigation enterprises were capable of irrigating in 1910 .....	\$30.69

## Mineral Production in 1913.

Substance.	Amount.	Value.
Brick, thousand .....	2,100	\$14,000 00
Clay, tons .....	15,500	20,666 00
Natural gas, thousand .....	192,240	9,612 00
Petroleum, bbls. ....	9,485,362	6,867,402 00
Stone industry .....		36,815 00
Total .....		\$6,948,495 00
Number of mineral springs .....		2



## PLACER COUNTY.

Date of creation, April 25, 1851.

		1890.	1900.	1910.
Land area, 1,395 square miles.	Population-----	15,101	15,786	18,237
County seat, Auburn, city.	Population-----	1,595	2,050	2,376
Population per square mile, 13.1.				
	Highest.	Lowest.	Inches.	Inches.
Elevation, 1,360 feet.	1914: Temperature---	104	28	Rainfall--26.43
				Snow--- 0

Placer County is about 100 miles long and of varying widths, from 10 to 30 miles, the course and distance being defined by the course of the rivers which mark its boundaries. It extends from about eight miles from the Sacramento River to the summit of the Sierra Nevada Mountains. Just above Auburn, between the Bear and American rivers, the county is very narrow, being about 8 miles across. Above Auburn it widens out into the two divides lying between the Bear River and the Middle Fork of the American River. These are known as the Dutch Flat, or Railroad Divide, and the Forest Hill Divide. The southwestern portion is more regular in shape than the part just described. This section contains the foothill and level agricultural lands.

The entire extent faces toward the west, extending from an altitude of some 40 feet on the plains in the western portion to over 7,000 feet at its eastern boundary line. At the eastern boundary, separating it from the state of Nevada, is Lake Tahoe, one of the most picturesque lakes in America.

The soil of the western, or valley, portion is of the same general alluvial composition as all the soil in the Sacramento Valley, and is well adapted to the growth of grain. The low foothills near Lincoln are excellent for the grape.

Placer County holds a foremost position among the fruit producers. Peaches have been grown for years, and oranges and olives are also produced. In the production of cherries, small fruits, berries, and table grapes, Placer holds a foremost place.

Dairying and stock and poultry raising are successful industries. Butter making is carried on in the summer, the mountain ranges providing plenty of natural feed for cattle.

Much sugar and yellow pine, fir, spruce, and cedar are found in the mountains, and the lumber output from that section has been very large for many years. Oak and scrub pine abound all over the foothills and fuel is plentiful.

## PLACER COUNTY SUMMARY.

## Number of Farms Classified by Size.

Under 3 acres.....	2
3 to 9 acres.....	52
10 to 19 acres.....	109
20 to 49 acres.....	269
50 to 99 acres.....	206
100 to 174 acres.....	174
175 to 259 acres.....	69
260 to 499 acres.....	75
500 to 999 acres.....	50
1,000 acres and over.....	36

Total.....	1,032
Total in 1900.....	1,076

## Land and Farm Areas.

Approximate land, acres.....	892,800
Land in farms in 1910.....	248,080
Land in farms in 1900.....	440,371
Improved land in farms in 1910.....	98,008
Improved land in farms in 1900.....	121,063
Woodland in farms.....	32,194
Other unimproved land.....	117,278

## Value of All Farm Property.

Total value in 1910.....	\$10,234,101
Total value in 1900.....	6,547,761
Per cent increase 1900-1910.....	56.3
Land in 1910.....	7,747,744
Land in 1900.....	4,839,730
Buildings in 1910.....	1,399,840
Buildings in 1900.....	908,620
Implements and machinery in 1910.....	320,083
Implements and machinery in 1900.....	222,060
Domestic animals, poultry and bees in 1910.....	763,434
Domestic animals, poultry and bees in 1900.....	487,351

## Domestic Animals on Farms and Ranges.

Cattle*—	
Dairy cows.....	2,421
Other cows.....	2,233
Yearling heifers.....	602
Calves.....	1,204
Yearling steers and bulls.....	428
Other steers and bulls.....	532

Total.....	7,510
Value.....	*\$182,827

Horses—	
Mature horses.....	3,762
Yearling colts.....	294
Spring colts.....	137

Total.....	4,193
Value.....	\$308,692

Mules—	
Mature mules.....	459
Yearling colts.....	13
Spring colts.....	26

Total.....	493
Value.....	\$58,430

Asses and burros—	
Number.....	66
Value.....	\$1,529

## Swine—

Mature hogs.....	1,822
Spring pigs.....	1,565
Total.....	3,387
Value.....	\$23,785

## Sheep—

Rams, ewes and wethers.....	15,142
Spring lambs.....	9,323
Total.....	24,468
Value.....	\$68,716

## Goats—

Number.....	1,542
Value.....	\$3,455

Total value all domestic animals \$737,464

## Poultry and bees—

Poultry of all kinds.....	43,619
Value.....	\$26,714
Colonies of bees.....	667
Value.....	\$2,256

## Principal Crops.

Description.	Acres.	Bushels.
Corn.....	27	1,053
Oats.....	3,630	40,397
Wheat.....	5,721	62,167
Barley.....	1,318	17,128
Kafir corn and milo maize.....	8	161
Potatoes.....	72	7,442
Hay and forage—		
Timothy alone.....	38	37
Timothy and clover mixed..	20	27
Clover alone.....	78	77
Alfalfa.....	465	1,249
Other tame and cultivated grasses.....	218	206
Wild, salt or prairie grasses	1,262	824
Grains cut green.....	14,099	10,978
All other hay and forage...	4	6

Total..... 16,034 13,404

## Poultry products—

Poultry raised, number.....	62,151
Eggs produced, dozens.....	235,066
Value poultry and eggs produced..	\$110,974

## Honey and wax—

Honey produced, pounds.....	7,338
Wax produced, pounds.....	80
Value honey and wax produced....	\$814

## Wool—

Wool, fleeces shorn.....	28,841
Mohair and goat hair, fleeces shorn	177
Value wool and mohair produced..	\$21,728

## Special crops—

Potatoes, acres.....	72
All other vegetables, acres.....	408

## Orchard fruits—

	Number bearing trees
Apples.....	42,704
Apricots.....	4,092
Cherries.....	31,269
Peaches and nectarines.....	683,824
Pears.....	142,990
Prunes and plums.....	279,766

Total..... 1,190,074

\*Includes animals, age or sex not specified.

## PLACER COUNTY SUMMARY—Continued.

Principal Crops—Continued.		Irrigation.	
Tropical fruits—	Number bearing trees	Number of farms irrigated in 1909	618
Figs	4,463	Acres irrigated in 1909	16,845
Lemons	714	Acres enterprises were capable of irrigating in 1910	23,365
Oranges	26,921	Acres included in projects	61,751
Pomeloes	289	Main ditches, number	35
Olives	26,396	Length, miles	194
Total	59,906	Laterals, number	46
Grapevines—		Length, miles	108
Number in bearing	1,340,152	Pumped wells, number	2
Small fruits—		Cost of irrigation enterprises up to July 1, 1910	\$2,798,740
Strawberries, acres	433	Average cost per acre irrigation enterprises were capable of irrigating in 1910	\$119.78
Blackberries and dewberries, acres	62		
All others, acres	87		
Total	582		
Nuts—	Number bearing trees	Mineral Production in 1913.	
Almonds	11,539	Substance.	Amount.
Pecans	2	Brick, M	1,900
Walnuts	535	Clay, tons	68,600
Total	12,122	Copper, pounds	429
		Gold	220,785
		Lead, tons	805
		Quartz, tons	2,000
		Silver	2,972
		Stone industry	205,749
		Total	\$520,808
		Number of mineral springs	12

## PLUMAS COUNTY.

Date of creation, March 18, 1854.

Land area, 2,594 square miles.	Population.....	1890. 4,933	1900. 4,657	1910. 5,259
County seat, Quincy, township.	Population.....	818	748	884
Population per square mile, 2.0.				

	Highest.	Lowest.	Inches.	Inches
Elevation, 3,400 feet. 1914: Temperature...	98	---	Rainfall..40.45	Snow..60.0

Plumas County is situated in the northeastern part of California. It is bounded on the north by Shasta and Lassen counties, on the south by Yuba, Butte, and Sierra counties, on the east by Lassen, and on the west by Butte and Tehama counties. In the lowest portion the elevation is about 1,800 feet, but sloping gradually from its valleys, it rises gently to an elevation on its mountain ridges of over 7,000 feet. Although a great deal of valley lands have been cultivated, there is still a large acreage of uncleared land.

Plumas County has the largest area of timber land of any county in California. It is practically one entire sweep of forest land from one end to the other. While the greater part of it has been in reserve, the timber on it has been taken up, and the many sawmills throughout its mountains are turning out thousands of feet of white, sugar pine and spruce lumber.

Running in numerous channels through all of its mountain ridges, the ancient river beds afford large stores of gold. There have been millions of dollars in gold taken from the mines of Plumas. There has also been a great deal of surface mining done in times past. The mining section of Plumas is scattered throughout the entire county.

Hot Spring Valley, near the northwest corner of the county, contains scores of rumbling springs from which issue steam, or in which hot mud is bubbling, suggesting nearness to an active volcano. To the southwest of this valley are the geyser and a lake of boiling mud.

## PLUMAS COUNTY SUMMARY.

Number of Farms Classified by Size.		Value of All Farm Property.	
3 to 9 acres.....	6	Total value in 1910.....	\$3,362,955
10 to 19 acres.....	5	Total value in 1900.....	2,239,876
20 to 49 acres.....	9	Per cent increase 1900-1910.....	50.1
50 to 99 acres.....	12	Land in 1910.....	2,201,654
100 to 174 acres.....	45	Land in 1900.....	1,211,530
175 to 259 acres.....	19	Buildings in 1910.....	532,156
260 to 499 acres.....	37	Buildings in 1900.....	387,010
500 to 999 acres.....	46	Implements and machinery in 1910.....	123,300
1,000 acres and over.....	42	Implements and machinery in 1900.....	97,240
Total.....	221	Domestic animals, poultry, and bees in 1910.....	505,845
Total in 1900.....	267	Domestic animals, poultry, and bees in 1900.....	544,096
<b>Land and Farm Areas.</b>		<b>Domestic Animals on Farms and Ranges.</b>	
Approximate land, acres.....	1,660,160	Cattle—	
Land in farms in 1910.....	134,259	Dairy cows.....	3,437
Land in farms in 1900.....	184,449	Other cows.....	1,954
Improved land in farms in 1910.....	54,281	Yearling heifers.....	1,561
Improved land in farms in 1900.....	57,351	Calves.....	1,586
Woodland in farms.....	27,238	Yearling steers and bulls.....	1,468
Other unimproved land.....	52,740	Other steers and bulls.....	1,395
		Total.....	11,401
		Value.....	\$279,651



## PLUMAS COUNTY SUMMARY—Continued.

## Domestic Animals on Farms and Ranges—Continued.

<b>Horses—</b>		
Mature horses .....	1,770	
Yearling colts .....	2	
Spring colts .....	68	
Total .....	2,044	
Value .....	\$200,409	
<b>Mules—</b>		
Mature mules .....	41	
Yearling colts .....	2	
Total .....	43	
Value .....	\$4,435	
<b>Asses and burros—</b>		
Number .....	5	
Value .....	\$1,560	
<b>Swine—</b>		
Mature hogs .....	665	
Spring pigs .....	744	
Total .....	1,409	
Value .....	\$8,922	
<b>Sheep—</b>		
Rams, ewes, and wethers .....	845	
Spring lambs .....	314	
Total .....	1,159	
Value .....	\$4,080	
<b>Goats—</b>		
Number .....	10	
Value .....	\$32	
Total value all domestic animals .....	\$499,089	

<b>Poultry and bees—</b>		
Poultry of all kinds .....	9,649	
Value .....	\$6,272	
Colonies of bees .....	121	
Value .....	\$484	

## Principal Crops.

Description.	Acres.	Bushels.
Oats .....	2,193	75,606
Wheat .....	766	10,313
Barley .....	1,260	12,216
Potatoes .....	100	12,638
<b>Hay and forage—</b>		
Timothy alone .....	851	1,084
Timothy and clover mixed .....	5,239	7,191
Clover alone .....	155	283
Alfalfa .....	711	1,104
Other tame and cultivated grasses .....	2,402	2,892
Wild, salt, or prairie grasses .....	19,794	20,425
Grains cut green .....	985	1,031
All other hay and forage .....	15	25
Total .....	30,152	34,038

<b>Poultry products—</b>		
Poultry raised, number .....	15,163	
Eggs produced, dozen .....	48,511	
Value of poultry and eggs produced .....	\$22,206	

<b>Honey and wax—</b>		
Honey produced, pounds .....	2,280	
Wax produced, pounds .....	5	
Value of honey and wax produced .....	\$308	

<b>Wool—</b>		
Wool, fleeces shorn .....	593	
Value of wool and mohair produced .....	\$767	

<b>Special crops—</b>		
Potatoes, acres .....	100	
All other vegetables, acres .....	97	

Orchard fruits—	Number bearing trees
Apples .....	3,534
Apricots .....	18
Cherries .....	65
Peaches and nectarines .....	184
Pears .....	261
Prunes and plums .....	510

Total .....

4,574

Tropical fruits—	Number bearing trees
Figs .....	6
Olives .....	6

Total .....

12

<b>Small fruits—</b>		
Strawberries, acres .....	6	
Blackberries and dewberries, acres .....	1	
All others, acres .....	6	

Total .....

13

<b>Nuts—</b>		
Walnuts .....	4	

## Irrigation.

Number of farms irrigated in 1909 .....	151
Acres irrigated in 1909 .....	36,602
Acres enterprises were capable of irrigating in 1910 .....	37,529
Acres included in projects .....	37,901
Main ditches, number .....	147
Length, miles .....	201
Laterals, number .....	62
Length, miles .....	16
Flowing wells, number .....	3
Cost of irrigation enterprises up to July 1, 1910 .....	\$107,118
Average cost per acre irrigation enterprises were capable of irrigating in 1910 .....	\$2.85

## Mineral Production in 1913.

Substance.	Amount.	Value.
Copper, pounds .....	17,274	\$2,678
Gold .....		138,368
Lead, pounds .....	5,621	247
Silver .....		705
Stone industry .....		1,700
Total .....		\$143,698
Number of mineral springs .....		16

## RIVERSIDE COUNTY.

Date of creation, March 11, 1893.

	1890.	1900.	1910.
Land area, 7,240 square miles.	Population-----	17,897	34,696
County seat, Riverside, city.	Population-----	4,683	7,973
Population per square mile, 4.8.			15,212
	Highest.	Lowest.	Inches.
Elevation, 851 feet.	1914: Temperature---104	30	Rainfall---15.54
			Snow--- 0

Riverside County was formed in 1893 from the southwestern part of San Bernardino and the northern part of San Diego counties. It is about 200 miles long by 40 miles wide, and embraces most varied geographical and topographical features, climate, scenery, soil, agricultural, horticultural, and mineral resources. It contains within its borders one of the highest mountains in southern California and part of Salton Sea, 250 feet below sea level.

The principal rivers of the county are the Colorado, which forms its eastern boundary; the Santa Ana, having its head in the San Bernardino range of mountains, flowing through the northwestern part of the county, furnishing irrigation for a large area of land; the San Jacinto, having its source in the San Jacinto range, flowing through the San Jacinto, Hemet, and Perris valleys, and forming Lake Elsinore.

While the progress of the county has been practically confined to its northwest corner, which embraces one of the largest orange-growing districts in the State. It is supplied by one of the best and most complete irrigating systems in the State, the entire western portion is being brought under cultivation from the rapid development of artesian wells. There is also a large acreage in lemons. A factory has recently been established at Riverside for the manufacture of orange juice. The capacity of the plant will be 4,000 pounds of culls per day, producing approximately 2,000 pint bottles of orange syrup.

During the last fifteen years dates have been grown in an experimental way, but the industry is now well established. In the Coachella Valley and the country around Palo Verde they are being extensively cultivated, but the expense is greater than for other orchard crops, owing to the cost of the offshoots. There are about 5,000 palms shortly coming into bearing. The quantity of edible dates sold last year was about 7,000 pounds.

The central and greater part of the eastern portion of the county is desert, but known to be heavily mineralized. The high cost of freight, fuel, and scarcity of water, making prospecting dangerous, all combine to retard mining developments.

The San Jacinto and Hemet valleys, situated about 45 miles southeast of Riverside City, at the base of the San Jacinto Mountains, are excellently adapted to diversified farming, and the foothills to stock grazing. The San Jacinto Valley is watered by numerous flowing wells and the Hemet Valley by the great Hemet dam, the largest piece of solid masonry in the West, forming a reservoir filled with pure mountain water.

## RIVERSIDE COUNTY SUMMARY.

## Number of Farms Classified by Size.

Under 3 acres.....	42
3 to 9 acres.....	462
10 to 19 acres.....	593
20 to 49 acres.....	614
50 to 99 acres.....	262
100 to 174 acres.....	262
175 to 259 acres.....	99
260 to 499 acres.....	166
500 to 999 acres.....	104
1,000 acres and over.....	81

Total .....	2,688
Total in 1900.....	2,340

## Land and Farm Areas.

Approximate land, acres.....	4,633,000
Land in farms in 1910.....	520,806
Land in farms in 1900.....	427,097
Improved land in farms in 1910.....	278,151
Improved land in farms in 1900.....	216,033
Woodland in farms.....	30,231
Other unimproved land.....	212,424

## Value of All Farm Property.

Total value in 1910.....	\$43,263,795
Total value in 1900.....	21,644,031
Per cent increase 1900-1910.....	113.5
Land in 1910.....	39,363,652
Land in 1900.....	18,488,110
Buildings in 1910.....	3,666,689
Buildings in 1900.....	1,999,850
Implements and machinery in 1910.....	1,112,189
Implements and machinery in 1900.....	399,280
Domestic animals, poultry and bees in 1910.....	2,061,265
Domestic animals, poultry and bees in 1900.....	756,791

## Domestic Animals on Farms and Ranges.

Cattle—	
Dairy cows .....	5,235
Other cows .....	4,449
Yearling heifers .....	2,493
Calves .....	2,203
Yearling steers and bulls.....	1,333
Other steers and bulls.....	3,755
Total .....	19,468
Value .....	484,082

## Horses—

Mature horses .....	8,969
Yearling colts .....	943
Spring colts .....	403
Total .....	10,315
Value .....	\$1,157,357

## Mules—

Mature mules .....	1,303
Yearling colts .....	83
Spring colts .....	43
Total .....	1,429
Value .....	\$205,099

## Asses and burros—

Number .....	88
Value .....	\$9,050

## Swine—

Mature hogs .....	3,892
Spring pigs .....	2,253
Total .....	6,150
Value .....	\$44,770

## Sheep—

Rams, ewes and wethers.....	5,589
Spring lambs .....	1,420

Total .....	7,009
Value .....	\$30,167

## Goats—

Number .....	924
Value .....	\$6,712

Total value all domestic animals \$1,937,237

## Poultry and bees—

Poultry of all kinds.....	84,226
Value .....	\$61,742
Colonies of bees.....	18,900
Value .....	\$92,283

## Principal Crops.

Description.....	Acres.	Bushels.
Corn .....	372	12,421
Oats .....	3,767	85,540
Wheat .....	11,817	159,434
Barley .....	56,916	958,526
Kafir corn and milo maize.....	44	580
Dry edible beans.....	50	192
Potatoes .....	209	22,392
Hay and forage—	Acres.	Tons.
Timothy alone .....	5	5
Alfalfa .....	12,904	69,230
Other tame and cultivated grasses .....	795	2,000
Wild, salt, or prairie grasses .....	14	15
Grains cut green.....	73,985	69,235
All other hay and forage.....	727	1,309

Total .....

## Poultry products—

Poultry raised, number.....	95,767
Eggs produced, dozen.....	438,099
Value poultry and eggs produced..	\$183,490

## Honey and wax—

Honey produced, pounds.....	902,106
Wax produced, pounds.....	12,915
Value honey and wax produced....	\$92,337

## Wool—

Wool, fleeces shorn.....	4,536
Mohair and goat hair, fleeces shorn .....	73
Value wool and mohair produced..	\$2,000

## Special crops—

Potatoes, acres .....	309
Sweet potatoes, acres.....	57
All other vegetables, acres.....	1,225
Sugar beets, acres.....	4

## Orchard fruits—

	Number bearing trees
Apples .....	10,577
Apriots .....	83,069
Cherries .....	982
Peaches and nectarines.....	72,993
Pears .....	18,447
Prunes and plums.....	34,357

Total .....

## RIVERSIDE COUNTY SUMMARY—Continued.

Principal Crops—Continued.		Irrigation.		
Tropical fruits—	Number bearing trees	Number of farms irrigated in 1909	2,174	
Figs	2,054	Acres irrigated in 1909	71,436	
Lemons	115,020	Acres enterprises were capable of irrigating in 1910	103,233	
Oranges	1,021,937	Acres included in projects	210,452	
Pomecloes	4,477	Main ditches, number	301	
Olives	80,572	Length, miles	500	
Total	1,224,217	Laterals, number	282	
		Length, miles	288	
		Flowing wells, number	553	
		Pumped wells, number	792	
Grapevines—		Cost of irrigation enterprises up to July 1, 1910	\$5,648,439	
Number in bearing	1,570,749	Average cost per acre irrigation enterprises were capable of irrigating in 1910	54.72	
		Mineral Production in 1913.		
Small fruits—		Substance.	Amount.	Value.
Strawberries, acres	27	Brick, thousand	3,530	\$30,300
Blackberries and dewberries, acres	28	Clay, tons	88,936	89,963
All others, acres	9	Copper, pounds	8,971	1,391
Total	64	Gems		1,000
		Gold		12,501
		Gypsum, tons	1,000	3,000
		Magnesite, tons	539	4,532
		Mineral water, gallons	200,000	20,000
Nuts—	Number bearing trees	Silver		104
Almonds	21,789	Stone industry		536,844
Pecans	93	Other minerals		1,372,314
Walnuts	3,040	Total		\$2,071,969
Total	24,940	Number of mineral springs		23



## SACRAMENTO COUNTY.

Date of creation, February 18, 1850.

Land area, 983 square miles.	Population-----	1890.	1900.	1910.
County seat, Sacramento, city.	Population-----	40,339	45,915	67,806
Population per square mile, 69.0.	Population-----	26,386	29,282	44,696
	Highest.	Lowest.	Inches.	Inches.
Elevation, 71 feet.	1914: Temperature---102	30	Rainfall---16.05	Snow--- 0

Sacramento County is one of the largest in the Sacramento Valley, as well as one of the oldest in the State, having been organized by the first legislature. Its principal cities and towns are: Sacramento, Folsom, Galt, Elk Grove, Fair Oaks, Courtland, Walnut Grove, Isleton, Franklin, and Cosumnes.

Its area is almost all rich, alluvial plain, ranging from 30 to 125 feet above sea level, rising gradually from the rivers to meet the low, rolling foothills of the Sierra Nevada Mountains.

The Sacramento River is the longest and largest in the State, and is navigable from Red Bluff to San Francisco Bay, giving unexcelled transportation facilities, landing freight on deep water vessels at a minimum cost.

The American River rises in the upper Sierra and enters the county at the northeast corner among the low foothills, flowing in a southwesterly direction, and emptying into the Sacramento just north of the city of Sacramento.

The fish in the rivers are salmon, striped bass, sturgeon, pike, perch, catfish, shad, carp, and black bass.

Strawberries are marketed here eleven months in the year, and fresh vegetables are obtainable the year round. The largest asparagus beds in the State are within the confines of Sacramento County. Alfalfa grows luxuriantly without irrigation on the rich bottom lands.

The river districts are most prolific producers of beans. Egyptian corn, potatoes, asparagus, in fact, all kinds of vegetables thrive, many of them having two growing seasons.

Along the Sacramento, American, and Cosumnes rivers are some of the most productive hop fields in the United States. Hop culture on this coast dates back to 1858. It was early demonstrated that the soil and climate of Sacramento County are unsurpassed for hop culture. For thirty years Sacramento was the largest hop growing county in the State.

Sacramento County presents splendid opportunities to the live stock breeder and the dairyman. There are a number of large creameries in the county, and the largest and most modern dairy on the coast is located here. The climate is so temperate and mild that animals remain in the open air practically unsheltered the year round without hardship. The soil, because of its fertility, is peculiarly adapted to the growth of forage crops, especially alfalfa, which is at the same time one of the cheapest of stock feeds.

Hogs are raised generally by the farmers, and pedigreed Poland China, Berkshire, and Essex swine are bred quite extensively and have proven very profitable.

Poultry raising has steadily increased in importance in the last few years. Elk Grove, Galt, and Folsom are among the principal poultry-raising districts.

There are a number of wineries in the county.

One of the largest rock-crushing plants is located in the county, supplying many thousands of tons of crushed rock for the many uses made of it.

## SACRAMENTO COUNTY SUMMARY.

Number of Farms Classified by Size.			
Under 3 acres.....	12	Mules—	
3 to 9 acres.....	167	Mature mules .....	708
10 to 19 acres.....	237	Yearling colts .....	30
20 to 49 acres.....	321	Spring colts .....	10
50 to 99 acres.....	170	Total .....	748
100 to 174 acres.....	223	Value .....	\$87,020
175 to 259 acres.....	96	Asses and burros—	
260 to 499 acres.....	173	Number .....	19
500 to 999 acres.....	111	Value .....	\$5,245
1,000 acres and over.....	91	Swine—	
Total .....	1,601	Mature hogs .....	6,421
Total in 1900.....	1,392	Spring pigs .....	4,034
		Total .....	10,455
		Value .....	\$73,278
Land and Farm Areas.		Sheep—	
Approximate land, acres.....	629,120	Rams, ewes, and wethers.....	25,828
Land in farms in 1910.....	473,044	Spring lambs .....	21,129
Land in farms in 1900 <sup>1</sup> .....	668,426	Total .....	46,957
Improved land in farms in 1910.....	275,682	Value .....	\$160,221
Improved land in farms in 1900.....	327,159	Goats—	
Woodland in farms.....	20,964	Number .....	89
Other unimproved land.....	176,398	Value .....	\$280
		Total value all domestic animals .....	\$2,187,810
Value of All Farm Property.		Poultry and bees—	
Total value in 1910.....	\$36,694,682	Poultry of all kinds.....	116,556
Total value in 1900.....	19,326,626	Value .....	\$84,188
Per cent increase 1900-1910.....	89.9	Colonies of bees.....	1,835
Land in 1910.....	30,425,404	Value .....	\$5,481
Land in 1900.....	15,189,870		
Buildings in 1910.....	3,205,416		
Buildings in 1900.....	2,159,630		
Implements and machinery in 1910.....	786,383		
Implements and machinery in 1900.....	528,780		
Domestic animals, poultry, and bees in 1910.....	2,277,479		
Domestic animals, poultry, and bees in 1900 .....	1,448,346		
Domestic Animals on Farms and Ranges.		Principal Crops.	
Cattle <sup>2</sup> —		Description.	Acres. Bushels.
Dairy cows .....	11,979	Corn .....	795 34,089
Other cows .....	5,484	Oats .....	4,174 66,949
Yearling heifers .....	3,195	Wheat .....	10,704 103,728
Calves .....	5,568	Barley .....	4,599 75,575
Yearling steers and bulls.....	1,529	Kafir corn and milo maze.....	2 43
Other steers and bulls.....	1,961	Dry edible beans.....	7,801 166,852
Total .....	31,188	Potatoes .....	1,406 160,519
Value .....	\$838,431		Acres. Tons.
Horses—		Hay and forage—	
Mature horses .....	8,770	Timothy alone .....	1,303 1,187
Yearling colts .....	773	Clover alone .....	222 422
Spring colts .....	426	Alfalfa .....	9,602 32,021
Total .....	9,969	Other tame and cultivated	
Value .....	\$1,022,335	grasses .....	3,714 3,570
		Wild, salt, or prairie grasses .....	1,909 2,196
		Grains cut green.....	40,130 31,040
		All other hay and forage.....	56 112
		Totals .....	56,936 70,548

<sup>1</sup>By an error the acreage in 1900 was reported to be 668,426, instead of 501,448.

<sup>2</sup>Includes animals, age or sex not specified.

## SACRAMENTO COUNTY SUMMARY—Continued.

Principal Crops—Continued.			
Poultry products—		Small fruits—	
Poultry raised, number.....	144,704	Strawberries, acres .....	450
Eggs produced, dozen.....	663,906	Blackberries and dewberries, acres..	52
Value of poultry and eggs produced	249,821	All others, acres.....	52
		Total .....	554
Honey and wax—		Nuts—	
Honey produced, pounds.....	55,272	Almonds .....	Number bearing trees
Wax produced, pounds.....	160	Pecans .....	66,372
Value of honey and wax produced..	\$5,398	Walnuts .....	3
		Total .....	755
Wool—		Irrigation.	
Wool, fleeces shorn.....	41,103	Number of farms irrigated in 1909....	1,053
Mohair and goat hair, fleeces shorn	7	Aeres irrigated in 1909.....	53,683
Value of wool and mohair produced	\$35,449	Acreage enterprises were capable of irrigating in 1910.....	69,970
		Acreage included in projects.....	74,538
Special crops—		Main ditches, number.....	213
Potatoes, acres .....	1,406	Length, miles .....	238
All other vegetables, acres.....	6,367	Laterals, number .....	5
Sugar beets, acres.....	7	Length, miles .....	8
		Pumped wells, number.....	1,168
Orchard fruits—		Cost of irrigation enterprises up to July 1, 1910.....	\$1,452,471
	Number bearing trees	Average cost per acre irrigation enterprises were capable of irrigat- ing in 1910.....	20.76
Apples .....	10,948	Mineral Production In 1913.	
Apricots .....	10,480	Substance.	Amount.
Cherries .....	17,173	Brick, thousand .....	22,535
Peaches and nectarines.....	99,635	Gold .....	2,503,633
Pears .....	161,094	Natural gas, thousand.....	72,000
Prunes and plums.....	206,553	Silver .....	3,406
Total .....	506,961	Stone industry .....	238,476
		Total .....	\$2,925,706
Tropical fruits—			
Figs .....	1,145		
Lemons .....	2,500		
Oranges .....	46,256		
Pomeloes .....	864		
Olives .....	34,077		
Total .....	84,863		
Grapevines—			
Number in bearing.....	7,627,510		

## SAN BENITO COUNTY.

Date of creation, February 12, 1874.

Land area, 1,392 square miles.	Population-----	1890. 6,412	1900. 6,633	1910. 8,041
County seat, Hollister, town.	Population-----	1,234	1,315	2,308
Population per square mile, 5.8.				

Elevation, 284 feet.	Highest.	Lowest.	Inches.	Inches.
1914: Temperature---	98	28	Rainfall--17.38	Snow--- 0

The county extends from northwest to southeast about 60 miles, with a general breadth of 20 miles. The Gabilan Mountains on the southwest constitute the dividing line from Monterey County, and at their base flows northerly, the entire length, the San Benito River. Farther east the Tres Pinos forms another valley.

Irrigation is by gravity from the San Benito River and the Tres Pinos. This is supplemented by an extensive system of pumping from an apparently inexhaustible supply of underground flow, and further by artesian wells in the northern end of the county.

The lime industry, though once large, has ceased, awaiting better transportation facilities. The quicksilver product of the New Idria mines goes on unceasingly. Large deposits of potter's clay of superior quality lie in easy access.

## SAN BENITO COUNTY SUMMARY.

Number of Farms Classified by Size.		Domestic Animals on Farms and Ranges.	
Under 3 acres.....	7	Cattle*—	
3 to 9 acres.....	87	Dairy cows .....	4,828
10 to 19 acres.....	83	Other cows .....	11,064
20 to 49 acres.....	118	Yearling heifers .....	4,459
50 to 99 acres.....	93	Calves .....	5,864
100 to 174 acres.....	107	Yearling steers and bulls.....	4,151
175 to 259 acres.....	50	Other steers and bulls.....	8,987
260 to 499 acres.....	144		
500 to 999 acres.....	109	Total .....	39,703
1,000 acres and over.....	117	Value .....	*\$939,600
Total .....	921	Horses—	
Total in 1900.....	907	Mature horses .....	6,921
		Yearling colts .....	955
		Spring colts .....	599
		Total .....	8,475
		Value .....	\$843,985
		Mules—	
		Mature mules .....	74
		Yearling colts .....	19
		Spring colts .....	3
		Total .....	96
		Value .....	\$11,145
		Asses and burros—	
		Number .....	29
		Value .....	\$945
		Swine—	
		Mature hogs .....	5,572
		Spring pigs .....	2,560
		Total .....	8,132
		Value .....	\$57,253

## Land and Farm Areas.

Approximate land, acres.....	890,880
Land in farms in 1910.....	544,301
Land in farms in 1900.....	512,719
Improved land in farms in 1910.....	186,573
Improved land in farms in 1900.....	168,698
Woodland in farms.....	52,466
Other unimproved land.....	305,262

## Value of All Farm Property.

Total value in 1910.....	\$14,963,967
Total value in 1900.....	9,117,058
Per cent increase 1900-1910.....	64.1
Land in 1910.....	11,272,156
Land in 1900.....	7,057,190
Buildings in 1910.....	1,333,855
Buildings in 1900.....	852,340
Implements and machinery in 1910.....	391,058
Implements and machinery in 1900.....	272,030
Domestic animals, poultry and bees in 1910.....	1,963,798
Domestic animals, poultry and bees in 1900.....	935,498

\*Includes animals, age or sex not specified.



## SAN BENITO COUNTY SUMMARY—Continued.

Domestic Animals on Farms and Ranges—Continued.					
Sheep—			Orchard fruits—		
Rams, ewes and wethers.....	10,635		Apples.....		Number bearing trees 26,593
Spring lambs.....	4,511		Apricots.....		691
			Cherries.....		3,421
Total.....	15,146		Peaches and nectarines.....		12,301
Value.....	\$55,239		Pears.....		12,409
			Prunes and plums.....		91,063
Goats—			Total.....		267,537
Number.....	489		Tropical fruits—		
Value.....	\$1,159		Figs.....		123
Total value all domestic animals	\$1,909,383		Lemons.....		5
Poultry and bees—			Oranges.....		42
Poultry of all kinds.....	95,289		Olives.....		4
Value.....	\$50,414		Total.....		179
Colonies of bees.....	1,177		Grapelines—		
Value.....	\$3,993		Number in bearing.....		177,973
Principal Crops.			Small fruits—		
Description.....	Acres.	Bushels.	Strawberries, acres.....		35
Corn.....	401	5,839	Blackberries and dewberries, acres..		1
Oats.....	776	13,823	All others.....		18
Wheat.....	4,451	57,535	Total.....		54
Barley.....	10,955	307,215	Nuts—		
Dry edible beans.....	59	677	Almonds.....		Number bearing trees 6,958
Potatoes.....	205	25,438	Pecans.....		6
Totals.....	16,847	410,080	Walnuts.....		1,339
Hay and forage—			Total.....		8,333
Alfalfa.....	1,940	7,700	Irrigation.		
Other tame and cultivated			Number of farms irrigated in 1909...		240
grasses.....	440	630	Acres irrigated in 1909.....		7,186
Wild, salt or prairie grasses.....	3,727	3,827	Acres irrigated in 1910.....		13,790
Grains cut green.....	57,319	70,439	Acres included in projects.....		20,067
All other hay and forage.....	638	1,784	Main ditches, number.....		64
Total.....	64,014	84,380	Length, miles.....		61
Poultry products—			Laterals, number.....		12
Poultry raised, number.....	79,550		Length, miles.....		33
Eggs produced, dozen.....	696,264		Pumped wells, number.....		87
Value poultry and eggs produced..	\$225,891		Cost of irrigation enterprises up to		
Honey and wax—			July 1, 1910.....		\$177,924
Honey produced, pounds.....	68,253		Average cost per acre irrigation en-		
Wax produced, pounds.....	773		terprises were capable of irrigating		
Value honey and wax produced.....	\$5,671		in 1910.....		\$12.90
Wool—			Mineral Production in 1913.		
Wool, fleeces shorn.....	19,457		Substance.....	Amount.	Value.
Mohair and goat hair, fleeces shorn	33		Mineral water, gallons.....	7,000	\$4,560
Value wool and mohair produced..	\$18,974		Quicksilver, flasks.....	9,719	390,995
Special crops—			Stone industry.....		119,560
Potatoes, acres.....	205		Total.....		\$514,995
All other vegetables, acres.....	183		Number of mineral springs.....		1
Sugar beets, acres.....	283				

## SAN BERNARDINO COUNTY.

Date of creation, April 26, 1853.

	1890.	1900.	1910.
Land area, 20,157 square miles.	Population----- 25,497	27,929	56,706
County seat, San Bernardino, city.	Population----- 4,012	6,150	12,779
Population per square mile, 2.8.			
	Highest.	Lowest.	Inches.
Elevation, 1,054 feet. 1914: Temperature---104	26	Rainfall---21.85	Snow--- 0

San Bernardino is not only the largest county in California, but it is the largest in the United States. It is larger than New Hampshire, Vermont, and Rhode Island combined; larger than New Jersey, Delaware, Massachusetts, and Rhode Island combined; very nearly as large as Massachusetts, Connecticut, and New Jersey. There are eight states whose area is less than that of this county.

San Bernardino County is in the southeastern part of the State. The greater portion is desert. In the north is the Mojave desert, and in the east the northern end of the Colorado desert, the arable portion being confined to the southwestern part—the San Bernardino Valley. This valley forms an almost perfect amphitheater, encircled by mountains and hills, open only on the west, allowing the sea breeze from the ocean to sweep its entire length.

Mount San Bernardino, from its distinctive cone, has been adopted by the United States surveyors as the initial point for land surveys in southern California, both base and meridian starting from its peak.

The northern and western portions of the county are almost sterile. Yet, along the Mojave River, where it debouches from the mountains to the desert, and for many miles, the land on both sides is fertile, easily worked, and produces abundantly as long as the water supply is available.

Here was dug the first irrigation ditch in the State, and here were raised the first crops by irrigation. It is over a hundred years since the mission fathers of San Gabriel established a sub-mission, just west of Redlands, and employed Indian labor to dig what is known as the zanja. This ancient ditch is still in use and within the same banks that were first thrown up by Indian labor almost a century ago.

Almost every variety of fruit can be produced in some part of this county. On the lower levels, all the deciduous fruits are produced. The production of oranges, lemons, and pomeloes is large, these fruits being grown to perfection. The production of oranges has increased rapidly during the last few years. There has also been a large increase within the last five years, in alfalfa, and deciduous fruits, the latter growing mostly in the Banning and Beaumont districts. The acreage in wine grapes is small, but table grapes are grown in the Coachella Valley.

In the western part of Rialto, Etiwanda, and Cucamonga neighborhoods a considerable quantity of raisins are made.

In the southwest corner of the valley is located the Chino Ranch, on which is one of the largest beet-sugar factories.

The raising of cattle and sheep is carried on along the mountain ranges and in the upper mountain valleys. Several large bands of

sheep are grazed on the ranges. Dairying is carried on in both the upper and lower valleys on a small scale.

Vegetables of nearly all descriptions are raised. The northern and eastern portions are heavily mineralized. The most promising source of potash is in the saline deposits at Searles Lake, where a development plant has been erected, effecting a complete commercial utilization of the vast supply of raw material in sight. The deposits are not only rich in potash but contain, also, borax, common salt, sodium sulphate, and sodium carbonate. The scarcity of water, which renders the life of the prospector precarious, as well as interfering with the working of the mines, and the scarcity and high cost of fuel, all combined, have limited prospecting and retarded mining development, but in spite of these drawbacks the county ranks twelfth in the State in mineral production, the total value being nearly two and a half million dollars.

### SAN BERNARDINO COUNTY SUMMARY.

Number of Farms Classified by Size.	
Under 3 acres.....	76
3 to 9 acres.....	567
10 to 19 acres.....	918
20 to 49 acres.....	703
50 to 99 acres.....	278
100 to 174 acres.....	209
175 to 259 acres.....	70
260 to 499 acres.....	75
500 to 999 acres.....	35
1,000 acres and over.....	18
Total .....	2,949
Total in 1900.....	2,350

Land and Farm Areas.	
Approximate land, acres.....	12,900,480
Land in farms in 1910.....	208,396
Land in farms in 1900.....	219,132
Improved land in farms in 1910.....	136,625
Improved land in farms in 1900.....	96,920
Woodland in farms.....	23,137
Other unimproved land.....	48,634

Value of All Farm Property.	
Total value in 1910.....	\$68,499,103
Total value in 1900.....	24,656,402
Per cent increase 1900-1910.....	177.8
Land in 1910.....	60,681,348
Land in 1900.....	21,000,370
Buildings in 1910.....	5,238,858
Buildings in 1900.....	2,573,120
Implements and machinery in 1910.....	1,077,851
Implements and machinery in 1900.....	395,860
Domestic animals, poultry, and bees in 1910.....	1,501,046
Domestic animals, poultry, and bees in 1900 .....	687,052

Domestic Animals on Farms and Ranges.	
Cattle—	
Dairy cows .....	3,043
Other cows .....	4,389
Yearling heifers .....	1,075
Calves .....	926
Yearling steers and bulls.....	481
Other steers and bulls.....	2,847
Total .....	12,761
Value .....	\$335,713

Horses—	
Mature horses .....	6,339
Yearling colts .....	372
Spring colts .....	167
Total .....	6,878
Value .....	\$899,831
Mules—	
Mature mules .....	757
Yearling colts .....	18
Spring colts .....	3
Total .....	778
Value .....	\$139,476
Asses and burros—	
Number .....	88
Value .....	\$1,789
Swine—	
Mature hogs .....	2,562
Spring pigs .....	1,187
Total .....	3,749
Value .....	\$29,173
Sheep—	
Rams, ewes, and wethers.....	7
Value .....	\$35
Goats—	
Number .....	81
Value .....	\$506
Total value all domestic animals	
\$1,406,523	
Poultry and bees—	
Poultry of all kinds.....	91,098
Value .....	\$65,160
Colonies of bees.....	8,073
Value .....	\$29,363

Principal Crops.		
Description.	Acres.	Bushels.
Corn .....	920	14,839
Oats .....	436	16,598
Wheat .....	100	200
Barley .....	3,260	85,480
Kafir corn and milo maize.....	1,216	15,391
Potatoes .....	444	43,364

## SAN BERNARDINO COUNTY SUMMARY—Continued.

Principal Crops—Continued.			Small fruits—		
Hay and forage—	Acres.	Tons.	Strawberries, acres		34
Timothy alone	10	15	Blackberries and dewberries, acres.		68
Clover alone	18	40	All others, acres		28
Alfalfa	8,263	35,922	Total, acres		130
Other tame and cultivated					
grasses	89	146	Nuts—	Number	bearing trees
Wild, salt, or prairie grasses	55	44	Almonds		634
Grains cut green	33,764	39,414	Walnuts		2,228
All other hay and forage	409	778	Total		2,900
Totals	42,608	76,359			
Poultry products—			Irrigation.		
Poultry raised, number	105,606		Number of farms irrigated in 1909		2,463
Eggs produced, dozen	579,685		Acres irrigated in 1909		70,278
Value poultry and eggs produced	\$228,998		Acres irrigated enterprises were capable of		
Honey and wax—			irrigating in 1910		86,107
Honey produced, pounds	363,025		Acres included in projects		152,415
Wax produced, pounds	5,983		Main ditches, number		291
Value honey and wax produced	\$23,466		Length, miles		466
Special crops—			Laterals, number		237
Potatoes, acres	444		Length, miles		283
Sweet potatoes, acres	55		Flowing wells, number		79
All other vegetables, acres	813		Pumped wells, number		449
Sugar beets, acres	4,121		Cost of irrigation enterprises up to		
Orchard fruits—	Number		July 1, 1910		\$9,416,960
	bearing trees		Average cost per acre irrigation		
Apples	55,150		enterprises were capable of irrigat-		
Apricots	111,125		ing in 1910		109.36
Cherries	3,057		Mineral Production in 1913.		
Peaches and nectarines	197,763		Substance.	Amount.	Value.
Pears	2,302		Barytes, tons	50	\$550
Prunes and plums	8,779		Brick, thousand	350	2,100
Total	379,533		Copper, pounds	497,852	77,167
Tropical fruits—	Number		Gems		550
	bearing trees		Gold		356,524
Figs	1,144		Gypsum, tons	25,000	74,000
Lemons	157,731		Lead, pounds	279,241	12,287
Oranges	1,951,254		Lime, barrels	121,544	113,856
Pomeloes	13,134		Limestone, tons	25,896	35,464
Olives	30,190		Mineral water, gallons	4,500	3,000
Total	2,153,501		Salt, tons	3,049	10,573
Grapevines—			Silver		44,413
Number in bearing	5,987,127		Stone industry		364,312
			Other minerals		1,391,304
			Total		\$2,486,100
			Number of mineral springs		44



## SAN DIEGO COUNTY.

Date of creation, February 18, 1850.

		1890.	1900.	1910.
Land area, 4,221 square miles.	Population-----	34,897	35,090	61,665
County seat, San Diego, city.	Population-----	16,159	17,700	39,578
Population per square mile, 14.6.				
	Highest.	Lowest.	Inches.	Inches.
Elevation, 93 feet.	1914: Temperature---	90	39	Rainfall---10.90
				Snow--- 0

San Diego occupies the extreme southwestern portion of the State, and has an area slightly larger than Massachusetts. The Pacific Ocean washes its shores for upward of 75 miles. The land rises gently from the ocean for a distance of about 50 miles to a chain of peaks forming the backbone of the county, descending again quite rapidly to the Colorado River, the greater part of which is below sea level.

The arable portion of the western slope is divided into a series of irregular terraces or plateaus. The lower, or coast, terrace comprises a number of valleys with the intervening mesa. This large acreage is practically frostless. Next comes a series of higher valleys, Poway Valley, varying in elevation from 400 to 500 feet. The third terrace, the altitude of which ranges from 1,000 to 2,500 feet, comprises the foothill region, with numerous smaller intervening valleys, nooks, and glens. Next comes the mountain region. The elevation of the mountain valleys varies from 2,500 to 4,500 feet. They are chiefly devoted to stock raising.

The arable soil of the county may be classed under two heads: granitic and adobe; though there is often a mixture of both, resembling adobe.

San Diego County is coming to the front in the production of Lima beans, some of the most productive sections yielding from 40 to 45 sacks per acre.

The intermountain region, the hills and valleys between the plains of Imperial and the western slope of the county, is rich in minerals, and affords excellent pasturage for several thousand cattle.

The orange, lemon, pomelo, or grapefruit, do well. Raisin grapes are also produced in one or two districts. Olives are grown on a considerable scale in the county. San Diego City has two olive oil factories. Within the last five years apples have increased considerably, peaches and pears have more than doubled, and there has been a large increase in lemons. A limited acreage has recently been planted in avocado trees.

Peaches, apricots, pears, quinces, plums, cherries, and other deciduous fruits do well.

Escondido is some 35 miles northeast of San Diego, and has a large area of productive land, from which are made shipments of many agricultural products, including raisins.

The mineral wealth of San Diego County, though known to be great, is largely undeveloped.

San Diego is producing the finest tourmaline in the United States. The climate of San Diego is all that could be desired.

## SAN DIEGO COUNTY SUMMARY.

Number of Farms Classified by Size.		Asses and burros—	
Under 3 acres.....	20	Number .....	181
3 to 9 acres.....	236	Value .....	\$11,036
10 to 19 acres.....	345	Swine—	
20 to 49 acres.....	414	Mature hogs .....	4,261
50 to 99 acres.....	269	Spring pigs .....	3,130
100 to 174 acres.....	337	Total .....	7,391
175 to 259 acres.....	146	Value .....	\$59,842
260 to 499 acres.....	246	Sheep—	
500 to 999 acres.....	156	Rams, ewes, and wethers.....	220
1,000 acres and over.....	129	Spring lambs .....	69
Total .....	2,298	Total .....	280
Total in 1900.....	2,698	Value .....	\$1,310
Land and Farm Areas.		Goats—	
Approximate land, acres.....	2,701,440	Number .....	1,147
Land in farms in 1910.....	834,426	Value .....	\$2,789
Land in farms in 1900.....	803,419	Total value all domestic animals	\$2,790,287
Improved land in farms in 1910.....	234,045	Poultry and bees—	
Improved land in farms in 1900.....	229,791	Poultry of all kinds.....	130,158
Woodland in farms.....	71,020	Value .....	\$104,829
Other unimproved land.....	529,361	Colonies of bees.....	30,566
		Value .....	\$105,993
Value of All Farm Property.		Principal Crops.	
Total value in 1910.....	\$31,124,814	Description.....	Acres..... Bushels.....
Total value in 1900.....	18,346,677	Corn .....	4,544 71,874
Per cent increase 1900-1910.....	*	Oats .....	7,690 177,485
Land in 1910.....	23,934,732	Wheat .....	7,268 82,012
Land in 1900.....	14,133,990	Barley .....	17,745 284,677
Building in 1910.....	3,337,382	Kafir corn and milo maize.....	17 282
Buildings in 1900.....	2,170,190	Dry edible beans.....	3,492 45,661
Implements and machinery in 1910.....	533,980	Potatoes .....	374 35,717
Implements and machinery in 1900.....	533,980	Hay and forage—	Acres..... Tons.....
Domestic animals, poultry, and bees in 1910.....	3,001,109	Timothy alone .....	26 58
Domestic animals, poultry, and bees in 1900.....	1,508,517	Clover alone .....	1 5
		Alfalfa .....	2,566 11,739
		Other tame and cultivated grasses .....	6,655 6,225
		Wild, salt, or prairie grasses .....	2,792 2,018
		Grains cut green.....	68,844 60,362
		All other hay and forage.....	1,165 6,152
		Totals .....	82,049 86,559
Domestic Animals on Farms and Ranges.		Poultry products—	
Cattle—		Poultry raised, number.....	174,778
Dairy cows .....	10,633	Eggs produced, dozen.....	921,117
Other cows .....	15,815	Value of poultry and eggs produced	\$357,579
Yearling heifers .....	7,874	Honey and wax—	
Calves .....	8,083	Honey produced, pounds.....	1,559,607
Yearling steers and bulls.....	6,490	Wax produced, pounds.....	18,589
Other steers and bulls.....	9,877	Value of honey and wax produced..	\$89,401
Total .....	58,777	Wool—	
Value .....	\$1,356,802	Wool, fleeces shorn.....	155
Horses—		Mohair and goat hair, fleeces shorn	60
Mature horses .....	9,663	Value wool and mohair produced..	\$195
Yearling colts .....	1,130	Special crops—	
Spring colts .....	705	Potatoes, acres .....	374
Total .....	11,498	Sweet potatoes, acres.....	27
Value .....	\$1,282,938	All other vegetables, acres.....	1,131
Mules—		Sugar beets, acres.....	21
Mature mules .....	683		
Yearling colts .....	60		
Spring colts .....	23		
Total .....	766		
Value .....	\$95,570		

\*About half of the eastern part of the county, comprising 4,089 square miles, was organized into Imperial County in 1907.

## Principal Crops—Continued.

Irrigation.		
Number of farms irrigated in 1909.....		590
Acres irrigated in 1909.....		24,944
Acreege enterprises were capable of irrigating in 1910.....		31,205
Acreege included in projects.....		45,585
Main ditches, number.....		288
Length, miles.....		259
Lacerals, number.....		244
Length, miles.....		140
Pumped wells, number.....		438
Cost of irrigation enterprises up to July 1, 1910.....		\$3,753,127
Average cost per acre irrigation enterprises were capable of irrigat- ing in 1910.....		120.27

Mineral Production in 1913.		
Substance.	Amount.	Value.
Brick, thousand .....	9,384	\$68,400
Clay, tons .....	838	2,840
Gems .....		7,465
Mineral water, gallons.....	41,500	15,225
Salt, tons .....	20,500	51,750
Stone industry .....		170,014
Total .....		\$315,694
Number of mineral springs.....		19

### Irrigation.

Number of farms irrigated in 1909.....	890
Acres irrigated in 1909.....	24,944
Acreege enterprises were capable of irrigating in 1910.....	31,205
Acreege included in projects.....	45,535
Main ditches, number.....	288
Length, miles.....	259
Lacerals, number.....	244
Length, miles.....	140
Pumped wells, number.....	438
Cost of irrigation enterprises up to July 1, 1910.....	\$3,753,127
Average cost per acre irrigation enterprises were capable of irrigat- ing in 1910.....	120.27

## Mineral Production in 1913.

Substance.	Amount.	Value.
Brick, thousand -----	9,384	\$68,400
Clay, tons -----	838	2,840
Gems -----		7,465
Mineral water, gallons -----	41,500	15,225
Salt, tons -----	20,500	51,750
Stone industry -----		170,014
Total -----		\$315,694
Number of mineral springs -----		19

## SAN FRANCISCO COUNTY.

Date of creation, February 18, 1850.

	1890.	1900.	1910.
Land area, 43 square miles.	Population.....	298,997	342,782
County seat, San Francisco.			416,912
Population per square mile, 9,695.6.			

	Highest.	Lowest.	Inches.	Inches.
Elevation, 207 feet.	1914: Temperature...	92	41	Rainfall...24.04
				Snow... 0

San Francisco is essentially a commercial and manufacturing city. It produces no agricultural products, except to a small extent the minor vegetables. Its location on the bay of San Francisco, one of the finest and safest harbors in the world, eminently fits it for a commercial city, and its importance in this respect insures it a place among the chief shipping centers of the world.

Within the past two years the city has expended large sums for public improvements, which include municipal buildings, streets, sewers, high-pressure water system for fire protection, hospitals, etc.

The value of all property has increased enormously in recent years in spite of a temporary setback owing to the terrible double disaster of earthquake and fire in 1906, as the following summary of assessed values will prove:

1850 .....	\$21,621,184	1900 .....	\$410,425,849
1860 .....	35,967,490	1911 .....	545,398,908
1870 .....	116,375,988	1912 .....	2,919,342,889
1880 .....	253,520,326	1913 .....	3,114,136,640
1890 .....	301,438,040	1914 .....	3,232,646,152

The total county indebtedness in 1911 only amounted to \$18,417,900. Space will not allow of even a brief summary of the vast resources and possibilities of this great, rising, and progressive city, but much up-to-date information of value will be found in numerous publications, especially in the annual reports of the San Francisco Chamber of Commerce.

## SAN FRANCISCO COUNTY SUMMARY.

Number of Farms Classified by Size.		Value of All Farm Property.	
Under 3 acres.....	69	Total value in 1910.....	\$2,630,428
3 to 9 acres.....	50	Total value in 1900.....	2,407,893
10 to 19 acres.....	11	Per cent increase 1900-1910.....	9.2
20 to 49 acres.....	15	Land in 1910.....	2,097,111
50 to 99 acres.....	7	Land in 1900.....	1,855,030
100 to 174 acres.....	4	Buildings in 1910.....	326,789
175 to 259 acres.....	1	Buildings in 1900.....	228,100
Total .....	157	Implements and machinery in 1910.....	68,270
Total in 1900.....	304	Implements and machinery in 1900.....	71,200
		Domestic animals, poultry, and bees	
		in 1910.....	138,258
		Domestic animals, poultry, and bees	
		in 1900.....	253,563
		Domestic Animals on Farms and Ranges.	
		Cattle—	
		Dairy cows .....	1,645
		Other cows .....	10
		Yearling heifers .....	581
		Calves .....	174
		Yearling steers and bulls.....	75
		Other steers and bulls.....	25
		Total .....	2,510
		Value .....	\$77,015

## Land and Farm Areas.

Approximate land, acres.....	27,520
Land in farms in 1910.....	2,091
Land in farms in 1900.....	8,219
Improved land in farms in 1910.....	1,562
Improved land in farms in 1900.....	3,829
Woodland in farms.....	289
Other unimproved land.....	240



## SAN FRANCISCO COUNTY SUMMARY—Continued.

Domestic Animals on Farms and Ranges—Continued.				Poultry products—	
Horses—				Poultry raised, number.....	196,020
Mature horses .....	318			Eggs produced, dozen.....	110,057
Spring colts .....	1			Value poultry and eggs produced..	\$126,595
Total .....	319			Wool—	
Value .....	\$32,480			Wool, fleeces shorn.....	3
Swine—				Value wool and mohair produced	\$4
Mature hogs .....	181			Special crops—	
Spring pigs .....	100			Potatoes, acres .....	87
Total .....	281			Sweet potatoes, acres.....	2
Value .....	\$1,655			All other vegetables, acres.....	466
Sheep—				Orchard fruits—	
Rams, ewes, and wethers.....	3			Apples .....	40
Value .....	\$20			Peaches and nectarines.....	120
Goats—				Prunes and plums.....	945
Number .....	9			Total .....	1,105
Value .....	\$60			Olives—	
Total value all domestic animals	\$111,230			Number in bearing.....	1
Poultry and bees—				Grapevines—	
Poultry of all kinds.....	42,649			Number in bearing.....	3,000
Value .....	\$26,889			Irrigation.	
Colonies of bees.....	6			Number of farms irrigated in 1909...	25
Value .....	\$14			Acres irrigated in 1909.....	383
Principal Crops.				Acres irrigated in 1910.....	383
Description .....	Acres.	Bushels.		Acreage enterprises were capable of	
Potatoes .....	87	7,366		irrigating in 1910.....	383
Hay and forage—				Acres included in projects.....	383
Alfalfa .....	1	10		Main ditches, number.....	24
Other tame and cultivated				Length, miles .....	7
grasses .....	60	60		Pumped wells, number.....	39
Grains cut green.....	42	80		Cost of irrigation enterprises up to	
Totals .....	103	150		July 1, 1910.....	\$21,975
				Average cost per acre irrigation	
				enterprises were capable of irrigat-	
				ing in 1910.....	57.38
				Mineral Production in 1913.	
				Substance.	Value.
				Stone industry .....	\$110,551

## SAN JOAQUIN COUNTY.

Date of creation, February 18, 1850.

Land area, 1,448 square miles.	Population.....	1890. 28,629	1900. 35,452	1910. 50,731
County seat, Stockton, city.	Population.....	14,424	17,506	23,253
Population per square mile, 35.0.				

Elevation, 24 feet.	Highest. 102	Lowest. 30	Inches. 16.25	Inches. Snow--- 0
1914: Temperature.....				
Rainfall.....				

San Joaquin County lies directly east of San Francisco and San Pablo bays and spans the great interior valley of California from the foothills of the Coast Range to the foothills of the Sierra Nevada Mountains. It thus commands the entrance to the chief port and metropolis of the coast from the continent, and for both water and land traffic; hence it is termed the "Gateway County." It embraces most of the famous San Joaquin delta within its limits. The soil varies in character, but the surface is mostly level and well adapted to intensive agriculture. The climate of this area is tempered by sea influences, by the air which rushes through the gap in the Coast Range. The products are wonderfully diversified, and from its rank, ten years ago, as the leading grain county of the State, it has progressed to a system of mixed agriculture, and is now distinguished as a producer of hay, barley, potatoes, grapes, garden vegetables, orchard fruits, vegetables, dairy products, and poultry.

The county is famous for its good roads, on which large sums have been spent.

## SAN JOAQUIN COUNTY SUMMARY.

Number of Farms Classified by Size.		Domestic Animals on Farms and Ranges.	
Under 3 acres.....	9	Cattle—	
3 to 9 acres.....	204	Dairy cows .....	11,904
10 to 19 acres.....	531	Other cows .....	6,861
20 to 49 acres.....	797	Yearling heifers .....	3,636
50 to 99 acres.....	397	Calves .....	4,960
100 to 174 acres.....	395	Yearling steers and bulls.....	1,937
175 to 250 acres.....	217	Other steers and bulls.....	1,998
260 to 499 acres.....	371	Total .....	31,216
500 to 999 acres.....	221	Value .....	\$874,834
1,000 acres and over.....	144		
Total .....	3,286	Horses*—	
Total in 1900.....	1,966	Mature horses .....	18,256
Land and Farm Areas.		Yearling colts .....	1,597
Approximate land, acres.....	926,720	Spring colts .....	1,089
Land in farms in 1910.....	763,048	Total .....	20,972
Land in farms in 1900.....	751,065	Value .....	*\$2,247,676
Improved land in farms in 1910.....	611,762		
Improved land in farms in 1900.....	652,923	Mules—	
Woodland in farms.....	35,387	Mature mules .....	3,169
Other unimproved land.....	115,899	Yearling colts .....	217
Value of All Farm Property.		Spring colts .....	144
Total value in 1910.....	\$67,296,628	Total .....	3,530
Total value in 1900.....	31,218,424	Value .....	\$482,560
Per cent increase 1900-1910.....	115.5	Asses and burros—	
Land in 1910.....	55,909,884	Number .....	62
Land in 1900.....	25,769,590	Value .....	\$16,760
Buildings in 1910.....	5,675,665		
Buildings in 1900.....	2,297,130	Swine—	
Implements and machinery in 1910.....	1,741,053	Mature hogs .....	13,473
Implements and machinery in 1900.....	907,410	Spring pigs .....	9,981
Domestic animals, poultry, and bees in 1910.....	3,960,026	Total .....	23,454
Domestic animals, poultry, and bees in 1900.....	2,244,294	Value .....	\$143,626

\*Includes animals, age or sex not specified.

## SAN JOAQUIN COUNTY SUMMARY—Continued.

Domestic Animals on Farms and Ranges—Continued.	
Sheep—	
Rams, ewes, and wethers.....	14,807
Spring lambs .....	10,012
Total .....	24,819
Value .....	\$83,771

Goats—	
Number .....	260
Value .....	\$728

Total value all domestic animals \$3,850,155

Poultry and bees—	
Poultry of all kinds.....	175,456
Value .....	\$101,710
Colonies of bees.....	3,014
Value .....	\$8,161

## Principal Crops.

Description.	Acres.	Bushels.
Corn .....	2,547	57,028
Oats .....	23,208	396,661
Wheat .....	24,786	310,587
Barley .....	125,114	3,827,187
Kafir corn and milo maize....	2,968	32,786
Dry edible beans.....	13,954	352,157
Potatoes .....	21,313	4,279,395

Hay and forage—	Acres.	Tons.
Timothy and clover mixed..	190	320
Clover alone .....	70	352
Alfalfa .....	8,805	36,859
Other tame and cultivated grasses .....	3,633	3,975
Wild, salt, or prairie grasses	10,248	12,286
Grain cut green.....	80,851	119,032
All other hay and forage..	1,119	1,624
Total .....	104,916	174,448

Poultry products—	
Poultry raised, number.....	212,434
Eggs produced, dozens .....	955,501
Value poultry and eggs produced..	\$337,417
Honey and wax—	
Honey produced, pounds .....	104,645
Wax produced, pounds .....	3,459
Value of honey and wax produced..	\$6,565

Wool—	
Wool, fleeces shorn .....	20,477
Mohair and goat hair, fleeces shorn	37
Value of wool and mohair produced	\$14,114

Special crops—	
Potatoes, acres .....	21,313
Sweet potatoes, acres.....	19
All other vegetables, acres.....	6,728
Sugar beets, acres.....	132

Orchard fruits—	Number bearing trees
Apples .....	5,053
Apricots .....	53,007
Cherries .....	21,590
Peaches and nectarines.....	185,073
Pears .....	13,664
Prunes and plums .....	83,641
Total .....	361,290

Tropical fruits—	Number bearing trees
Figs .....	4,037
Lemons .....	75
Oranges .....	1,950
Pomeloes .....	2
Olives .....	19,908
Total .....	26,070

Grapevines—	
Number in bearing.....	13,371,794

Small fruits—	
Strawberries, acres .....	33
Blackberries and dewberries, acres	31
All others, acres .....	28
Total .....	92

Nuts—	Number bearing trees
Almonds .....	97,024
Pecans .....	6
Walnuts .....	2,455
Total .....	99,499

## Irrigation.

Number of farms irrigated in 1909...	1,452
Acres irrigated in 1909.....	59,511
Acreage enterprises were capable of irrigating in 1910.....	77,083
Acreage included in projects.....	173,563
Main ditches, number.....	298
Length, miles .....	308
Laterals, number .....	49
Length, miles .....	192
Pumped wells, number.....	1,618
Cost of irrigation enterprises up to July 1, 1910.....	\$1,689,720
Average cost per acre irrigation en- terprises were capable of irrigating in 1910 .....	21.92

## Mineral Production in 1913.

Substance.	Amount.	Value.
Brick, thousand .....	6,314	\$73,768
Clay,* tons .....	1,494	18,522
Natural gas, thousand.....	142,730	67,937
Sand-glass, tons .....	3,000	4,000
Stone industry .....		900
Total .....		\$165,157
*High-grade fire clay.		

## SAN LUIS OBISPO COUNTY.

Date of creation, February 18, 1850.

Land area, 3,334 square miles.	Population-----	1890.	1900.	1910.
County seat, San Luis Obispo, city.	Population-----	16,072	16,637	19,383
Population per square mile, 5.8.	Population-----	2,995	3,021	5,157

Elevation, 201 feet.	Highest.	Lowest.	Inches.	Inches.
1914: Temperature---	98	32	Rainfall--26.74	Snow--- 0

This large and fertile county lies on the coast side of the State, about midway between San Francisco and Los Angeles. It is an old county, organized in the days of gold, and received its name nearly a hundred years before the Americans came into the country. It was a great region in the days of the Spanish occupation, and is a great region still in its advantages of soil and climate, of diversified surface and abundant natural resources.

Much grain is still grown. In the eastern portion of the county wheat is still a large product, with an increasing acreage sown to barley.

Fruit is grown successfully in almost all portions of the county, and there are wide areas where fruit of many kinds is a prolific crop. The coast section is especially adapted, nearly every variety doing well.

Paso Robles is the leading town east of the Santa Lucia Mountains, and the second in size in the county, and is pleasantly situated on the Salinas River in a land of oaks and rolling hills. Its chief features are the hot springs. The great hot springs flow approximately 2,000,000 gallons per day, and there are several other springs of varying chemical constituents and adapted to wide medicinal uses.

The producing oil wells of San Luis Obispo County demonstrate the fact that the Monterey shale, found over the greater portion of the coast side of the county, is an extension of those of the great Santa Maria oil fields immediately adjoining the county on the south. Port San Luis, which is the terminus of three pipe lines from the Santa Maria fields, is one of the largest oil ports. The well-known Coalinga, Kern River, Midway, Sunset, and McKittrick fields are also connected by pipe line with this port.

## SAN LUIS OBISPO COUNTY SUMMARY.

Number of Farms Classified by Size.		Value of All Farm Property.	
Under 3 acres-----	7	Total value in 1910-----	\$32,426,353
3 to 9 acres-----	65	Total value in 1900-----	14,635,757
10 to 19 acres-----	80	Per cent increase 1900-1910-----	121.6
20 to 49 acres-----	179	Land in 1910-----	24,745,375
50 to 99 acres-----	187	Land in 1900-----	11,133,180
100 to 174 acres-----	267	Buildings in 1910-----	2,136,447
175 to 259 acres-----	123	Buildings in 1900-----	1,272,820
260 to 499 acres-----	304	Implements and machinery in 1910-----	742,498
500 to 999 acres-----	288	Implements and machinery in 1900-----	479,840
1,000 acres and over-----	214	Domestic animals, poultry, and bees	
		in 1910-----	4,802,033
Total-----	1,714	Domestic animals, poultry, and bees	
Total in 1900-----	1,813	in 1900-----	1,749,917
Land and Farm Areas.		Domestic Animals on Farms and Ranges.	
Approximate land, acres-----	2,133,760	Cattle*—	
Land in farms in 1910-----	1,588,660	Dairy cows-----	24,193
Land in farms in 1900-----	1,034,480	Other cows-----	22,903
Improved land in farms in 1910-----	326,928	Yearling heifers-----	10,345
Improved land in farms in 1900-----	412,356	Calves-----	15,635
Woodland in farms-----	174,891	Yearling steers and bulls-----	8,948
Other unimproved land-----	1,086,841	Other steers and bulls-----	33,180
		Total-----	118,704
		Value-----	*\$2,789,415

\*Includes animals, age or sex not specified.



## SAN LUIS OBISPO COUNTY SUMMARY—Continued.

Domestic Animals on Farms and Ranges—Continued.							
<b>Horses—</b>				<b>Wool—</b>			
Mature horses .....	12,601			Wool, fleeces shorn .....	64,719		
Yearling colts .....	1,686			Mohair and goat hair, fleeces shorn .....	4,758		
Spring colts .....	987			Value of wool and mohair produced .....	\$52,868		
Total .....	15,274			<b>Special crops—</b>			
Value .....	\$1,451,086			Potatoes, acres .....	955		
<b>Mules—</b>				Sweet potatoes, acres .....	3		
Mature mules .....	754			All other vegetables, acres .....	950		
Yearling colts .....	83			Sugar beets, acres .....	284		
Spring colts .....	40			<b>Orchard fruits—</b>			
Total .....	877			Apples .....	Number bearing trees 35,006		
Value .....	\$108,795			Apricots .....	20,123		
<b>Asses and burros—</b>				Cherries .....	702		
Number .....	19			Peaches and nectarines .....	10,614		
Value .....	\$2,095			Pears .....	5,097		
<b>Swine—</b>				Prunes and plums .....	21,383		
Mature hogs .....	11,750			Total .....	93,217		
Spring pigs .....	6,118			<b>Tropical fruits—</b>			
Total .....	17,868			Figs .....	Number bearing trees 819		
Value .....	\$110,380			Lemons .....	955		
<b>Sheep—</b>				Oranges .....	794		
Rams, ewes, and wethers .....	54,717			Pomeloes .....	75		
Spring lambs .....	32,236			Olives .....	1,597		
Total .....	86,953			Total .....	4,253		
Value .....	\$256,156			<b>Grapevines—</b>			
<b>Goats—</b>				Number in bearing .....	265,481		
Number .....	7,390			<b>Small fruits—</b>			
Value .....	\$14,733			Strawberries, acres .....	45		
Total value all domestic animals .....	\$4,733,160			Blackberries and dewberries, acres .....	30		
<b>Poultry and bees—</b>				All others, acres .....	62		
Poultry of all kinds .....	119,822			Total .....	137		
Value .....	\$53,605			<b>Nuts—</b>			
Colonies of bees .....	3,936			Almonds .....	Number bearing trees 9,281		
Value .....	\$15,268			Pecans .....	1		
<b>Principal Crops.</b>				Walnuts .....	7,871		
Description.	Acres.	Bushels.		Total .....	17,264		
Corn .....	1,509	24,015		<b>Irrigation.</b>			
Oats .....	1,139	35,884		Number of farms irrigated in 1909 .....	91		
Wheat .....	33,608	428,636		Acres irrigated in 1909 .....	1,687		
Barley .....	26,370	667,718		Acreage enterprises were capable of irrigating in 1910 .....	2,416		
Kafir corn and milo maize .....	1	24		Acreage included in projects .....	2,539		
Dry edible beans .....	11,169	207,674		Main ditches, number .....	51		
Potatoes .....	955	105,277		Length, miles .....	42		
<b>Hay and forage—</b>				Laterals, number .....	5		
Alfalfa .....	Acres. 989	Tons. 2,658		Length, miles .....	3		
Other tame and cultivated grasses .....	1,888	2,103		Flowing wells, number .....	4		
Wild, salt, or prairie grasses .....	830	1,038		Pumped wells, number .....	12		
Grains cut green .....	50,954	62,650		Cost of irrigation enterprises up to July 1, 1910 .....	\$32,311		
All other hay and forage .....	339	1,776		Average cost per acre irrigation enterprises were capable of irrigating in 1910 .....	13.37		
Total .....	55,000	70,225		<b>Mineral Production In 1913.</b>			
<b>Poultry products—</b>				Substance.	Amount.	Value.	
Poultry raised, number .....	109,871			Bituminous rock, tons .....	609	\$1,149	
Eggs produced, dozens .....	840,405			Brick, thousand .....	1,500	15,000	
Value of poultry and eggs produced .....	\$243,244			Gold .....		124	
<b>Honey and wax—</b>				Mineral water, gallons .....	1,500	600	
Honey produced, pounds .....	177,342			Quicksilver, flasks .....	1,160	46,667	
Wax produced, pounds .....	1,983			Silver .....		1	
Value of honey and wax produced .....	\$11,374			Stone industry .....		134	
				Total .....		\$63,675	
				Number of mineral springs .....		12	

## SAN MATEO COUNTY.

Date of creation, April 19, 1856.

Land area, 447 square miles.	Population.....	1890. 10,087	1900. 12,094	1910. 26,585
County seat, Redwood, city.	Population.....	1,572	1,653	2,442
Population per square mile, 59.5.				

Elevation, -- feet.	1914: Temperature.....	Highest. Lowest.	Rainfall.....	Inches. Inches.	Snow.....	Inches.
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San Mateo County is that part of the San Francisco peninsula lying between San Francisco County on the north and Santa Clara and Santa Cruz counties on the south. This county is divided lengthwise by the Santa Morena ridge of mountains, forming the backbone of the peninsula. The mountain ridge is the fertile and picturesque watershed of a region peculiarly adapted for homes of beauty and comfort on its eastern slope. Along the bay shore are many miles of deep water, and spur tracks to this deep water are now under construction, thereby opening up vast possibilities to manufacturers who desire cheap sites with excellent shipping facilities.

On the west the descent to the Pacific is quick and abrupt into a region occupied by farmers, dairymen, stock raisers, and lumbermen. The whole ridge is anywhere accessible, and all more or less covered with oak and redwood.

Climatic and scenic surroundings, shipping facilities, proximity to the metropolis of the Pacific Coast, are all favorable conditions working toward the prosperity of this county.

## SAN MATEO COUNTY SUMMARY.

Number of Farms Classified by Size.		Domestic Animals on Farms and Ranges.	
Under 3 acres.....	46	Cattle—	
3 to 9 acres.....	81	Dairy cows .....	8,119
10 to 19 acres.....	55	Other cows .....	2,305
20 to 49 acres.....	112	Yearling heifers .....	1,848
50 to 99 acres.....	61	Calves .....	2,375
100 to 174 acres.....	90	Yearling steers and bulls.....	369
175 to 259 acres.....	52	Other steers and bulls.....	272
260 to 499 acres.....	67		
500 to 999 acres.....	60	Total .....	15,288
1,000 acres and over.....	41	Value .....	\$463,646
Total .....	665	Horses—	
Total in 1900.....	551	Mature horses .....	3,940
Land and Farm Areas.		Yearling colts .....	253
Approximate land, acres.....	286,080	Spring colts .....	102
Land in farms in 1910.....	160,655		
Land in farms in 1900.....	149,944	Total .....	4,295
Improved land in farms in 1910.....	100,800	Value .....	\$425,976
Improved land in farms in 1900.....	72,429	Mules—	
Woodland in farms.....	27,334	Mature mules .....	10
Other unimproved land.....	32,521	Yearling colts .....	2
Value of All Farm Property.			
Total value in 1910.....	\$20,870,585	Total .....	12
Total value in 1900.....	10,354,856	Value .....	\$915
Per cent increase 1900-1910.....	101.6	Asses and burros—	
Land in 1910.....	17,448,280	Number .....	2
Land in 1900.....	8,201,140	Value .....	\$50
Buildings in 1910.....	2,009,705	Swine—	
Buildings in 1900.....	1,333,390	Mature hogs .....	8,692
Implements and machinery in 1910.....	398,327	Spring pigs .....	3,990
Implements and machinery in 1900.....	173,600		
Domestic animals, poultry, and bees in 1910 .....	1,017,273	Total .....	12,682
Domestic animals, poultry, and bees in 1900 .....	646,726	Value .....	\$93,912

## SAN MATEO COUNTY SUMMARY—Continued.

Domestic Animals on Farms and Ranges—Continued.	
Sheep—	
Rams, ewes, and wethers.....	767
Spring lambs .....	562
Total .....	1,329
Value .....	\$5,140

Goats—	
Number .....	154
Value .....	\$569

Total value all domestic animals \$990,208

Poultry and bees—	
Poultry of all kinds.....	47,625
Value .....	\$26,112
Colonies of bees.....	289
Value .....	\$953

## Principal Crops.

Description.	Acres.	Bushels.
Corn .....	11	164
Oats .....	16,125	162,566
Wheat .....	68	1,473
Barley .....	917	26,001
Dry edible beans.....	466	14,435
Potatoes .....	971	109,879

Hay and forage—	Acres.	Tons.
Timothy and clover mixed..	6	6
Clover alone .....	18	36
Alfalfa .....	11	52
Other tame and cultivated grasses .....	2,472	3,638
Wild, salt, or prairie grasses	82	57
Grains cut green.....	16,466	25,181
All other hay and forage...	5	12

Total .....

Poultry products—	
Poultry raised, number.....	43,946
Eggs produced, dozen.....	236,642
Value of poultry and eggs produced	\$82,139

Honey and wax—	
Honey produced, pounds.....	5,458
Wax produced, pounds.....	193
Value of honey and wax produced	\$810

Wool—	
Wool, fleeces shorn.....	1,013
Mohair and goat hair, fleeces shorn	26
Value wool and mohair produced..	\$1,162

Special crops—	
Potatoes, acres .....	971
All other vegetables, acres.....	3,210

Orchard fruits—	Number bearing trees
Apples .....	18,634
Apricots .....	3,694
Cherries .....	671
Peaches and nectarines.....	572
Pears .....	1,688
Prunes and plums.....	18,279

Total .....

Tropical fruits—	Number bearing trees.
Figs .....	36
Lemons .....	1
Oranges .....	25
Olives .....	7,187

Total .....

Grapevines—	
Number in bearing.....	124,990

Small fruits—	
Strawberries, acres .....	56
Blackberries and dewberries, acres..	10
All others .....	3

Total .....

Nuts—	Number bearing trees
Almonds .....	94
Walnuts .....	223

Total .....

## Irrigation.

Number of farms irrigated in 1909..	75
Acres irrigated in 1909.....	3,648
Acres enterprises were capable of irrigating in 1910.....	3,653
Acres included in projects.....	3,983
Main ditches, number.....	57
Length, miles .....	58
Pumped wells, number.....	40
Cost of irrigation enterprises up to July 1, 1910.....	\$90,921
Average cost per acre irrigation enterprises were capable of irrigat- ing in 1910.....	\$24.89

## Mineral Production in 1913.

Substance.	Amount.	Value.
Brick, thousand .....	1,418	\$44,680
Clay, tons .....	2,000	1,000
Gems .....		300
Limestone, tons .....	138,544	78,506
Salt, tons .....	28,000	72,250
Stone industry .....		18,635

Total .....

## SANTA BARBARA COUNTY.

Date of creation, February 18, 1850.

Land area, 2,740 square miles.	Population-----	1890.	1900.	1910.
County seat, Santa Barbara, city.	Population-----	15,754	18,934	27,738
Population per square mile, 10.1.		5,864	6,587	11,659

	Highest.	Lowest.	Inches.	Inches.
Elevation, 130 feet.	98	35	Rainfall--29.64	Snow--- 0

Santa Barbara County is situated in the parallelogram formed by the trend in the California coast line made by Point Concepcion, the great continental headland. Its coast line is thus of considerable extent, being, in fact, about 100 miles in length. A chain of mountains, the Santa Ynez range, divides the county into two grand divisions. The southern division is the most populous. The surrounding country is agricultural, being devoted to the culture of walnuts, olives, lemons, and beans in large quantities.

The northern part contains four large valleys. Lompoc Valley is a very prosperous and fertile agricultural section. Much of the mustard seed used in the United States is grown in this district. Sweet pea seed is also grown here. Santa Ynez Valley is largely devoted to the raising of grain, as is the Los Alamos Valley. The Santa Maria Valley is the largest in southern California. Here is located the Union Sugar Company's factory at Betteravia. The hills on the southern side of this valley are the center of the large Santa Maria oil fields.

Santa Barbara has the best harbor in the county. There are large areas yet uncultivated and the county is ripe for immigration. Around Santa Maria the principal crops are sugar beets and beans of the pink and small white varieties. A large number of lemons are produced in the county, and it is also one of the principal walnut producing counties in the State, the annual shipments amounting to about 1,250 tons, which usually are of a very fine quality.



## SANTA BARBARA COUNTY SUMMARY.

Number of Farms Classified by Size.		Swine—	
Under 3 acres.....	17	Mature hogs .....	15,113
3 to 9 acres.....	130	Spring pigs .....	6,960
10 to 19 acres.....	140		
20 to 49 acres.....	212	Total .....	22,073
50 to 99 acres.....	164	Value .....	\$162,635
100 to 174 acres.....	185		
175 to 259 acres.....	105	Sheep—	
260 to 499 acres.....	138	Rams, ewes, and wethers.....	60,205
500 to 999 acres.....	93	Spring lambs .....	20,328
1,000 acres and over.....	171		
		Total .....	80,533
Total .....	1,355	Value .....	\$275,259
Total in 1900.....	1,149		
Land and Farm Areas.		Goats—	
Approximate land, acres.....	1,753,600	Number .....	558
Land in farms in 1910.....	1,120,475	Value .....	\$1,698
Land in farms in 1900.....	922,611		
Improved land in farms in 1910.....	215,552	Total value all domestic animals	\$4,119,104
Improved land in farms in 1900.....	202,982	Poultry and bees—	
Woodland in farms.....	276,071	Poultry of all kinds.....	89,995
Other unimproved land.....	628,852	Value .....	\$46,815
		Colonies of bees.....	4,072
		Value .....	\$12,621
Value of All Farm Property.		Principal Crops.	
Total value in 1910.....	\$43,544,076	Description.	Acres.
Total value in 1900.....	18,271,863	Corn .....	1,240
Per cent increase 1900-1910.....	138.3	Oats .....	9,494
Land in 1910.....	35,556,593	Wheat .....	2,300
Land in 1900.....	14,840,440	Barley .....	26,204
Buildings in 1910.....	3,004,679	Dry edible beans.....	22,355
Buildings in 1900.....	1,375,290	Potatoes .....	1,524
Implements and machinery in 1910.....	804,264	Hay and forage—	Acres.
Implements and machinery in 1900.....	365,770	Timothy and clover mixed..	100
Domestic animals, poultry, and bees		Clover alone .....	25
in 1910.....	4,178,540	Alfalfa .....	635
Domestic animals, poultry, and bees		Other tame and cultivated	
in 1900.....	1,681,363	grasses .....	223
		Wild, salt, or prairie grasses	479
		Grains cut green.....	47,602
		All other hay and forage..	1,006
Domestic Animals on Farms and Ranges.			
Cattle*—		Total .....	50,070
Dairy cows .....	11,690		70,146
Other cows .....	23,752	Poultry products—	
Yearling heifers .....	6,891	Poultry raised, number.....	91,159
Calves .....	11,524	Eggs produced, dozen.....	407,168
Yearling steers and bulls.....	8,666	Value poultry and eggs produced..	\$151,719
Other steers and bulls.....	24,578	Honey and wax—	
		Honey produced, pounds.....	288,875
Total .....	87,576	Wax produced, pounds.....	4,060
Value .....	*\$2,223,007	Value of honey and wax produced	\$16,678
Horses—		Wool—	
Mature horses .....	10,621	Wool, fleeces shorn.....	27,787
Yearling colts .....	1,442	Mohair and goat hair, fleeces shorn	68
Spring colts .....	971	Value wool and mohair produced	\$26,308
		Special crops—	
Total .....	13,034	Potatoes, acres .....	1,524
Value .....	\$1,398,385	Sweet potatoes, acres.....	28
Mules—		All other vegetables, acres.....	1,588
Mature mules .....	362	Sugar beets, acres.....	11,820
Yearling colts .....	56	Orchard fruits—	Number
Spring colts .....	25	Apples .....	bearing trees
		Apricots .....	2,744
Total .....	443	Cherries .....	15,512
Value .....	\$53,740	Peaches and nectarines.....	659
Asses and burros—		Pears .....	9,569
Number .....	24	Prunes and plums.....	2,612
Value .....	\$4,380	Total .....	34,200

\*Includes animals, age or sex not specified.

## SANTA BARBARA COUNTY SUMMARY—Continued.

Principal Crops—Continued.		Irrigation.	
Tropical fruits—	Number bearing trees	Number of farms irrigated in 1909..	137
Figs .....	858	Aeres irrigated in 1909.....	12,012
Lemons .....	4,246	Acreage enterprises were capable of irrigating in 1910.....	13,572
Oranges .....	46,181	Acreage included in projects.....	13,633
Pomeatoes .....	716	Main ditches, number.....	76
Olives .....	44,258	Length, miles .....	75
Total .....	99,023	Laterals, number .....	4
Grapevines—		Length, miles .....	5
Number in bearing.....	208,595	Flowing wells, number.....	7
Small fruits—		Pumped wells, number.....	113
Strawberries, acres .....	24	Cost of irrigation enterprises up to July 1, 1910.....	\$370,186
Blackberries and dewberries, acres	32	Average cost per acre irrigation enterprises were capable of irrigat- ing in 1910.....	27.28
All others, acres .....	7		
Total, acres .....	63		
Nuts—	Number bearing trees	Mineral Production in 1913.	
Almonds .....	239	Substance.	Amount.
Pecans .....	70	Value.	
Walnuts .....	96,776	Bituminous rock, tons....	10,000
Total .....	97,091	Brick, thousand .....	3,000
		Infusorial earth, tons....	6,895
		Lime, barrels .....	26,512
		Limestone, tons .....	5,884
		Mineral water, gallons....	112,500
		Natural gas, thousand....	5,096,300
		Petroleum, barrels .....	6,291,076
		Sandstone, cubic feet....	4,500
		Stone industry .....	11,450
		Total .....	\$3,636,288
		Number of mineral springs.....	7

## SANTA CLARA COUNTY.

Date of creation, February 18, 1850.

Land area, 1,328 square miles.	Population-----	1890. 48,005	1900. 60,216	1910. 83,539
County seat, San Jose, city.	Population-----	18,060	21,500	28,946
Population per square mile, 62.9.				

Elevation, 95 feet.	1914: Temperature	Highest. 95	Lowest. 29	Rainfall-----	Inches. 17.75	Snow-----	Inches. 0
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Santa Clara County is situated to the south of San Francisco Bay, and is separated from the Pacific Ocean by San Mateo and Santa Cruz counties. The county seat is San Jose, and is distant 50 miles from San Francisco. The county is 47 miles wide from north to south, and through the center runs the favored Santa Clara Valley, with an average width of 15 miles, which is one of the most fertile valleys in the State. The county from the valley slopes upward through rolling hills to the summit of the Santa Cruz Mountains on the west. The county is famous for its large fruit production, especially of prunes.

The roads are excellent, and make all points easily accessible. More than 300 miles of these roads are sprinkled during the summer months.

Educational interests are represented by the Leland Stanford Junior University, University of Santa Clara, the State Normal School, The University of the Pacific, and the College of Notre Dame.

The valley is drained by a number of streams. In summer their watercourses greatly diminish and smaller ones wholly disappear; having their sources in the surrounding hills and sinking as they approach the valley, they augment the subterranean supply of the artesian wells.

## SANTA CLARA COUNTY SUMMARY.

Number of Farms Classified by Size.		Value of All Farm Property.	
Under 3 acres-----	68	Total value in 1910-----	\$67,187,549
3 to 9 acres-----	773	Total value in 1900-----	50,724,703
10 to 19 acres-----	1,186	Per cent increase 1900-1910-----	32.5
20 to 49 acres-----	1,317	Land in 1910-----	52,882,603
50 to 99 acres-----	532	Land in 1900-----	42,270,340
100 to 174 acres-----	376	Buildings in 1910-----	9,125,640
175 to 259 acres-----	141	Buildings in 1900-----	5,332,710
260 to 499 acres-----	147	Implements and machinery in 1910--	1,942,336
500 to 999 acres-----	75	Implements and machinery in 1900--	1,287,560
1,000 acres and over-----	86	Domestic animals, poultry and bees in 1910-----	3,236,937
Total-----	4,731	Domestic animals, poultry and bees in 1900-----	1,834,093
Total in 1900-----	3,995		
<b>Land and Farm Areas.</b>		<b>Domestic Animals on Farms and Ranges.</b>	
Approximate land, acres-----	849,920	Cattle*--	
Land in farms in 1910-----	734,819	Dairy cows-----	12,181
Land in farms in 1900-----	710,686	Other cows-----	12,251
Improved land in farms in 1910-----	237,170	Yearling heifers-----	4,449
Improved land in farms in 1900-----	290,285	Calves-----	5,443
Woodland in farms-----	153,835	Yearling steers and bulls-----	3,133
Other unimproved land-----	343,814	Other steers and bulls-----	7,552
		Total-----	43,030
		Value-----	*\$1,218,607

\*Includes animals, age or sex not specified.

## SANTA CLARA COUNTY SUMMARY—Continued.

Domestic Animals on Farms and Ranges—Continued.		
<b>Horses—</b>		
Mature horses .....	14,405	
Yearling colts .....	899	
Spring colts .....	512	
Total .....	15,816	
Value .....	\$1,763,731	
<b>Mules—</b>		
Mature mules .....	267	
Yearling colts .....	7	
Total .....	274	
Value .....	\$29,026	
<b>Asses and burros—</b>		
Number .....	11	
Value .....	\$150	
<b>Swine—</b>		
Mature hogs .....	4,165	
Spring pigs .....	3,184	
Total .....	7,349	
Value .....	\$61,121	
<b>Sheep—</b>		
Rams, ewes and wethers .....	4,449	
Spring lambs .....	5,606	
Total .....	10,055	
Value .....	\$32,553	
<b>Goats—</b>		
Number .....	163	
Value .....	\$675	
Total value all domestic animals .....	\$3,105,853	
<b>Poultry and bees—</b>		
Poultry of all kinds .....	209,093	
Value .....	\$122,299	
Colonies of bees .....	2,542	
Value .....	\$8,615	

## Principal Crops.

Description.	Acres.	Bushels.
Corn .....	411	9,791
Oats .....	247	9,424
Wheat .....	376	10,198
Barley .....	8,603	200,893
Dry edible beans .....	766	8,810
Potatoes .....	1,035	105,617
<b>Hay and forage—</b>		
Timothy alone .....	34	48
Clover alone .....	226	355
Alfalfa .....	3,073	11,486
Other tame and cultivated grasses .....	2,275	2,606
Wild, salt or prairie grasses .....	1,203	1,352
Grains cut green .....	76,399	169,051
All other hay and forage .....	343	2,110
Total .....	83,553	127,066
<b>Poultry products—</b>		
Poultry raised, number .....	233,729	
Eggs produced, dozen .....	1,166,782	
Value poultry and eggs produced .....	\$410,877	
<b>Honey and wax—</b>		
Honey produced, pounds .....	77,252	
Wax produced, pounds .....	842	
Value honey and wax produced .....	\$6,203	
<b>Wool—</b>		
Wool, fleeces shorn .....	4,765	
Value wool and mohair produced .....	\$3,596	

<b>Special crops—</b>		
Potatoes, acres .....	1,085	
All other vegetables, acres .....	4,241	
Sugar beets, acres .....	1,135	
<b>Orchard fruits—</b>		
Apples .....	102,841	
Apricots .....	783,585	
Cherries .....	173,002	
Peaches and nectarines .....	437,677	
Pears .....	142,550	
Prunes and plums .....	3,387,455	
<b>Tropical fruits—</b>		
Total .....	5,043,766	
Figs .....	985	
Lemons .....	993	
Oranges .....	1,905	
Pomeloes .....	57	
Olives .....	13,945	
Total .....	18,023	
<b>Grapevines—</b>		
Number in bearing .....	5,584,480	
<b>Small fruits—</b>		
Strawberries, acres .....	460	
Blackberries and dewberries, acres .....	228	
All others .....	323	
Total .....	1,011	
<b>Nuts—</b>		
Almonds .....	25,962	
Pecans .....	136	
Walnuts .....	19,070	
Total .....	43,998	

## Irrigation.

Number of farms irrigated in 1909 .....	1,101
Acres irrigated in 1909 .....	37,637
Acceage enterprises were capable of irrigating in 1910 .....	50,939
Acceage included in projects .....	60,140
Main ditches, number .....	458
Length, miles .....	228
Laterals, number .....	39
Length, miles .....	27
Flowing wells, number .....	428
Pumped wells, number .....	800
Cost of irrigation enterprises up to July 1, 1910 .....	\$1,337,216
Average cost per acre irrigation enterprises were capable of irrigating in 1910 .....	\$26.25

## Mineral Production in 1913.

Substance.	Amount.	Value.
Brick, thousand .....	18,000	\$95,000
Lime, barrels .....	13,107	9,783
Limestone, tons .....	3,549	4,200
Magnesite, tons .....	70	560
Mineral water, gallons .....	101,000	10,750
Natural gas, thousand .....	2,000	500
Petroleum, barrels .....	20,000	12,000
Quicksilver, flasks .....	3,709	149,213
Stone industry .....		29,377
Total .....		\$311,338
Number of mineral springs .....	12	



SANTA CRUZ COUNTY.

Date of creation, February 18, 1850.

Land area, 435 square miles.	Population-----	1890.	1900.	1910.
County seat, Santa Cruz, city.	Population-----	19,270	21,512	26,140
Population per square mile, 60.1.		5,596	5,659	11,146
	Highest.	Lowest.	Inches.	Inches.
Elevation, 20 feet.	1914: Temperature---	97	27	Rainfall--32.12
				Snow--- 0

Santa Cruz fronts its entire length on the Pacific Ocean. It is separated from San Mateo and Santa Clara counties by the Santa Cruz Mountains, and from Monterey County by the Pajaro River. It is one of the smallest counties, and comprises a narrow strip of mountainous land about 40 miles long and 18 miles broad, forming a vast amphitheater, and sloping from the summits of the Santa Cruz range, whose highest elevation, Loma Prieta, is 4,000 feet, southward and westward to the bay of Monterey.

The curving line of shore and the corresponding curve of the mountain line inclose an irregular, crescent-shaped tract of country, with an average width of 20 miles. The sides of the mountain are closely set with forests of pine, redwood, madrone, and other trees, the redwoods having, in many cases, attained gigantic growth.

The extent of the apple industry is shown by statistics, and is one of the most valuable industries. During the harvesting of the crop in the Pajaro Valley, this industry gives employment to several thousands. The annual shipments of green apples average from 3,500 to 4,000 carloads, and evaporated apples, about 150 to 200 carloads. Growers receive from \$20 to \$25 per ton delivered at the packing house. The leading varieties are Newtown Pippin, Bellflower, Red Pearmain, White Pearmain, Missouri Pippin, Baldwin, Rome Beauty, Spitzenberg, Wine-sap, Langford Seedling, and Ben Davis.

Of the small fruits, the strawberry is the most widely grown and furnishes a crop from about April 1st to December 1st, about 270 carloads being shipped in 1914.

In the southern part of the county a large acreage is devoted to the profitable growth of sugar beets, potatoes, beans, and onions.

Asparagus and rhubarb are grown for outside markets.

Seeds, bulbs, plants, and cut flowers are cultivated on a large scale.

This is one of the few places in the State where ginseng is cultivated. The exports of this root in 1914 from the United States to Hong Kong, the principal market, was about two-thirds cultivated and the remainder wild.

The Santa Cruz Portland cement plant has the largest capacity for the manufacture of cement of any in the State. There is a cold storage plant at Watsonville with a capacity of 500 carloads.

The fish hatchery at Brookdale, on Clear Creek, which was established in 1905, produces large quantities of steelhead trout and also of quinnat salmon and silver salmon.

## SANTA CRUZ COUNTY SUMMARY.

## Number of Farms Classified by Size.

Under 3 acres.....	18
3 to 9 acres.....	226
10 to 19 acres.....	198
20 to 49 acres.....	384
50 to 99 acres.....	293
100 to 174 acres.....	188
175 to 259 acres.....	60
260 to 499 acres.....	52
500 to 999 acres.....	25
1,000 acres and over.....	22

Total.....	1,466
Total in 1900.....	1,274

## Land and Farm Areas.

Approximate land, acres.....	278,400
Land in farms in 1910.....	157,308
Land in farms in 1900.....	160,438
Improved land in farms in 1910.....	66,875
Improved land in farms in 1900.....	62,849
Woodland in farms.....	44,157
Other unimproved land.....	46,276

## Value of All Farm Property.

Total value in 1910.....	\$17,653,136
Total value in 1900.....	11,443,150
Per cent increase 1900-1910.....	54.3
Land in 1910.....	14,103,715
Land in 1900.....	9,094,410
Buildings in 1910.....	2,299,890
Buildings in 1900.....	1,452,020
Implements and machinery in 1910.....	461,107
Implements and machinery in 1900.....	246,930
Domestic animals, poultry, and bees in 1910.....	788,424
Domestic animals, poultry, and bees in 1900.....	649,790

## Domestic Animals on Farms and Ranges.

Cattle—	
Dairy cows.....	4,210
Other cows.....	1,811
Yearling heifers.....	1,113
Calves.....	1,779
Yearling steers and bulls.....	438
Other steers and bulls.....	749

Total.....	10,100
Value.....	\$259,560

## Horses—

Mature horses.....	3,914
Yearling colts.....	260
Spring colts.....	116

Total.....	4,290
Value.....	\$435,787

## Mules—

Mature mules.....	84
Yearling colts.....	4

Total.....	88
Value.....	\$8,150

## Asses and burros—

Number.....	6
Value.....	\$125

## Swine—

Mature hogs.....	2,165
Spring pigs.....	1,509

Total.....	3,674
Value.....	\$27,421

## Sheep—

Rams, ewes, and wethers.....	876
Spring lambs.....	703

Total.....	1,579
Value.....	\$5,354

## Goats—

Number.....	1,043
Value.....	\$3,230

Total value all domestic animals.....	\$739,727
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## Poultry and bees—

Poultry of all kinds.....	85,705
Value.....	\$46,054
Colonies of bees.....	693
Value.....	\$2,643

## Principal Crops.

Description.	Acres.	Bushels.
Corn.....	1,136	22,284
Oats.....	2,282	59,812
Wheat.....	217	3,629
Barley.....	1,000	34,226
Dry edible beans.....	577	12,645
Potatoes.....	1,080	128,977

## Hay and forage—

	Acres.	Tons.
Timothy alone.....	350	450
Clover alone.....	70	170
Alfalfa.....	255	1,090
Other tame and cultivated grasses.....	28	36
Wild, salt, or prairie grasses.....	29	29
Grains cut green.....	16,609	22,376
All other hay and forage.....	696	1,093

Totals.....	18,037	25,214
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## Poultry products—

Poultry raised, number.....	79,015
Eggs produced, dozen.....	577,989
Value of poultry and eggs produced.....	\$188,542

## Honey and wax—

Honey produced, pounds.....	11,032
Wax produced, pounds.....	98
Value of honey and wax produced.....	\$1,207

## Wool—

Wool, fleeces shorn.....	799
Mohair and goat hair, fleeces shorn.....	630
Value of wool and mohair produced.....	\$1,444

## Special crops—

Potatoes, acres.....	1,080
Sweet potatoes, acres.....	1
All other vegetables, acres.....	648
Sugar beets, acres.....	312

## Orchard fruits—

	Number bearing trees.
Apples.....	647,135
Apricots.....	63,021
Cherries.....	17,608
Peaches and nectarines.....	11,868
Pears.....	23,100
Prunes and plums.....	112,269

Total.....	875,642
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## Tropical fruits—

	Number bearing trees.
Figs.....	333
Lemons.....	349
Oranges.....	330
Pomeles.....	7
Olives.....	1,243

Total.....	2,279
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## SANTA CRUZ COUNTY SUMMARY—Continued.

Principal Crops—Continued.		Irrigation.		
Grapevines—		Number of farms irrigated in 1909.....	106	
Number in bearing.....	1,365,414	Acres irrigated in 1909.....	1,201	
		Acreage enterprises were capable of irrigating in 1910.....	1,313	
		Acreage included in projects.....	2,232	
		Main ditches, number.....	81	
		Length, miles.....	41	
		Flowing wells, number.....	2	
		Pumped wells, number.....	58	
Small fruits—		Cost of irrigation enterprises up to July 1, 1910.....	\$76,621	
Strawberries, acres.....	489	Average cost per acre irrigation enterprises were capable of irrigat- ing in 1910.....	\$58.36	
Blackberries and dewberries, acres.....	116			
All others, acres.....	139			
Total.....	744			
		Mineral Production in 1913.		
		Substance.	Amount.	Value.
		Bituminous rock, tons.....	26,932	\$67,330
		Lime, barrels.....	75,000	60,000
		Limestone, tons.....	39,494	30,994
		Stone industry.....		10,511
		Other minerals.....		1,647,970
		Total.....		\$1,816,805
		Number of mineral springs.....		3
Nuts—	Number bearing trees			
Almonds.....	240			
Pecans.....	5			
Walnuts.....	4,015			
Total.....	4,757			

## SHASTA COUNTY.

Date of creation, February 18, 1850.

Land area, 3,858 square miles.	Population-----	1890.	1900.	1910.
County seat, Redding, city.	Population-----	12,133	17,318	18,920
Population per square mile, 4.9.	Population-----	1,821	2,946	3,572
Elevation, 552 feet.	Highest.	Lowest.	Inches.	Inches.
1914: Temperature---	109	21	Rainfall--48.37	Snow--- 7.0

Shasta County lies at the head of the famous Sacramento Valley. One mile north of Redding, the county seat, the valley ends and the canyon, second only in fame to the valley, which bears the name of the great waterway in the State, begins. The area of the county covers 90 miles from east to west and 60 miles from north to south.

Covering a portion of eastern Shasta are the Sierra Nevada Mountains and on the northeastern boundary is the Coast Range. These are lofty, some peaks exceeding 5,000 feet in height, and are very rugged. On the extreme eastern border of the county is Lassen Peak, raising its mighty head 10,577 feet above sea level. This peak has attracted much attention the past year owing to numerous great eruptions. This mountain is timbered two-thirds of the way up. Hot and boiling springs, and others noted for their medicinal qualities, abound in this region. The southwestern portion of this section is a succession of rounded hills, varying in height from 50 to 200 feet, while the central and southern portions consist of tablelands, varying in altitude from 500 to 700 feet. Fertile valleys predominate.

Shasta is noted for the number and beauty of its streams. First in importance is the Sacramento River, which enters the county on its northern boundary, traversing it throughout to its southern borders. The Sacramento is augmented by the combined McCloud, Pit. and Fall rivers, the former finding its source at Mount Shasta on the extreme north, enters the county and travels in a southerly direction, emptying into the Pit, which earlier has received the Fall River flow, and continuing still in a southerly course meets and enters the Sacramento at a point a few miles north of Kennett. Most beautiful of all northern streams is the Fall River.

Irrigation is unnecessary for most crops, as the rainfall is sufficient.

Beautiful resorts and springs abound. The mountains are heavily timbered with sugar pine, cedar, fir, and other valuable timbers.

The prune, peach, pear, and plum thrive, while grapes have proven a success in the valley districts.

Anderson, twelve miles south of Redding, the fruit and lumber center of the county, and Kennett, seventeen miles to the north of the county seat, are the two next important centers, but Coram, where the largest copper smelter in the State is located, and Delmar, the site of a big copper plant, are almost equally important.

Shasta's pre-eminence in mineral production, giving her the title of "banner county," is largely due to her immense copper output.



## SHASTA COUNTY SUMMARY.

## Number of Farms Classified by Size.

Under 3 acres.....	6
3 to 9 acres.....	16
10 to 19 acres.....	29
20 to 49 acres.....	103
50 to 99 acres.....	111
100 to 174 acres.....	300
175 to 250 acres.....	96
260 to 499 acres.....	190
500 to 999 acres.....	93
1,000 acres and over.....	66
Total .....	1,010
Total in 1900.....	1,221

## Land and Farm Areas.

Approximate land, acres.....	2,469,120
Land in farms in 1910.....	389,218
Land in farms in 1900.....	347,120
Improved land in farms in 1910.....	96,217
Improved land in farms in 1900.....	86,540
Woodland in farms.....	151,113
Other unimproved land.....	141,888

## Value of All Farm Property.

Total value in 1910.....	\$7,847,929
Total value in 1900.....	4,420,423
Per cent increase 1900-1910.....	77.5
Land in 1910.....	5,403,079
Land in 1900.....	2,980,620
Buildings in 1910.....	851,750
Buildings in 1900.....	538,500
Implements and machinery in 1910.....	289,511
Implements and machinery in 1900.....	163,450
Domestic animals, poultry, and bees in 1910.....	1,303,589
Domestic animals, poultry, and bees in 1900.....	737,853

## Domestic Animals on Farms and Ranges.

Cattle—	
Dairy cows .....	2,923
Other cows .....	15,433
Yearling heifers .....	3,678
Calves .....	3,308
Yearling steers and bulls.....	3,197
Other steers and bulls.....	5,580
Total .....	34,119
Value .....	\$677,694

## Horses—

Mature horses .....	4,516
Yearling colts .....	488
Spring colts .....	213
Total .....	5,217
Value .....	\$396,414

## Mules—

Mature mules .....	224
Yearling colts .....	57
Spring colts .....	13
Total .....	294
Value .....	\$23,225

## Asses and burros—

Number .....	23
Value .....	\$2,635

## Swine—

Mature hogs .....	12,832
Spring pigs .....	5,968
Total .....	18,800
Value .....	\$96,329

## Sheep—

Rams, ewes, and wethers.....	11,449
Spring lambs .....	5,574
Total .....	17,023
Value .....	\$44,945

## Goats—

Number .....	18,403
Value .....	\$41,501

Total value all domestic animals \$1,282,743

## Poultry and bees—

Poultry of all kinds.....	35,873
Value .....	\$19,226
Colonies of bees.....	689
Value .....	\$1,620

## Principal Crops.

Description.	Acres.	Bushels.
Corn .....	163	4,655
Oats .....	723	8,915
Wheat .....	3,783	45,022
Barley .....	1,298	21,551
Dry edible beans.....	49	685
Potatoes .....	243	27,756

## Hay and forage—

	Acres.	Tons.
Timothy alone .....	3,083	4,118
Timothy and clover mixed..	2,165	2,847
Clover alone .....	269	530
Alfalfa .....	6,698	16,874
Other tame and cultivated grasses .....	917	1,077
Wild, salt, or prairie grasses	13,158	12,716
Grains cut green.....	8,525	7,836
All other hay and forage...	526	580

Total 35,341 46,578

## Poultry products—

Poultry raised, number.....	52,607
Eggs produced, dozen.....	199,858
Value poultry and eggs produced..	\$73,767

## Honey and wax—

Honey produced, pounds.....	8,466
Wax produced, pounds.....	185
Value of honey and wax produced	\$1,013

## Wool—

Wool, fleeces shorn.....	17,862
Mohair and goat hair, fleeces shorn	11,606
Value wool and mohair produced..	\$25,705

## Special crops—

Potatoes, acres .....	243
Sweet potatoes, acres.....	16
All other vegetables, acres.....	577

## SHASTA COUNTY SUMMARY—Continued.

Principal Crops—Continued		Irrigation.	
Orchard fruits—	Number bearing trees	Number of farms irrigated in 1909..	639
Apples .....	35,440	Acres irrigated in 1909.....	33,004
Apricots .....	839	Acres enterprises were capable of irrigating in 1910.....	36,564
Cherries .....	2,785	Acres included in projects.....	72,653
Peaches and nectarines.....	98,950	Main ditches, number.....	446
Pears .....	33,952	Length, miles .....	678
Prunes and plums.....	87,959	Laterals, number .....	130
Total .....	262,136	Length, miles .....	81
Tropical fruits—	Number bearing trees	Flowing wells, number.....	2
Figs .....	2,306	Pumped wells, number.....	34
Lemons .....	7	Cost of irrigation enterprises up to July 1, 1910.....	\$430,766
Oranges .....	55	Average cost per acre irrigation enterprises were capable of irrigating in 1910.....	11.78
Olives .....	9,616		
Total .....	11,986		
Grapevines—		Mineral Production in 1913.	
Number in bearing.....	117,481	Substance.	Amount. Value.
Small fruits—		Asbestos, tons .....	47 \$1,175
Strawberries, acres .....	44	Brick, thousand .....	360 4,330
Blackberries and dewberries, acres.....	32	Chromite, tons .....	280 2,800
All others, acres.....	19	Copper, pounds .....	27,688,436 4,291,708
Total, acres .....	95	Gold .....	1,208,870
Nuts—	Number bearing trees	Lead, pounds .....	19,070 839
Almonds .....	8,056	Lime, barrels .....	8,595 7,030
Pecans .....	7	Limestone, tons .....	41,346 35,616
Walnuts .....	1,168	Mineral water, gallons.....	30,000 6,850
Total .....	9,339	Pyrite, tons .....	72,971 194,409
		Silver .....	448,031
		Other minerals .....	10,686
		Total .....	\$6,212,344
		Number of mineral springs.....	16

## SIERRA COUNTY.

Date of creation, April 16, 1852.

Land area, 923 square miles.	Population.....	1890. 5,051	1900. 4,017	1910. 4,098
County seat, Downieville, township.	Population.....			751
Population per square mile, 4.4.				
Elevation, 3,150 feet.	Highest.	Lowest.	Inches.	Inches.
1914: Temperature...	103	13	Rainfall...64.02	Snow...37.7

Sierra County has an area practically all mountainous. The altitude ranges from 2,000 to 8,600 feet, the highest elevation being that of the Sierra Buttes, but the greater portion has an elevation of from 4,000 to 5,000 feet.

The main ridge of the Sierra Nevada crosses the eastern part from south to north. Several spurs traverse the county from east to west, forming the watersheds of the four principal streams which make the drainage system of the western part. These streams consist of the Middle Yuba River on the south, the North Yuba near the center, and Canyon Creek and Slate Creek on the north, and in the eastern end the many streams that form the headwaters of the Feather and Truckee rivers. Of the peculiar topographical features are the expansive valleys and lakes, lying among the loftiest peaks of the Sierra. The lakes vary from one-eighth of a mile to three or four miles in length, most of them circular, and, considering their small size, remarkable for their depth.

The important body of agricultural land is Sierra Valley. It extends over the boundary line into Plumas County, and is the largest and the most elevated of the valley of the Sierra, being 4,750 feet above sea level. It is 30 miles in length and 10 miles in width. This valley is particularly adapted to stock raising and dairy purposes. There are several creameries in the valley. The soil is deep, black loam, largely admixed with rich mold.

Since 1849, the principal industry has been gold mining.

The greater portion is practically covered with a virgin belt of soft timber. The lumber cut runs into many millions of feet.

## SIERRA COUNTY SUMMARY.

Number of Farms Classified by Size.		Value of All Farm Property.	
Under 3 acres.....	1	Total value in 1910.....	\$1,650,799
3 to 9 acres.....	6	Total value in 1900.....	995,395
10 to 19 acres.....	3	Per cent increase 1900-1910.....	65.8
20 to 49 acres.....	4	Land in 1910.....	962,575
50 to 99 acres.....	5	Land in 1900.....	564,990
100 to 174 acres.....	25	Buildings in 1910.....	262,125
175 to 259 acres.....	4	Building in 1900.....	179,770
260 to 499 acres.....	19	Implements and machinery in 1910.....	65,524
500 to 999 acres.....	18	Implements and machinery in 1900.....	37,480
1,000 acres and over.....	25	Domestic animals, poultry, and bees in 1910.....	360,575
Total.....	110	Domestic animals, poultry, and bees in 1900.....	213,155
Total in 1900.....	141		
Land and Farm Areas.		Domestic Animals on Farms and Ranges.	
Approximate land, acres.....	590,720	Cattle—	
Land in farms in 1910.....	84,220	Dairy cows.....	1,563
Land in farms in 1900.....	74,609	Other cows.....	2,268
Improved land in farms in 1910.....	30,794	Yearling heifers.....	850
Improved land in farms in 1900.....	26,687	Calves.....	874
Woodland in farms.....	18,168	Yearling steers and bulls.....	831
Other unimproved land.....	35,258	Other steers and bulls.....	1,401
		Total.....	7,787
		Value.....	\$199,156

## SIERRA COUNTY SUMMARY—Continued.

## Domestic Animals on Farms and Ranges—Continued.

Horses—	
Mature horses .....	1,199
Yearling colts .....	155
Spring colts .....	40
Total .....	1,394
Value .....	\$136,605
Mules—	
Mature mules .....	20
Value .....	\$1,450
Asses and burros—	
Number .....	4
Value .....	\$325
Swine—	
Mature hogs .....	370
Spring pigs .....	294
Total .....	664
Value .....	\$4,198
Sheep—	
Rams, ewes, and wethers .....	2,005
Spring lambs .....	93
Total .....	3,098
Value .....	\$15,579
Goats—	
Number .....	73
Value .....	\$184
Total value all domestic animals .....	\$357,497

## Poultry and bees—

Poultry of all kinds .....	4,458
Value .....	\$2,950
Colonies of bees .....	49
Value .....	\$128

## Principal Crops.

Description.	Acres.	Bushels.
Corn .....	1	40
Oats .....	526	11,431
Wheat .....	383	6,389
Barley .....	406	7,362
Potatoes .....	46	5,016
Hay and forage—	Acres.	Tons.
Timothy alone .....	388	570
Timothy and clover mixed .....	1,789	2,020
Clover alone .....	26	37
Alfalfa .....	1,125	1,712
Other tame and cultivated grasses .....	839	922
Wild, salt, or prairie grasses .....	15,772	16,253
Grains cut green .....	683	720
Totals .....	20,622	22,234

## Poultry products—

Poultry raised, number .....	6,993
Eggs produced, dozens .....	24,877
Value poultry and eggs produced .....	\$11,788

## Honey and wax—

Honey produced, pounds .....	2,081
Wax produced, pounds .....	10
Value of honey and wax produced .....	\$220

## Wool—

Wool, fleeces shorn .....	2,333
Value wool and mohair produced .....	\$3,940

## Special crops—

Potatoes, acres .....	46
All other vegetables, acres .....	35

## Orchard fruits—

Apples .....	Number bearing trees 3,398
Cherries .....	67
Peaches and nectarines .....	157
Pears .....	148
Prunes and plums .....	232

    Total .....

## Small fruits—

Strawberries, acres .....	2
Blackberries and dewberries, acres .....	1
All others, acres .....	3

    Total .....

## Nuts—

Walnuts .....	Number bearing trees 24
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## Irrigation.

Number of farms irrigated in 1909 .....	94
Acres irrigated in 1909 .....	17,504
Acreage enterprises were capable of irrigating in 1910 .....	17,505
Acreage included in projects .....	18,249
Main ditches, number .....	119
Length, miles .....	150
Laterals, number .....	4
Length, miles .....	1
Cost of irrigation enterprises up to July 1, 1910 .....	\$39,650
Average cost per acre irrigation enterprises were capable of irrigating in 1910 .....	3.98

## Mineral Production in 1913.

Substance.	Amount.	Value.
Gold .....		\$1,006,573
Lead, pounds .....	2,228	98
Silver .....		4,305
Total .....		\$1,010,976
Number of mineral springs .....		2



## SISKIYOU COUNTY.

Date of creation, March 22, 1852.

Land area, 6,256 square miles.	Population-----	1890.	1900.	1910.
County seat, Yreka, town.	Population-----	12,163	16,962	18,801
Population per square mile, 3.0.		1,100	1,254	1,134
Dunsmuir (Station)	Highest.	Lowest.	Inches.	Inches.
Elevation, 2,285 feet. 1914: Temperature---	104	18	Rainfall--57.17	Snow--59.4

Siskiyou is one of the northern counties of the State, adjoining Oregon for 80 miles on the north. Of its area of 6,256 square miles, 1,500 square miles are valley; the remainder is mountains and forest. Much of the agricultural land is farmed without irrigation, producing good crops of wheat, barley, and in some localities alfalfa and timothy. The so-called desert lands were long considered of little value save for pasturage, but are now being successfully farmed, and require only the application of water to produce abundant crops.

The agricultural lands are chiefly comprised in Scott Valley in the western portion of the county, Shasta Valley and Little Shasta in the central portion, and McCloud and Butte valleys in the eastern portion.

Timber is everywhere; there are thousands of sections that will cut from ten to twenty million feet of yellow and sugar pine, besides large quantities of red fir and cedar.

The Sierra Nevada and Coast Range mountains meet here. The altitude ranges from 2,000 feet in the valleys to 14,000 feet on the mountain peaks, the highest of these being Mount Shasta. There are localities where snow seldom falls, and regions of perpetual snow. These conditions make it one of the most scenic of the counties.

The Marble Mountains, now but little known to tourists, will in time rival the Kings River Canyon and the Yosemite Valley. Chief among the noted resorts are the famous Shasta Springs and Upper Soda Springs, all situated in the Sacramento River Canyon, just over the border of Shasta County. At Sisson, at the base of Mount Shasta, the largest fish hatchery in the United States is located.

Lumbering is the chief industry, with mining and live stock a close second and third.

## SISKIYOU COUNTY SUMMARY.

## Number of Farms Classified by Size.

Under 3 acres.....	1
3 to 9 acres.....	21
10 to 19 acres.....	36
20 to 49 acres.....	68
50 to 99 acres.....	98
100 to 174 acres.....	288
175 to 259 acres.....	84
260 to 499 acres.....	199
500 to 999 acres.....	124
1,000 acres and over.....	75
<b>Total</b> .....	<b>1,114</b>
<b>Total in 1900</b> .....	<b>931</b>

## Land and Farm Areas.

Approximate land, acres.....	4,003,830
Land in farms in 1910.....	455,576
Land in farms in 1900.....	452,859
Improved land in farms in 1910.....	186,147
Improved land in farms in 1900.....	181,029
Woodland in farms.....	82,544
Other unimproved land.....	187,185

## Value of All Farm Property.

Total value in 1910.....	\$14,270,362
Total value in 1900.....	7,764,739
Per cent increase 1900-1910.....	85.2
Land in 1910.....	10,352,935
Land in 1900.....	5,084,110
Buildings in 1910.....	1,411,810
Buildings in 1900.....	1,056,390
Implements and machinery in 1910.....	420,745
Implements and machinery in 1900.....	284,520
Domestic animals, poultry and bees in 1910.....	2,084,812
Domestic animals, poultry and bees in 1900.....	1,279,749

## Domestic Animals on Farms and Ranges.

<b>Cattle*</b> —	
Dairy cows.....	7,018
Other cows.....	14,781
Yearling heifers.....	5,935
Calves.....	4,919
Yearling steers and bulls.....	5,359
Other steers and bulls.....	6,513
<b>Total</b> .....	<b>45,079</b>
<b>Value</b> .....	<b>\$1,010,902</b>

## Horses—

Mature horses.....	7,690
Yearling colts.....	1,037
Spring colts.....	423

<b>Total</b> .....	<b>9,150</b>
<b>Value</b> .....	<b>\$831,437</b>

## Mules—

Mature mules.....	390
Yearling colts.....	76
Spring colts.....	37

<b>Total</b> .....	<b>503</b>
<b>Value</b> .....	<b>\$44,929</b>

## Asses and burros—

Number.....	22
Value.....	\$4,610

## Swine—

Mature hogs.....	6,116
Spring pigs.....	3,391
<b>Total</b> .....	<b>9,512</b>
<b>Value</b> .....	<b>\$58,475</b>

## Sheep—

Rams, ewes, and wethers.....	18,013
Spring lambs.....	11,909

<b>Total</b> .....	<b>29,922</b>
<b>Value</b> .....	<b>\$99,082</b>

## Goats—

Number.....	384
Value.....	\$1,079

Total value all domestic animals \$2,053,544

## Poultry and bees—

Poultry of all kinds.....	43,413
Value.....	\$22,568
Colonies of bees.....	2,775
Value.....	\$8,700

## Principal Crops.

Description.	Acres.	Bushels.
Corn.....	89	3,165
Oats.....	3,148	93,076
Wheat.....	17,872	224,512
Barley.....	4,282	60,118
Dry edible beans.....	10	272
Potatoes.....	655	76,218

## Hay and forage—

	Acres.	Tons.
Timothy alone.....	1,278	2,671
Timothy and clover mixed.....	12,792	23,178
Clover alone.....	168	405
Alfalfa.....	22,492	48,478
Other tame and cultivated grasses.....	3,432	5,459
Wild, salt, or prairie grasses.....	10,114	12,913
Grains cut green.....	7,651	6,831
All other hay and forage.....	49	178

Total 57,976 100,113

## Poultry products—

Poultry raised, number.....	57,444
Eggs produced, dozens.....	254,107
Value poultry and eggs produced..	\$93,177

## Honey and wax—

Honey produced, pounds.....	85,322
Wax produced, pounds.....	324
Value of honey and wax produced..	\$8,317

## Wool—

Wool, fleeces shorn.....	14,975
Mohair and goat hair, fleeces shorn.....	134
Value wool and mohair produced..	\$23,038

\*Includes animals, age or sex not specified.

## SISKIYOU COUNTY SUMMARY—Continued.

Principal Crops—Continued.		Irrigation.	
Special crops—		Number of farms irrigated in 1909...	636
Potatoes, acres .....	655	Acres irrigated in 1909.....	60,301
All other vegetables, acres.....	673	Acres enterprises were capable of irrigating in 1910.....	66,866
Sugar beets, acres.....	128	Acres included in projects.....	79,161
Orchard fruits—		Main ditches, number.....	595
Apples .....	31,055	Length, miles .....	688
Apricots .....	356	Laterals, number .....	172
Cherries .....	1,850	Length, miles .....	41
Peaches and nectarines.....	4,371	Pumped wells, number.....	3
Pears .....	2,300	Cost of irrigation enterprises up to July 1, 1910.....	\$370,627
Prunes and plums.....	5,683	Average cost per acre irrigation enterprises were capable of irrigating in 1910.....	\$5.54
Total .....	45,615		
Tropical fruits—			
Figs .....	3		
Lemons .....	2		
Total .....	5		
Grapevines—			
Number in bearing.....	2,473		
Small fruits—			
Strawberries, acres .....	7		
Blackberries and dewberries, acres.....	10		
All others, acres.....	14		
Total .....	31		
Nuts—			
Almonds .....	83		
Pecans .....	2		
Walnuts .....	30		
Total .....	185		
Mineral Production in 1913.			
		Substance.	Amount. Value.
		Gems .....	\$250
		Gold† .....	180,125
		Mineral water, gallons.....	700,000 120,000
		Pumice stone, tons.....	90 2,000
		Silver† .....	1,228
		Stone industry .....	4,883
		Other minerals .....	1,500
		Total .....	\$309,986
		Number of mineral springs.....	28

†Production from dredging operations included in the Stanislaus total.

## SOLANO COUNTY.

Date of creation, February 13, 1850.

	1890.	1900.	1910.
Land area, 822 square miles.	Population..... 20,946	24,143	27,559
County seat, Fairfield, town.	Population.....	-----	834
Population per square mile, 33.5			

Suisun (Station).	Highest.	Lowest.	Inches.	Inches.
Elevation, 20 feet.	1914: Temperature...106	32	Rainfall...25.32	Snow... 0

In the foothills of the Coast Range on its western border, and extending across broad acres of the fertile land till its eastern confines are marked by the Sacramento River, lies Solano County.

A considerable acreage is devoted to grain raising. Thousands of cattle, horses, and sheep graze on the upland pastures and marsh lands. The soil is unexcelled, even in California, for productiveness. All fruits, especially prunes, peaches, apricots, and pears, grow to perfection; citrus fruits are also raised.

In the eastern section of the county is another rich section, the delta lands of the Sacramento River being noted for their productiveness.

This favored section is of a limited area. From east to west its extreme length is 45 miles, while from north to south the county measures 35 miles.

## SOLANO COUNTY SUMMARY.

Number of Farms Classified by Size.		Domestic Animals on Farms and Ranges.	
Under 3 acres.....	6	Cattle—	
3 to 9 acres.....	45	Dairy cows .....	9,279
10 to 19 acres.....	60	Other cows .....	4,257
20 to 49 acres.....	198	Yearling heifers .....	1,933
50 to 99 acres.....	170	Calves .....	3,720
100 to 174 acres.....	167	Yearling steers and bulls.....	1,187
175 to 259 acres.....	89	Other steers and bulls.....	1,408
260 to 499 acres.....	156		
500 to 999 acres.....	144	Total .....	21,784
1,000 acres and over.....	108	Value .....	\$605,378
Total .....	1,143	Horses—	
Total in 1903.....	1,151	Mature horses .....	6,993
		Yearling colts .....	695
		Spring colts .....	362
		Total .....	8,050
		Value .....	\$884,500
		Mules—	
		Mature mules .....	2,157
		Yearling colts .....	84
		Spring colts .....	78
		Total .....	2,319
		Value .....	\$295,866
		Asses and burros—	
		Number .....	23
		Value .....	\$2,800
		Swine—	
		Mature hogs .....	8,836
		Spring pigs .....	4,732
		Total .....	15,568
		Value .....	\$89,528

## Land and Farm Areas.

Approximate land, acres.....	526,080
Land in farms in 1910.....	474,866
Land in farms in 1900.....	480,551
Improved land in farms in 1910.....	310,452
Improved land in farms in 1900.....	344,058
Woodland in farms.....	44,534
Other unimproved land.....	119,880

## Value of All Farm Property.

Total value in 1910.....	\$28,727,683
Total value in 1900.....	20,780,434
Per cent increase 1900-1910.....	38.2
Land in 1910.....	23,025,081
Land in 1900.....	16,903,310
Building in 1910.....	2,278,540
Building in 1900.....	1,905,970
Implements and machinery in 1910.....	767,136
Implements and machinery in 1900.....	649,320
Domestic animals, poultry, and bees in 1910.....	2,656,926
Domestic animals, poultry, and bees in 1900.....	1,321,834



## SOLANO COUNTY SUMMARY—Continued.

Domestic Animals on Farms and Ranges—Continued.		
Sheep—		
Rams, ewes, and wethers.....	96,921	
Spring lambs .....	73,232	
Total .....	170,153	
Value .....	\$737,457	

Goats—		
Number .....	392	
Value .....	\$1,218	

Total value all domestic animals \$2,616,747

Poultry and bees—		
Poultry of all kinds.....	74,683	
Value .....	\$39,384	
Colonies of bees.....	256	
Value .....	\$795	

## Principal Crops.

Description.	Acres.	Bushels.
Corn .....	91	935
Oats .....	1,306	25,711
Wheat .....	20,924	391,753
Barley .....	41,647	1,263,357
Dry edible beans.....	2,553	65,755
Potatoes .....	311	42,416

Hay and forage—	Acres.	Tons.
Timothy alone .....	2,566	2,856
Timothy and clover mixed..	375	381
Clover alone .....	60	174
Alfalfa .....	2,145	10,617
Other tame and cultivated grasses .....	381	636
Wild, salt, or prairie grasses	496	771
Grains cut green.....	33,641	41,552
All other hay and forage..	29	41

Totals .....

Poultry products—		
Poultry raised, number.....	66,403	
Eggs produced, dozens.....	426,261	
Value of poultry and eggs produced	\$128,295	

Honey and wax—		
Honey produced, pounds.....	2,873	
Value of honey and wax produced..	\$491	

Wool—		
Wool, fleeces shorn.....	157,499	
Mohair and goat hair, fleeces shorn	3	
Value wool and mohair produced..	\$161,312	

Special crops—		
Potatoes, acres .....	311	
All other vegetables, acres.....	656	
Sugar beets, acres.....	4	

Orchard fruits—		Number bearing trees
Apples .....		4,862
Apricots .....		310,262
Cherries .....		53,923
Peaches and nectarines.....		341,266
Pears .....		182,194
Prunes and plums.....		465,341

Total .....

Tropical fruits—		Number bearing trees
Figs .....		4,598
Lemons .....		126
Oranges .....		2,950
Pomeelos .....		15
Olives .....		1,221

Total .....

Grapevines—		
Number in bearing .....	1,213,265	

Small fruits—		
Strawberries, acres .....	5	
Blackberries and dewberries, acres	5	
All others, acres.....	2	

Total .....

Nuts—		Number bearing trees
Almonds .....		98,276
Pecans .....		134
Walnuts .....		1,806

Total .....

## Irrigation.

Number of farms irrigated in 1909..	150
Acres irrigated in 1909.....	3,610
Acraea enterprises were capable of irrigating in 1910.....	7,160
Acraea included in projects.....	8,192
Main ditches, number.....	20
Length, miles .....	22
Pumped wells, number.....	125
Cost of irrigation enterprises up to July 1, 1910.....	\$135,532
Average cost per acre irrigation en- terprises were capable of irrigating in 1910 .....	\$18.93

## Mineral Production in 1913.

Substance.	Amount.	Value.
Mineral water, gallons.....	23,600	\$3,440
Natural gas, thousand.....	6,319	7,366
Stone industry .....		28,915
Other minerals .....		1,800,000
Total .....		\$1,839,721
Number of mineral springs.....		2

## SONOMA COUNTY.

Date of creation, February 18, 1850.

Land area, 1,577 square miles.	Population-----	1890.	1900.	1910.
County seat, Santa Rosa, city.	Population-----	32,721	38,480	48,394
Population per square mile, 30.7.	Population-----	5,220	6,673	7,817
	Highest.	Lowest.	Inches.	Inches.
Elevation, 181 feet.	1914: Temperature...	100	24	Rainfall...34.62
				Snow--- 0

Sonoma County is bounded on the west by the Pacific Ocean, for more than 65 miles that boundary conforming to the irregularities of the shore, while on San Pablo Bay it has a frontage of 20 miles.

The great central valley extends the entire length of the county from south to north. The area on which rough stone interferes with farming operations is small. Out of the area of land in the county at least 200,000 acres are valley land, the richest soil known, being a black loam; 200,000 acres are rolling, or higher table-land, of exceedingly rich, alluvial, brown soil, with considerable sand. This is the best fruit land. At least 100,000 acres of mountain land are adapted to grazing, and about 80,000 acres are covered with redwood timber of a magnificent growth.

Sonoma Valley is about 20 miles in length, with an average width of 8 miles. It lies parallel to Petaluma Valley, from which it is separated by a range of mountains.

The streams and watercourses of Sonoma County are numerous. Russian River, the largest stream, enters on the north, flows in the southeasterly direction for 20 miles, turns at Fitch Mountain and finds its way to the largest depression in the Santa Rosa Basin, from which it breaks through a gap in the Coast Range to the Pacific Ocean. This river gathers the waters from three-fifths of the area of the county.

Sonoma County has a large acreage in wine grapes, most of which are made into dry wines. The average price for grapes in 1914 was \$15 to \$17 per ton, according to varieties. Beside wine, fruit, dairy and stock industries, the county produces more poultry and eggs than any other part of the State; and is also the leading county in the production of hops. Olive culture is increasing.

Cattle are raised on a large scale, principally for dairying purposes. The breeds of milch cows represented are mostly Jerseys, Holsteins, and Ayrshires, with some strains of Durhams and fine American breeds.

## SONOMA COUNTY SUMMARY.

Number of Farms Classified by Size.	
Under 3 acres.....	40
3 to 9 acres.....	916
10 to 19 acres.....	890
20 to 49 acres.....	1,040
50 to 99 acres.....	522
100 to 174 acres.....	508
175 to 259 acres.....	233
260 to 499 acres.....	299
500 to 999 acres.....	202
1,000 acres and over.....	122
Total .....	4,772
Total in 1900.....	3,676

## Land and Farm Areas.

Approximate land, acres.....	1,009,280
Land in farms in 1910.....	744,644
Land in farms in 1900.....	785,064
Improved land in farms in 1910.....	248,271
Improved land in farms in 1900.....	221,374
Woodland in farms.....	278,507
Other unimproved land.....	217,866

## Value of All Farm Property.

Total value in 1910.....	\$55,351,049
Total value in 1900.....	33,071,707
Per cent increase 1900-1910.....	67.4
Land in 1910.....	41,512,706
Land in 1900.....	25,286,750
Buildings in 1910.....	8,758,787
Buildings in 1900.....	4,646,580
Implements and machinery in 1910.....	1,326,832
Implements and machinery in 1900.....	847,240
Domestic animals, poultry, and bees in 1910.....	3,752,724
Domestic animals, poultry, and bees in 1900.....	2,291,137

## Domestic Animals on Farms and Ranges.

Cattle*—	
Dairy cows .....	24,961
Other cows .....	5,835
Yearling heifers .....	4,804
Calves .....	9,517
Yearling steers and bulls.....	1,805
Other steers and bulls.....	1,705

Total .....	48,727
Value .....	*\$1,166,971

Horses—	
Mature horses .....	12,611
Yearling colts .....	733
Spring colts .....	384

Total .....	13,728
Value .....	\$1,355,510

Mules—	
Mature mules .....	388
Yearling colts .....	8
Spring colts .....	2

Total .....	398
Value .....	\$48,025

Asses and burros—	
Number .....	28
Value .....	\$620

Swine—	
Mature hogs .....	10,995
Spring pigs .....	7,428

Total .....	18,423
Value .....	\$125,448

Sheep—	
Rams, ewes, and wethers.....	44,095
Spring lambs .....	21,220

Total .....	65,315
Value .....	\$224,274

Goats—	
Number .....	2,991
Value .....	7,962

Total value all domestic animals	\$2,928,810
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Poultry and bees—	
Poultry of all kinds.....	1,362,399
Value .....	\$821,299
Colonies of bees.....	824
Value .....	\$2,615

## Principal Crops.

Description.	Acres.	Bushels.
Corn .....	1,681	44,331
Oats .....	468	20,156
Wheat .....	56	1,445
Barley .....	361	8,795
Dry edible beans.....	7	83
Potatoes .....	2,279	161,597

Hay and forage—		Acres.	Tons.
Timothy alone .....	50	68	
Timothy and clover mixed.....	22	40	
Clover alone .....	251	370	
Alfalfa .....	5,565	10,461	
Other tame and cultivated grasses.....	1,509	1,842	
Wild, salt, or prairie grasses.....	6,507	7,346	
Grains cut green.....	47,021	65,919	
All other hay and forage.....	1,426	1,903	

Total .....	62,351	87,949
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Poultry products—	
Poultry raised, number.....	1,512,601
Eggs produced, dozens.....	9,470,880
Value poultry and eggs produced..	\$3,038,518

Honey and wax—	
Honey produced, pounds.....	7,014
Wax produced, pounds.....	44
Value of honey and wax produced..	\$941

Wool—	
Wool, fleeces shorn.....	75,925
Mohair and goat hair, fleeces shorn.....	2,330
Value wool and mohair produced..	\$74,951

Special crops—	
Potatoes, acres .....	2,279
All other vegetables, acres.....	954

Orchard fruits—		Number bearing trees
Apples .....	386,740	
Apricots .....	9,087	
Cherries .....	43,927	
Peaches and nectarines.....	237,220	
Pears .....	109,965	
Prunes and plums.....	569,232	

Total .....	1,364,105
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\*Includes animals, age or sex not specified.

## SONOMA COUNTY SUMMARY—Continued.

Principal Crops—Continued.		Irrigation.	
	Number bearing trees	Number of farms irrigated in 1909...	28
Tropical fruits—		Acres irrigated in 1909.....	631
Figs .....	3,850	Acres enterprises were capable of irrigating in 1910.....	761
Lemons .....	396	Acres included in projects.....	951
Oranges .....	5,047	Main ditches, number.....	32
Pomelos .....	8	Length, miles .....	21
Olives .....	10,863	Pumped wells, number.....	11
Total .....	20,226	Cost of irrigation enterprises up to July 1, 1910.....	\$13,801
Grapevines—		Average cost per acre irrigation enterprises were capable of irrigat- ing in 1910 .....	18.14
Number in bearing.....	17,939,972		
Small fruits—			
Strawberries, acres .....	103		
Blackberries and dewberries, acres..	930		
All others, acres.....	438		
Total .....	1,471		
Nuts—	Number bearing trees		
Almonds .....	2,893		
Pecans .....	43		
Walnuts .....	11,955		
Total .....	16,631		
		Mineral Production in 1913.	
		Substance.	Amount.
		Infusorial earth, tons.....	50
		Mineral water, gallons.....	96,240
		Quicksilver, flasks .....	12
		Stone industry .....	191,436
		Total .....	\$239.037
		Number of mineral springs.....	21



## STANISLAUS COUNTY.

Date of creation, April 1, 1854.

Land area, 1,450 square miles.	Population.....	1890.	1900.	1910.	
County seat, Modesto, city.	Population.....	10,040	9,550	22,522	
Population per square mile, 15.5.	Population.....	2,402	2,024	4,034	
Oakdale (Station):	Highest.	Lowest.	Inches.	Inches	
Elevation, 156 feet.	1914: Temperature.....	104	29	Rainfall.....16.78	Snow..... 0

Stanislaus County lies in the northern end of the great San Joaquin Valley, 114 miles from San Francisco and 30 miles from tidewater on the San Joaquin River. It is bounded by the Sierra Nevada Mountains on the east and the Coast Range Mountains on the west. The county is drained by three large rivers, the Stanislaus, the Tuolumne, and the San Joaquin. The soil ranges from a light sandy loam in the southerly part to a heavy sandy loam in the central part and adobe and redlands in the east. The county is crossed by four lines of railways, while the Sierra road connects Oakdale and vicinity with the mountain counties to the north.

The county has a large acreage in barley, oats and wheat, and is the largest producer of butter in the State, the total quantity in 1914 being 8,184,390 pounds. Fruits also grow well, especially peaches, apricots, and figs.

## STANISLAUS COUNTY SUMMARY.

Number of Farms Classified by Size.		Domestic Animals on Farms and Ranges.	
Under 3 acres.....	13	Cattle*—	
3 to 9 acres.....	153	Dairy cows .....	20,678
10 to 19 acres.....	319	Other cows .....	9,047
20 to 49 acres.....	1,046	Yearling heifers .....	5,294
50 to 99 acres.....	439	Calves .....	7,252
100 to 174 acres.....	192	Yearling steers and bulls.....	2,922
175 to 259 acres.....	83	Other steers and bulls.....	3,765
260 to 499 acres.....	125		
500 to 999 acres.....	142	Total .....	49,132
1,000 acres and over.....	175	Value .....	*\$1,728,698
Total .....	2,687	Horses*—	
Total in 1900.....	951	Mature horses .....	11,818
		Yearling colts .....	1,120
		Spring colts .....	619
		Total .....	14,357
		Value .....	*\$1,555,290
		Mules—	
		Mature mules .....	5,032
		Yearling colts .....	236
		Spring colts .....	174
		Total .....	5,442
		Value .....	\$703,567
		Asses and burros—	
		Number .....	31
		Value .....	\$7,835
		Swine—	
		Mature hogs .....	13,610
		Spring pigs .....	9,417
		Total .....	23,027
		Value .....	\$153,491
Land and Farm Areas.			
Approximate land, acres.....	928,000		
Land in farms in 1910.....	649,392		
Land in farms in 1900.....	830,692		
Improved land in farms in 1910.....	512,189		
Improved land in farms in 1900.....	622,700		
Woodland in farms.....	18,756		
Other unimproved land.....	118,447		
Value of All Farm Property.			
Total in 1910.....	\$43,787,887		
Total value in 1900.....	17,031,950		
Per cent increase 1900-1910.....	157.1		
Land in 1910.....	35,324,743		
Land in 1900.....	13,674,850		
Buildings in 1910.....	3,320,475		
Buildings in 1900.....	1,237,900		
Implements and machinery in 1910.....	820,079		
Implements and machinery in 1900.....	537,280		
Domestic animals, poultry, and bees in 1910.....	4,323,090		
Domestic animals, poultry, and bees in 1900.....	1,581,920		

\*Includes animals, age or sex not specified.

## STANISLAUS COUNTY SUMMARY—Continued.

Domestic Animals on Farms and Ranges—Continued.		
Sheep—		
Rams, ewes, and wethers.....	15,874	
Spring lambs.....	7,378	
Total.....	23,252	
Value.....	\$36,005	
Goats—		
Number.....	217	
Value.....	575	
Total value all domestic animals	\$4,240,461	

Poultry and bees—		
Poultry of all kinds.....	128,905	
Value.....	\$74,116	
Colonies of bees.....	2,554	
Value.....	\$8,423	

## Principal Crops.

Description.	Acres.	Bushels.
Corn.....	662	12,297
Oats.....	38,546	688,542
Wheat.....	22,068	258,121
Barley.....	57,529	828,628
Kafir corn and milo maize.....	4,448	80,343
Dry edible beans.....	373	4,395
Potatoes.....	207	17,502

Hay and forage—	Acres.	Tons.
Timothy alone.....	160	40
Clover alone.....	10	30
Alfalfa.....	40,917	149,214
Other tame and cultivated grasses.....	3,350	2,389
Wild, salt, or prairie grasses.....	7,400	4,976
Grains cut green.....	16,847	19,633
All other hay and forage.....	748	2,361
Total.....	69,432	178,643

Poultry products—		
Poultry raised, number.....	121,677	
Eggs produced, dozens.....	648,248	
Value of poultry and eggs produced	\$237,685	

Honey and wax—		
Honey produced, pounds.....	61,592	
Wax produced, pounds.....	1,371	
Value of honey and wax produced	\$5,160	

Wool—		
Wool, fleeces shorn.....	22,837	
Mohair and goat hair, fleeces shorn.....	50	
Value wool and mohair produced..	\$22,700	

Special crops—		
Potatoes, acres.....	207	
Sweet potatoes, acres.....	1,647	
All other vegetables, acres.....	1,621	

Orehard fruits—	Number bearing trees
Apples.....	3,680
Apricots.....	20,451
Cherries.....	1,182
Peaches and nectarines.....	154,553
Pears.....	4,158
Prunes and plums.....	6,095
Total.....	190,515

Tropical fruits—	Number bearing trees
Figs.....	37,676
Lemons.....	576
Oranges.....	10,492
Pomeloos.....	18
Olives.....	5,458
Total.....	54,291

Grapevines—	
Number in bearing.....	1,932,302

Small fruits—	
Strawberries, acres.....	95
Blackberries and dewberries, acres.....	53
All others, acres.....	13
Total.....	161

Nuts—	Number bearing trees
Almonds.....	33,726
Pecans.....	25
Walnuts.....	864
Total.....	34,701

## Irrigation.

Number of farms irrigated in 1909..	1,911
Acres irrigated in 1909.....	84,015
Acres enterprises were capable of irrigating in 1910.....	141,785
Acres included in projects.....	340,914
Main ditches, number.....	23
Length, miles.....	153
Laterals, number.....	34
Length, miles.....	274
Pumped wells, number.....	3
Cost of irrigation enterprises up to July 1, 1910.....	\$4,051,870
Average cost per acre irrigation enterprises were capable of irrigating in 1910.....	28.58

## Mineral Production in 1913.

Substance.	Amount.	Value.
Brick, thousand.....	300	\$2,400
Gold.....		253,166
Mineral paint, tons.....	255	1,530
Silver.....		671
Stone industry.....		14,482
Total.....		\$272,249
Number of mineral springs.....		2

SUTTER COUNTY.

Date of creation, February 18, 1850.				
Land area, 608 square miles.	Population-----	1890. 5,469	1900. 5,886	1910. 6,328
County seat, Yuba City, town.	Population-----	-----	-----	1,160
Population per square mile, 10.4.				
Elevation, 57 feet.	Highest.	Lowest.	Inches.	Inches.
1914: Temperature-----	-----	-----	Rainfall-----	Snow--- 0

Almost in the center of the far-famed valley of the Sacramento is located the county of Sutter, the larger portion of which lies between the Sacramento and Feather rivers directly at their confluence. The remaining portion of the county lies east of the Feather River, just south of Bear River. Surrounded by rivers on almost every side, it is evident that the soil of the county is largely river made, the wash of a thousand years from the Sierra Nevada and Coast Range mountains, and is deep and fertile, the equal of any in the whole State of California.

The western portion of Sutter County in particular is being rapidly developed. The large land holdings are being cut up and sold out in small tracts. Meridian is a prosperous little town, located in the western portion of the county, as well as Live Oak, in the northern part, and Nicolaus in the southern division.

The dairy industry is thriving, and there are a number of large creameries.

Sutter County is the home of the Thompson seedless grape, which is being grown so extensively in various valleys of the State. Most other fruits are grown with great success.

SUTTER COUNTY SUMMARY.

Number of Farms Classified by Size.		Domestic Animals on Farms and Ranges.	
3 to 9 acres-----	57	Cattle*—	
10 to 19 acres-----	101	Dairy cows-----	6,728
20 to 49 acres-----	142	Other cows-----	3,254
50 to 99 acres-----	91	Yearling heifers-----	1,939
100 to 174 acres-----	123	Calves-----	2,623
175 to 259 acres-----	84	Yearling steers and bulls-----	1,012
260 to 499 acres-----	123	Other steers and bulls-----	823
500 to 999 acres-----	78	Total-----	16,004
1,000 acres and over-----	74	Value-----	*\$465,202
Total-----	873	Horses—	
Total in 1900-----	728	Mature horses-----	4,869
Land and Farm Areas.		Yearling colts-----	587
Approximate land, acres-----	389,120	Spring colts-----	228
Land in farms in 1910-----	385,462	Total-----	5,684
Land in farms in 1900-----	293,287	Value-----	\$573,051
Improved land in farms in 1910-----	199,510	Mules—	
Improved land in farms in 1900-----	206,877	Mature mules-----	1,922
Woodland in farms-----	13,956	Yearling colts-----	107
Other unimproved land-----	171,996	Spring colts-----	67
Value of All Farm Property.		Total-----	2,096
Total value in 1910-----	\$19,115,593	Value-----	\$272,402
Total value in 1900-----	9,182,731	Asses and burros—	
Per cent increase 1900-1910-----	108.2	Number-----	20
Land in 1910-----	14,869,242	Value-----	\$6,670
Land in 1900-----	6,976,320	Swine—	
Buildings in 1910-----	2,032,535	Mature hogs-----	9,121
Buildings in 1900-----	987,700	Spring pigs-----	6,008
Implements and machinery in 1910---	458,269	Total-----	15,129
Implements and machinery in 1900---	313,780	Value-----	\$105,752
Domestic animals, poultry, and bees in 1910-----	1,755,547		
Domestic animals, poultry, and bees in 1900-----	904,931		

\*Includes animals, age or sex not specified.

## SUTTER COUNTY SUMMARY—Continued.

Domestic Animals on Farms and Ranges—Continued.			Special crops—	
Sheep—			Potatoes, acres	218
Rams, ewes, and wethers	51,135		Sweet potatoes, acres	41
Spring lambs	38,530		All other vegetables, acres	303
			Sugar beets, acres	27
Total	89,665		Orchard fruits—	Number bearing trees
Value	\$284,023		Apples	5,433
			Apricots	5,086
Goats—			Cherries	1,249
Number	511		Peaches and nectarines	149,057
Value	\$2,031		Pears	17,911
			Prunes and plums	65,723
Total value all domestic animals	\$1,709,131		Total	244,587
Poultry and bees—				Number bearing trees
Poultry of all kinds	68,861		Figs	4,675
Value	\$38,690		Lemons	602
Colonies of bees	2,055		Oranges	2,427
Value	\$7,726		Pomeles	18
			Olives	3,018
			Total	10,741
Principal Crops.			Grapevines—	
Description.	Acres.	Busbels.	Number in bearing	1,249,923
Corn	761	22,373	Small fruits—	
Oats	3,568	56,823	Strawberries, acres	1
Wheat	14,537	176,750	Blackberries and dewberries, acres	7
Barley	27,457	491,720	All others, acres	8
Kafir corn and milo maize	352	7,750	Total	16
Dry edible beans	2,766	76,201	Nuts—	Number bearing trees
Potatoes	218	23,419	Almonds	61,572
Hay and forage—	Acres.	Tons.	Pecans	11
Timothy and clover mixed	80	80	Walnuts	671
Clover alone	415	2,325	Total	62,289
Alfalfa	7,388	21,791		
Other tame and cultivated grasses	703	1,303		
Wild, salt, or prairie grasses	7,466	9,020		
Grains cut green	14,744	20,612		
All other hay and forage	1,948	1,986		
Total	32,744	57,017		
Poultry products—			Irrigation.	
Poultry raised, number	101,908		Number of farms irrigated in 1909	39
Eggs produced, dozens	420,196		Acres irrigated in 1909	1,173
Value of poultry and eggs produced	\$167,240		Acres enterprises were capable of irrigating in 1910	1,361
Honey and wax—			Acres included in projects	1,959
Honey produced, pounds	76,812		Main ditches, number	13
Wax produced, pounds	745		Length, miles	6
Value of honey and wax produced	\$4,909		Pumped wells, number	18
Wool—			Cost of irrigation enterprises up to July 1, 1910	\$18,800
Wool, fleeces shorn	149,821		Average cost per acre irrigation enterprises were capable of irrigating in 1910	\$13.81
Mohair and goat hair, fleeces shorn	800			
Value wool and mohair produced	\$110,738			

## Mineral Production.

Sutter shares with Yolo County the distinction of being the only section of the State which had no commercial output of some kind of mineral substance during 1913. Both clay and coal exist here, but deposits of neither mineral have been placed on a productive basis.



## TEHAMA COUNTY.

Date of creation, April 9, 1856.

Land area, 2,893 square miles.	Population-----	1890.	1900.	1910.
County seat, Red Bluff, city.	Population-----	9,916	10,996	11,401
Population per square mile, 3.9.		2,608	2,750	3,530
	Highest.	Lowest.	Inches.	Inches.
Elevation, 307 feet. 1914: Temperature---	108	28	Rainfall--27.51.	Snow--- 0

Tehama County occupies the upper or northern portion of the Sacramento Valley. It is 200 miles north of San Francisco and 120 miles north of Sacramento. Part of its eastern boundary follows the summit of the Sierra Nevada Mountains, and its western boundary lies along the summit of the Coast Range. Its greatest length is 78 miles; its width from north to south, 38 miles.

The Sacramento River is navigable to Red Bluff and steamboats from San Francisco and Sacramento make trips up and down during most of the year. The Sacramento River runs through the county from north to south. From this river there is a rise to the east and west until the summit of the mountain range is reached. South of Red Bluff and west of the river lie broad plains; beyond this, rolling hills developing into the foothills of the mountains, and then the mountains themselves, which rise quite abruptly to a height of from 3,000 to 9,000 feet.

Tehama County is well watered; numerous creeks carry streams from the mountain snows to the river.

The principal industries are horticulture, agriculture, stock raising, and lumbering. There is practically no mining. A large deposit of chrome ore to the west and valuable sulphur springs to the east are about all.

Olives are fast coming into favor as a crop and as a food. No attempts were made to plant them in quantity until within the past few years.

Grapes, and indeed all other fruits, grow remarkably well. A large winery is located on the Stanford ranch, in the southern part of the county.

Peaches are the principal fruit. They are shipped green, and are canned and dried. The bulk of the crop is dried.

Apples are grown only in the foothills. The chief apple-producing region of the county is at Manton, 35 miles to the northeast of Red Bluff, where very fine fruit is raised.

Berries and all small fruits do well. They come into the market early and sell readily.

In agriculture there has been a gradual change from the growing of wheat to fruit or other grains. Hay is made from a mixture of wild oats and wheat grown together and cut just when on the point of turning. It is cured on the ground and then stacked.

The owner of cattle, sheep, and goats finds it necessary to own or control two ranges, one in the valley for the winter months, and one in the mountains for the summer season. Considerable land has been withdrawn into temporary forest reserves. The number of men engaged in the stock business has greatly increased, and range land has been in greater demand as a consequence.

Sheep raising is easily the favorite branch of the stock business. This is the principal wool-producing county of northern California, and indeed of the State. The favorite breeds of sheep are Spanish Merino, French, Merino, Southdown, and Cotswold for wool, and Shropshire more particularly for mutton.

Of late years Angora goats have come into greater favor. They are hardy animals, readily adapting themselves to a mountainous and hilly country which no other animal can occupy. They will eat almost any thing, can protect themselves from wild animals, and their wood, or mohair, is in demand and brings a good price.

## TEHAMA COUNTY SUMMARY.

Number of Farms Classified by Size.			
Under 3 acres.....	7	Mules—	
3 to 9 acres.....	34	Mature mules .....	1,409
10 to 19 acres.....	119	Yearling colts .....	163
20 to 49 acres.....	198	Spring colts .....	103
50 to 99 acres.....	102	Total .....	1,675
100 to 174 acres.....	151	Value .....	\$171,979
175 to 259 acres.....	51	Asses and burros—	
260 to 499 acres.....	119	Number .....	23
500 to 999 acres.....	86	Value .....	\$7,880
1,000 acres and over.....	129	Swine—	
Total .....	1,006	Mature hogs .....	10,915
Total in 1900.....	1,055	Spring pigs .....	4,025
Land and Farm Areas.		Total .....	14,940
Approximate land, acres.....	1,851,520	Value .....	\$75,941
Land in farms in 1910.....	915,227	Sheep—	
Land in farms in 1900.....	950,763	Rams, ewes, and wethers.....	185,023
Improved land in farms in 1910.....	186,642	Spring lambs .....	112,713
Improved land in farms in 1900.....	269,693	Total .....	297,736
Woodland in farms.....	206,234	Value .....	\$850,456
Other unimproved land.....	522,351	Goats—	
Value of All Farm Property.		Number .....	28,473
Total value in 1910.....	\$16,821,178	Value .....	\$36,325
Total value in 1900.....	16,030,104	Total value all domestic animals	\$2,119,800
Per cent increase 1900-1910.....	4.9	Poultry and bees—	
Land in 1910.....	12,932,446	Poultry of all kinds.....	59,852
Land in 1900.....	11,720,120	Value .....	\$37,989
Buildings in 1910.....	1,234,375	Colonies of bees.....	786
Buildings in 1900.....	2,091,860	Value .....	\$1,636
Implements and machinery in 1910.....	494,932	Principal Crops.	
Implements and machinery in 1900.....	440,020	Description.....	Acres. Bushels.
Domestic animals, poultry, and bees		Corn .....	100 2,613
in 1910 .....	2,159,425	Oats .....	1,032 28,138
Domestic animals, poultry, and bees		Wheat .....	6,090 84,009
in 1900 .....	1,778,104	Barley .....	11,402 177,518
Domestic Animals on Farms and Ranges.		Dry edible beans.....	10 202
Cattle—		Potatoes .....	112 13,048
Dairy cows .....	3,462	Hay and forage—	Acres. Tons.
Other cows .....	10,691	Timothy alone .....	40 45
Yearling heifers .....	2,646	Timothy and clover mixed..	265 226
Calves .....	3,520	Clover alone .....	52 102
Yearling steers and bulls.....	2,590	Alfalfa .....	8,387 28,332
Other steers and bulls.....	2,400	Other tame and cultivated	
Total .....	25,309	grasses .....	258 272
Value .....	\$512,747	Wild, salt, or prairie grasses	2,184 1,844
Horses—		Grains cut green.....	13,157 13,218
Mature horses .....	5,073	Total .....	24,343 44,059
Yearling colts .....	525	Poultry products—	
Spring colts .....	278	Poultry raised, number.....	96,134
Total .....	5,876	Eggs produced, dozens.....	306,452
Value .....	\$464,472	Value poultry and eggs produced..	\$149,168

## TEHAMA COUNTY SUMMARY—Continued.

## Principal Crops—Continued.

Honey and wax—	
Honey produced, pounds.....	15,779
Wax produced, pounds.....	115
Value of honey and wax produced	\$1,198

Wool—	
Wool, fleeces shorn.....	336,373
Mohair and goat hair, fleeces shorn	36,119
Value wool and mohair produced.	\$349,689

Special crops—	
Potatoes, acres.....	112
Sweet potatoes, acres.....	30
All other vegetables, acres.....	292

Orchard fruits—	Number
	bearing trees
Apples.....	15,633
Apricots.....	30,446
Cherries.....	624
Peaches and nectarines.....	260,204
Pears.....	41,584
Prunes and plums.....	92,459

Total ..... 441,070

Tropical fruits—	Number
	bearing trees
Figs.....	3,176
Lemons.....	356
Oranges.....	10,744
Pomeloes.....	5
Olives.....	17,373

Total ..... 31,654

Grapevines—	
Number in bearing.....	1,307,218

Small fruits—	
Strawberries, acres.....	36
Blackberries and dewberries, acres.	7
All others, acres.....	6

Total ..... 49

Nuts—	Number
	bearing trees
Almonds.....	32,919
Pecans.....	10
Walnuts.....	1,569

Total ..... 34,555

## Irrigation.

Number of farms irrigated in 1909...	366
Acres irrigated in 1909.....	14,281
Acres enterprises were capable of	
irrigating in 1910.....	23,167
Acres included in projects.....	36,020
Main ditches, number.....	136
Length, miles.....	164
Laterals, number.....	41
Length, miles.....	40
Flowing wells, number.....	1
Pumped wells, number.....	141
Cost of irrigation enterprises up to	
July 1, 1910.....	\$263,055
Average cost per acre irrigation	
enterprises were capable of irrigat-	
ing in 1910.....	11.35

## Mineral Production in 1913.

Substance.	Amount.	Value.
Brick, thousand.....	300	\$1,800
Mineral water, gallons.....	75	42
Stone industry.....		600

Total ..... \$2,442

Number of mineral springs..... 11

## TRINITY COUNTY.

Date of creation, February 18, 1850.

Land area, 3,166 square miles.	Population-----	1890.	1900.	1910.
County seat, Weaverville, township.	Population-----	3,719	4,383	3,301
Population per square mile, 1.0.		768	968	674
	Highest.	Lowest.	Inches.	Inches.
Elevation, 2,162 feet.	1914: Temperature---	103	18	Rainfall---34.59
				Snow---2.0

Trinity County is situated in the Coast Range of mountains and is well drained by the Trinity, Mad, Eel, and Van Duzen rivers, and is well watered by the numerous creeks that carry streams of water from the mountain snows to the rivers and their tributaries. The higher mountain ranges, being covered with snow during the winter season, give ample supply for irrigation, and also provide an abundance of pasturage on the mountains. Trinity is bounded on the north by Siskiyou, on the east by Shasta and Tehama, on the south by Mendocino, and on the west by Humboldt County, thus being on the great mineral belt of the northwestern part of the State. Mining for gold has been the principal industry for fifty years. Hydraulic, placer, drift placer, dredge, and quartz mining have produced profitable results. Many other valuable minerals have been found, but owing to the lack of cheap transportation facilities, none of them has been developed to any extent. With an abundance of sugar pine, yellow pine, and fir timber ready for the market, the lumbering interests will be extensive as soon as railroad transportation is provided.

## TRINITY COUNTY SUMMARY.

Number of Farms Classified by Size.		Value of All Farm Property.	
Under 3 acres-----	6	Total value in 1910-----	\$1,591,469
3 to 9 acres-----	9	Total value in 1900-----	1,040,819
10 to 19 acres-----	9	Per cent increase 1900-1910-----	52.9
20 to 49 acres-----	24	Land in 1910-----	900,855
50 to 99 acres-----	23	Land in 1900-----	583,450
100 to 174 acres-----	148	Buildings in 1910-----	274,260
175 to 259 acres-----	23	Buildings in 1900-----	171,550
260 to 499 acres-----	41	Implements and machinery in 1910-----	69,119
500 to 999 acres-----	15	Implements and machinery in 1900-----	31,180
1,000 acres and over-----	10	Domestic animals, poultry, and bees in 1910-----	347,235
Total-----	308	Domestic animals, poultry, and bees in 1900-----	254,639
Total in 1900-----	272		
Land and Farm Areas.		Domestic Animals on Farms and Ranges.	
Approximate land, acres-----	2,026,240	Cattle-----	804
Land in farms in 1910-----	91,310	Dairy cows-----	5,143
Land in farms in 1900-----	76,038	Other cows-----	1,415
Improved land in farms in 1910-----	13,300	Yearling heifers-----	1,126
Improved land in farms in 1900-----	14,144	Calves-----	1,308
Woodland in farms-----	31,882	Yearling steers and bulls-----	2,089
Other unimproved land-----	46,128	Other steers and bulls-----	
		Total-----	11,885
		Value-----	\$211,324



## TRINITY COUNTY SUMMARY—Continued.

Domestic Animals on Farms and Ranges—Continued.		
<b>Horses—</b>		
Mature horses .....	1,150	
Yearling colts .....	117	
Spring colts .....	39	
Total .....	1,306	
Value .....	\$90,724	
<b>Mules—</b>		
Mature mules .....	142	
Yearling colts .....	19	
Spring colts .....	7	
Total .....	168	
Value .....	\$9,985	
<b>Asses and burros—</b>		
Number .....	8	
Value .....	\$670	
<b>Swine—</b>		
Mature hogs .....	2,594	
Spring pigs .....	1,457	
Total .....	4,051	
Value .....	\$17,281	
<b>Sheep—</b>		
Rams, ewes, and wethers .....	2,732	
Spring lambs .....	1,081	
Total .....	3,813	
Value .....	\$10,486	
<b>Goats—</b>		
Number .....	845	
Value .....	\$1,619	
Total value all domestic animals .....	\$342,089	
<b>Poultry and bees—</b>		
Poultry of all kinds .....	7,712	
Value .....	\$4,729	
Colonies of bees .....	98	
Value .....	\$417	

## Principal Crops.

Description.	Acres.	Bushels.
Corn .....	51	1,833
Oats .....	150	2,667
Wheat .....	377	5,274
Barley .....	39	1,210
Dry edible beans .....	4	275
Potatoes .....	143	20,467
<b>Hay and forage—</b>		
	Acres.	Tons.
Timothy alone .....	266	550
Timothy and clover mixed .....	1,549	2,974
Clover alone .....	135	251
Alfalfa .....	1,115	2,632
Other tame and cultivated grasses .....	33	46
Wild, salt, or prairie grasses .....	578	690
Grains cut green .....	1,665	1,765
All other hay and forage .....	9	21
Total .....	5,350	8,929
<b>Poultry products—</b>		
Poultry raised, number .....	10,800	
Eggs produced, dozens .....	31,776	
Value of poultry and eggs produced .....	\$15,957	

<b>Honey and wax—</b>		
Honey produced, pounds .....	1,005	
Wax produced, pounds .....	15	
Value of honey and wax produced .....	\$207	
<b>Wool—</b>		
Wool, fleeces shorn .....	2,603	
Mohair and goat hair, fleeces shorn .....	44	
Value wool and mohair produced .....	\$1,892	
<b>Special crops—</b>		
Potatoes, acres .....	143	
All other vegetables, acres .....	192	
<b>Orchard fruits—</b>		
	Number bearing trees	
Apples .....	4,272	
Apricots .....	41	
Cherries .....	247	
Peaches and nectarines .....	883	
Pears .....	738	
Prunes and plums .....	1,083	
Total .....	7,313	
<b>Tropical fruits—</b>		
	Number bearing trees	
Figs .....	20	
Lemons .....	2	
Total .....	22	
<b>Grapevines—</b>		
Number in bearing .....	2,842	
<b>Small fruits—</b>		
Strawberries, acres .....	5	
Blackberries and dewberries, acres .....	5	
All others, acres .....	5	
Total .....	15	
<b>Nuts—</b>		
	Number bearing trees	
Almonds .....	30	
Pecans .....	1	
Walnuts .....	58	
Total .....	91	

## Irrigation.

Number of farms irrigated in 1909 .....	201
Acres irrigated in 1909 .....	6,324
Acceage enterprises were capable of irrigating in 1910 .....	7,127
Acceage included in projects .....	9,513
Main ditches, number .....	208
Length, miles .....	228
Laterals, number .....	41
Length, miles .....	13
Pumped wells, number .....	1
Cost of irrigation enterprises up to July 1, 1910 .....	\$173,414
Average cost per acre irrigation enterprises were capable of irrigating in 1910 .....	\$24.33

## Mineral Production in 1913.

Substance.	Amount.	Value.
Gold .....		\$431,862
Quicksilver, flasks .....	4	161
Silver .....		2,119
Stone industry .....		1,000
Total .....		\$435,142
Number of mineral springs .....	4	

## TULARE COUNTY.

Date of creation, April 20, 1852.

Land area, 4,856 square miles.	Population-----	1890.	1900.	1910.
County seat, Visalia, city.	Population-----	24,574	18,375	35,440
Population per square mile, 7.3.		2,885	3,085	4,550
	Highest.	Lowest.	Inches.	Inches.
Elevation, 334 feet.	1914: Temperature---	108	25	Rainfall-- 6.89
				Snow--- 0

Tulare County is one of the largest counties of the great San Joaquin Valley, extending from the Sierra Nevada Mountains on the east to the Coast Range on the west, embracing a territory from 75 miles to 100 miles in width. The valley sweeps southward 250 miles to where the Tehachapi Mountains intersect with the Sierra and Coast ranges, forming the line between the so-called northern and southern California.

About one-half of the county is mountainous. Its eastern boundary, commencing at the crest of the Sierra, embraces Mount Whitney, whose hoary head reaches an altitude of 4,504 feet and is the highest summit in the United States. Out of these mountains flow many streams that furnish water to irrigate the level and fertile acres.

Wheat and small grains are grown without irrigation. Tulare County was at one time the banner wheat county, some individuals sowing five, ten, and twenty thousand acres, but farming on that scale is rapidly passing away. Still there are many thousand acres sown to wheat annually.

The principal agricultural products of Tulare County are wheat, barley, alfalfa, sugar beets, and Egyptian corn. The sugar beet factory at Visalia harvested 1,640 acres of beets in 1914, producing 8,536 tons of beets, and 2,112,100 pounds of sugar.

Tulare County produces large quantities of peaches and prunes, also pears, apricots, apples, olives, figs, plums, almonds, walnuts, raisins, table and wine grapes, oranges, lemons, and berries of all kinds. The citrus orchards in the districts around Exeter, Tulare, Porterville, and Lindsay are the largest and most successful in northern California. Up to April 2, 1915, Tulare County shipped 5,172 carloads of oranges and 180 of lemons.

Some of the largest raisin vineyards are to be found in Tulare County. The Muscat, Seedless Sultana, and Thompson's Seedless are the principal varieties grown. In the vicinity of Dinuba, Orosi, and Sultana this industry is especially flourishing.

The Kaweah is the largest river.

About 50 miles northeast of Visalia lies the Sequoia National Park, a reservation by the Government of the largest forest of *Sequoia gigantea* trees in existence. The reservation contains about 250 square miles. There are more than 3,000 sequoias in this forest that measure over 45 feet in circumference and 300 feet in height. The General Sherman in this forest is said to be the largest living tree in the United States. Over 100 feet from its base it is 80 feet in circumference.

## TULARE COUNTY SUMMARY.

Number of Farms Classified by Size.			
Under 3 acres.....	9	Swine—	
3 to 9 acres.....	171	Mature hogs .....	23,942
10 to 19 acres.....	390	Spring pigs .....	14,250
20 to 49 acres.....	1,247	Total .....	38,192
50 to 99 acres.....	647	Value .....	\$301,227
100 to 174 acres.....	597		
175 to 259 acres.....	198	Sheep—	
260 to 499 acres.....	364	Rams, ewes, and wethers.....	14,014
500 to 999 acres.....	197	Spring lambs .....	7,170
1,000 acres and over.....	201	Total .....	21,184
Total .....	4,021	Value .....	\$79,930
Total in 1900.....	2,212		
Land and Farm Areas.		Goats—	
Approximate land, acres.....	3,107,840	Number .....	297
Land in farms in 1910.....	1,045,231	Value .....	\$8,632
Land in farms in 1900.....	1,059,727	Total value all domestic animals	\$5,950,238
Improved land in farms in 1910.....	507,024		
Improved land in farms in 1900.....	546,289	Poultry and bees—	
Woodland in farms.....	161,360	Poultry of all kinds.....	191,965
Other unimproved land.....	376,847	Value .....	\$102,352
		Colonies of bees.....	9,568
		Value .....	\$30,627
Value of All Farm Property.			
Total value in 1910.....	\$76,539,642	Principal Crops.	
Total value in 1900.....	20,287,801		
Per cent increase 1900-1910.....	277.3	Description.....	Acres. Bushels.
Land in 1910.....	\$64,455,554	Corn .....	2,527 61,757
Land in 1900.....	15,898,600	Oats .....	1,281 25,524
Buildings in 1910.....	4,195,452	Wheat .....	66,567 761,459
Buildings in 1900.....	1,376,960	Barley .....	27,017 553,481
Implements and machinery in 1910.....	1,805,419	Kafir corn and milo maize.....	10,987 288,382
Implements and machinery in 1900.....	715,450	Dry edible beans.....	21 267
Domestic animals, poultry, and bees in 1910.....	6,083,217	Potatoes .....	677 57,026
Domestic animals, poultry, and bees in 1900.....	2,296,791	Hay and forage—	Acres. Tons.
		Timothy and clover mixed.....	35 23
		Clover alone .....	100 250
		Alfalfa .....	37,656 126,316
		Other tame and cultivated grasses .....	546 537
		Wild, salt, or prairie grasses .....	7,158 6,612
		Grains cut green.....	44,822 52,082
		All other hay and forage.....	1,278 3,040
		Total .....	91,595 188,810
Domestic Animals on Farms and Ranges.		Poultry products—	
Cattle*—		Poultry raised, number.....	204,167
Dairy cows .....	26,765	Eggs produced, dozen.....	1,033,110
Other cows .....	29,478	Value poultry and eggs produced..	\$325,658
Yearling heifers .....	11,911		
Calves .....	16,092	Honey and wax—	
Yearling steers and bulls.....	8,784	Honey produced, pounds.....	290,435
Other steers and bulls.....	10,429	Wax produced, pounds.....	4,743
Total .....	104,484	Value of honey and wax produced..	\$17,434
Value .....	*\$2,713,596		
Horses*—		Wool—	
Mature horses .....	18,917	Wool, fleeces shorn.....	33,150
Yearling colts .....	2,003	Mohair and goat hair, fleeces shorn	510
Spring colts .....	1,250	Value wool and mohair produced..	\$85,218
Total .....	22,200		
Value .....	*\$2,334,909	Special crops—	
Mules—		Potatoes, acres .....	677
Mature mules .....	3,149	Sweet potatoes, acres .....	46
Yearling colts .....	288	All other vegetables, acres.....	2,550
Spring colts .....	218	Sugar beets, acres.....	1,239
Total .....	3,655		
Value .....	\$491,410		
Asses and burros—			
Number .....	103		
Value .....	\$20,534		

\*Includes animals, age or sex not specified.

NOTE.—In 199, 96 square miles were transferred to Kings County.

## TULARE COUNTY SUMMARY—Continued.

Principal Crops—Continued.		Irrigation.		
Orchard fruits—	Number bearing trees	Number of farms irrigated in 1909...	3,048	
Apples .....	25,261	Acres irrigated in 1909.....	265,404	
Apricots .....	48,834	Acreage enterprises were capable of irrigating in 1910.....	337,938	
Cherries .....	316	Acreage included in projects.....	466,735	
Peaches and nectarines.....	714,494	Main ditches, number.....	752	
Pears .....	6,483	Length, miles .....	1,033	
Prunes and plums.....	264,337	Laterals, number .....	577	
Total .....	1,059,830	Length, miles .....	629	
Tropical fruits—	Number bearing trees	Flowing wells, number.....	79	
Figs .....	15,750	Pumped wells, number.....	794	
Lemons .....	41,069	Cost of irrigation enterprises up to July 1, 1910.....	\$5,634,379	
Oranges .....	801,151	Average cost per acre irrigation enterprises were capable of irrigating in 1910.....	16.67	
Pomeloes .....	8,114			
Olives .....	5,605			
Total .....	872,657			
Grapevines—				
Number in bearing.....	7,227,491			
Small fruits—				
Strawberries, acres .....	19			
Blackberries and dewberries, acres.....	70			
All others, acres.....	30			
Total .....	119			
Nuts—	Number bearing trees			
Almonds .....	1,977			
Pecans .....	26			
Walnuts .....	1,942			
Total .....	3,945			
		Mineral Production in 1913.		
		Substance.	Amount.	Value.
		Brick, thousand .....	6,000	\$45,000
		Feldspar, tons .....	1,429	5,050
		Gems .....		1,500
		Magnesite, tons .....	7,858	62,864
		Marble, cubic feet.....	392	796
		Quartz, tons .....	80	200
		Stone industry .....		4,350
		Total .....		\$119,760
		Number of mineral springs.....		18



## TUOLUMNE COUNTY.

Date of creation, February 18, 1850.

Land area, 2,190 square miles.	Population-----	1890.	1900.	1910.
County seat, Sonora, city.	Population-----	6,082	11,166	9,979
Population per square mile, 4.6.	Population-----	1,441	1,922	2,029
Jamestown (Station):	Highest.	Lowest.	Inches.	Inches.
Elevation, 1,471 feet. 1914: Temperature---	102	20	Rainfall--38.74	Snow---3.0

Tuolumne County is in central California. The eastern portion extends into the western slope of the Sierra Nevada range. The entire surface is of a rugged character, with many small and fertile valleys and meadows, and sloping hills heavily covered with timber.

During recent years the mining industry has been steadily improving. While mining is the greatest factor, the timber industry is fast coming to the front. Some of the best producing mines in the State are located in Tuolumne County. The timber belt is great in dimensions, comprising 60 per cent sugar pine, 20 per cent yellow pine, and the balance cedar and fir.

The famous Mother Lode traverses the entire western portion of the county. The foot wall of the Mother Lode is serpentine, with eruptive dikes accompanying, while mineralized slate forms the hanging wall. All east of the Mother Lode is what is known as the East Belt, upon which are situated many fine producing mines, together with prospects held under possessory title. The East Belt has made quite a record and is the principal mining section of the southern mines.

The main rivers are the Stanislaus and Tuolumne, tributaries of the San Joaquin. The Tuolumne has its source entirely within the limits of the county, and may be termed the river of a thousand lakelets, although a number of these strictly come under the head of lakes. The main, or principal branch of the river flows through the Hetch Hetchy Valley. The Stanislaus River, to the north, with one of its branches, forms the boundary line of this county and Calaveras.

In many places the soil is well adapted to fruit growing.

Stock raising is controlled mostly by feed—by those who have ranges in the mountains for summer and pasturages in the foothills for winter. In the mountains in certain sections there are meadows upon which grows the finest kind of bunch grass, while upon the hillsides wild oats and timothy afford a splendid feed.

## TUOLUMNE COUNTY SUMMARY.

Number of Farms Classified by Size.			
Under 3 acres.....	1	Swine—	
3 to 3 acres.....	4	Mature hogs.....	2,590
10 to 19 acres.....	15	Spring pigs.....	1,303
20 to 49 acres.....	28	Total.....	3,893
50 to 99 acres.....	27	Value.....	\$21,620
100 to 174 acres.....	105	Sheep—	
175 to 259 acres.....	35	Rams, ewes, and wethers.....	1,795
260 to 499 acres.....	88	Spring lambs.....	671
500 to 999 acres.....	43	Total.....	2,466
1,000 acres and over.....	40	Value.....	\$8,658
Total.....	386	Goats—	
Total in 1900.....	457	Number.....	1,609
		Value.....	\$3,868
Land and Farm Areas.		Total value all domestic animals.....	\$585,892
Approximate land, acres.....	1,401,600	Poultry and bees—	
Land in farms in 1910.....	193,072	Poultry of all kinds.....	15,989
Land in farms in 1900.....	204,758	Value.....	\$9,114
Improved land in farms in 1910.....	36,407	Colonies of bees.....	363
Improved land in farms in 1900.....	36,461	Value.....	\$1,061
Woodland in farms.....	62,215		
Other unimproved land.....	94,450		
Value of All Farm Property.		Principal Crops.	
Total value in 1910.....	\$2,942,322	Description.....	Acres. Bushels.
Total value in 1900.....	2,131,145	Corn.....	7 156
Per cent increase 1900-1910.....	38.1	Oats.....	425 7,447
Land in 1910.....	1,779,470	Wheat.....	277 5,373
Land in 1900.....	1,284,260	Barley.....	579 5,055
Buildings in 1910.....	451,955	Dry edible beans.....	3 61
Buildings in 1900.....	397,850	Potatoes.....	114 18,808
Implements and machinery in 1910.....	114,830	Hay and forage—	Acres. Tons.
Implements and machinery in 1900.....	102,070	Timothy alone.....	12 18
Domestic animals, poultry, and bees		Timothy and clover mixed.....	128 152
in 1910.....	596,067	Clover alone.....	110 218
Domestic animals, poultry, and bees		Alfalfa.....	145 475
in 1900.....	346,965	Other tame and cultivated	
		grasses.....	254 264
		Wild, salt, or prairie grasses.....	1,740 1,636
		Grains cut green.....	6,224 6,799
		All other hay and forage.....	11 22
		Total.....	8,624 9,534
Domestic Animals on Farms and Ranges.		Poultry products—	
Cattle*—		Poultry raised, number.....	22,710
Dairy cows.....	1,773	Eggs produced, dozen.....	94,507
Other cows.....	8,415	Value of poultry and eggs produced.....	\$36,457
Yearling heifers.....	2,040	Honey and wax—	
Calves.....	2,977	Honey produced, pounds.....	12,310
Yearling steers and bulls.....	1,531	Wax produced, pounds.....	65
Other steers and bulls.....	1,223	Value of honey and wax produced.....	\$879
Total.....	18,659	Wool—	
Value.....	*\$377,606	Wool, fleeces shorn.....	1,408
Horses—		Mohair and goat hair, fleeces shorn.....	177
Mature horses.....	2,053	Value wool and mohair produced.....	\$996
Yearling colts.....	242	Special crops—	
Spring colts.....	196	Potatoes, acres.....	114
Total.....	2,491	Sweet potatoes, acres.....	2
Value.....	\$165,930	All other vegetables, acres.....	232
Mules—		Orchard fruits—	Number bearing trees
Mature mules.....	76	Apples.....	13,544
Yearling colts.....	7	Apricots.....	162
Spring colts.....	8	Cherries.....	144
Total.....	91	Peaches and nectarines.....	3,065
Value.....	\$7,055	Pears.....	1,056
Asses and burros—		Prunes and plums.....	1,404
Number.....	26	Total.....	19,554
Value.....	\$1,155		

\*Includes animals, age or sex not specified.

## TUOLUMNE COUNTY SUMMARY—Continued.

Principal Crops—Continued.		Irrigation.	
Tropical fruits—	Number bearing trees	Number of farms irrigated in 1909—	157
Figs -----	237	Acres irrigated in 1909 -----	2,035
Lemons -----	6	Acreeage enterprises were capable of irrigating in 1910 -----	2,083
Oranges -----	114	Acreeage included in projects -----	5,958
Olives -----	10	Main ditches, number -----	62
Total -----	367	Length, miles -----	153
		Laterals, number -----	11
		Length, miles -----	24
		Flowing wells, number -----	2
		Pumped wells, number -----	4
Grapevines—		Cost of irrigation enterprises up to July 1, 1910 -----	\$180,474
Number in bearing -----	95,811	Average cost per acre irrigation enterprises were capable of irrigating in 1910 -----	\$86.64
Small fruits—			
Strawberries, acres -----	5		
Blackberries and dewberries, acres -----	8		
All others, acres -----	6		
Total -----	19		
		Mineral Production in 1913.	
		Substance.	Amount. Value.
		Copper, pounds -----	893 \$138
		Gold -----	974,409
		Lead, pounds -----	1,206 53
		Lime, barrels -----	75,000 85,000
		Limestone, tons -----	12,446 20,676
		Marble, cubic feet -----	37,312 93,726
		Silver -----	24,381
Nuts—	Number bearing trees	Total -----	\$1,198,383
Almonds -----	54	Number of mineral springs -----	1
Pecans -----	1		
Walnuts -----	175		
Total -----	230		

## VENTURA COUNTY.

Date of creation, March 22, 1872.

		1890.	1900.	1910.
Land area, 1,878 square miles.	Population-----	10,071	14,367	18,347
County seat, Ventura, city.	Population-----	2,320	2,470	2,945
Population per square mile, 9.8.				
Ojai Valley (Station):	Highest.	Lowest.	Inches.	Inches.
Elevation, 900 feet.	1914: Temperature...101	27	Rainfall...36.83	Snow... 0

Ventura County, one of the smallest of the group of seven southern counties, lies between Santa Barbara County on the north and west and Los Angeles County on the south and east, on the shores of Santa Barbara Channel. The county is triangular in shape, one face of the triangle, full 50 miles, fronting the ocean.

Of its area of 1,878 square miles, less than one-fourth is under cultivation. Back from the coast in all directions rise rugged mountain ranges, whose hearts are pierced in every direction with canyons and valleys of varying lengths. The entire northern section of the county is mountainous, but between the ranges here and there are to be found little valleys, whose soil is most productive. These two rivers, the Santa Clara and the San Buenaventura, rise in these northern mountains, their sources being separated but a few miles. The Piru River, the Sespe, and the Santa Paula River, each of considerable length from its winding through the mountain gorges and canyons, flow into and form the Santa Clara River, which enters the county on the southeastern border, and flows in a generally western direction straight across to the sea.

Every variety of plant life does well in this section.

The narrow stretch of coast from southern Santa Barbara County, through Ventura County and including the northern portion of Los Angeles County, is the great Lima bean section. The culture of sugar beets supports the Oxnard sugar factory.

Other products of the county are apricots, walnuts, lemons, and oranges.



## VENTURA COUNTY SUMMARY.

Number of Farms Classified by Size.		Swine—		
Under 3 acres.....	13	Mature hogs .....	6,984	
3 to 9 acres.....	87	Spring pigs .....	3,514	
10 to 19 acres.....	120			
20 to 49 acres.....	199	Total .....	10,498	
50 to 99 acres.....	214	Value .....	\$87,633	
100 to 174 acres.....	207			
175 to 259 acres.....	142	Sheep—		
260 to 499 acres.....	155	Rams, ewes, and wethers.....	16,113	
500 to 999 acres.....	90	Spring lambs .....	15,658	
1,000 acres and over.....	66			
		Total .....	31,771	
Total .....	1,293	Value .....	\$119,783	
Total in 1900.....	1,269	Goats—		
		Number .....	621	
		Value .....	\$1,273	
Land and Farm Areas.		Total value all domestic animals	\$2,826,239	
Approximate land, acres.....	1,201,920	Poultry and bees—		
Land in farms in 1910.....	550,199	Poultry of all kinds.....	60,921	
Land in farms in 1900.....	552,359	Value .....	\$34,216	
Improved land in farms in 1910.....	213,868	Colonies of bees.....	23,714	
Improved land in farms in 1900.....	174,419	Value .....	\$98,118	
Woodland in farms.....	56,061			
Other unimproved land.....	280,270			
Value of All Farm Property.		Principal Crops.		
Total value in 1910.....	\$48,262,645	Description.	Acres.	Bushels.
Total value in 1900.....	21,433,487	Corn .....	2,409	58,995
Per cent increase 1900-1910.....	125.2	Oats .....	1,138	27,901
Land in 1910.....	\$11,823,120	Wheat .....	2,896	67,366
Land in 1900.....	18,549,290	Barley .....	10,077	309,682
Buildings in 1910.....	2,365,140	Dry edible beans.....	58,744	1,313,156
Buildings in 1900.....	1,491,250	Potatoes .....	264	30,124
Implements and machinery in 1910.....	1,112,812	Hay and forage—	Acres.	Tons.
Implements and machinery in 1900.....	482,270	Clover alone .....	30	100
Domestic animals, poultry, and bees		Alfalfa .....	1,952	6,960
in 1910.....	2,958,573	Other tame and cultivated		
Domestic animals, poultry, and bees		grasses .....	23	44
in 1900.....	910,677	Wild, salt, or prairie grasses.....	20	40
		Grains cut green.....	49,044	70,193
		All other hay and forage.....	477	1,589
		Total .....	51,546	78,920
Domestic Animals on Farms and Ranges.		Poultry products—		
Cattle*—		Poultry raised, number.....		61,703
Dairy cows .....	2,666	Eggs produced, dozen.....		372,111
Other cows .....	5,887	Value of poultry and eggs produced		\$124,710
Yearling heifers .....	2,139	Honey and wax—		
Calves .....	2,442	Honey produced, pounds.....	1,839,986	
Yearling steers and bulls.....	2,095	Wax produced, pounds.....	20,918	
Other steers and bulls.....	10,850	Value of honey and wax produced		\$109,785
		Wool—		
Total .....	29,929	Wool, fleeces shorn .....		21,465
Value .....	*\$701,498	Mohair and goat hair, fleeces shorn.....		400
Horses*—		Value wool and mohair produced..		\$14,306
Mature horses .....	9,955	Special crops—		
Yearling colts .....	906	Potatoes, acres .....		264
Spring colts .....	589	Sweet potatoes, acres.....		10
		All other vegetables, acres.....		588
Total .....	11,480	Sugar beets, acres.....		14,333
Value .....	*\$1,497,792	Orchard fruits—		
Mules—		Apples .....	Number	bearing trees
Mature mules .....	2,250	Apricots .....	15,179	
Yearling colts .....	66	Cherries .....	219,836	
Spring colts .....	46	Peaches and nectarines.....	392	
		Pears .....	8,943	
Total .....	2,362	Prunes and plums.....	2,597	
Value .....	\$407,950	Total .....	12,541	
Asses and burros—				259,682
Number .....	60			
Value .....	\$10,310			

\*Includes animals, age or sex not specified.

## VENTURA COUNTY SUMMARY—Continued.

Principal Crops—Continued.		Irrigation.	
Tropical fruits—	Number bearing trees	Number of farms irrigated in 1909----	489
Figs -----	618	Acres irrigated in 1909-----	25,273
Lemons -----	95,018	Acres enterprises were capable of	
Oranges -----	131,681	irrigating in 1910-----	49,407
Pomeloes -----	392	Acres included in projects-----	56,357
Olives -----	25,961	Main ditches, number-----	148
		Length, miles -----	177
Total -----	253,754	Laterals, number -----	53
		Length, miles -----	87
Grapevines—		Flowing wells, number -----	32
Number in bearing-----	36,398	Pumped wells, number-----	157
		Cost of irrigating enterprises up to	
Small fruits—		July 1, 1910-----	\$2,262,205
Strawberries, acres -----	14	Average cost per acre irrigation	
Blackberries and dewberries, acres--	7	enterprises were capable of irrigating	
All others, acres-----	10	in 1910 -----	\$45.79
Total -----	31		
		Mineral Production in 1913.	
Nuts—	Number bearing trees	Substance.	Amount. Value.
Almonds -----	12,057	Brick, thousand -----	1,023 \$6,085
Pecans -----	301	Clay, tons -----	3,000 2,990
Walnuts -----	98,622	Natural gas, thousand-----	62,200 6,220
Total -----	110,984	Petroleum, barrels -----	899,007 907,997
		Sandstone, cubic feet -----	300 150
		Other minerals -----	1,530
		Total -----	\$924,972
		Number of mineral springs-----	9

## YOLO COUNTY.

Date of creation, February 18, 1850.

		1890.	1900.	1910.
Land area, 1,014 square miles.	Population-----	12,684	13,618	13,926
County seat, Woodland, city.	Population-----	3,069	2,886	3,187
Population per square mile, 13.7.				
Davis (Station):	Highest.	Lowest.	Inches.	Inches.
Elevation, 51 feet.	1914: Temperature---	104	26	Rainfall---22.25
				Snow--- 0

Yolo County is situated in a delta of the Sacramento River, where it changes from a southerly to a westerly course on its way to the Pacific. About 75 per cent of the county consists of level land, the balance being rolling hills and mountains. The principal pursuits of its inhabitants are farming, stock raising, and fruit growing.

Hops are produced along the river bottoms. There is a considerable acreage in barley and wheat, and in fruits, apricots, peaches, and prunes are the leading crops.

Eucalyptus trees have been planted upon 1,790 acres. These trees, of which 320 acres are two years old, show a marvelous growth and bid fair to add great value to our forest products. The former value of land where these trees are now planted has increased fivefold. This industry is in its infancy, but is receiving much attention, as an increased acreage will be planted.

Yolo County boasts one of the best equipped flour mills in the State.

The poultry industry is growing yearly.

The county has a navigable river front of 90 miles along the Sacramento River, which affords at all seasons a cheap and ready means of transportation for the numerous products grown along its banks.

The reclamation of overflowed lands (which are very fertile) grow apace with other developments. Many large tracts have either been reclaimed, or are in course of reclamation.

At Davis, upon 685 acres of very fertile land, is located the State Agricultural Farm, which is affiliated with the State University, and which is presided over by competent professors, who instruct in various branches of agriculture, dairying, etc. This college is very popular, and its courses are being taken advantage of by very many students.

Yolo is one of the two counties in California that produces no minerals, the other being Sutter County.

## YOLO COUNTY SUMMARY.

## Number of Farms Classified by Size.

Under 3 acres.....	4
3 to 9 acres.....	53
10 to 19 acres.....	115
20 to 49 acres.....	283
50 to 99 acres.....	166
100 to 174 acres.....	170
175 to 259 acres.....	83
260 to 499 acres.....	189
500 to 999 acres.....	107
1,000 acres and over.....	85
Total .....	1,255
Total in 1900.....	1,214

## Land and Farm Areas.

Approximate land, acres.....	648,960
Land in farms in 1910.....	463,383
Land in farms in 1900.....	552,065
Improved land in farms in 1910.....	317,268
Improved land in farms in 1900.....	351,213
Woodland in farms.....	77,576
Other unimproved land.....	68,539

## Value of All Farm Property.

Total value in 1910.....	\$31,798,096
Total value in 1900.....	19,989,751
Per cent increase 1900-1910.....	59.1
Land in 1910.....	25,684,710
Land in 1900.....	15,906,280
Buildings in 1910.....	2,799,277
Buildings in 1900.....	1,935,590
Implements and machinery in 1910.....	795,162
Implements and machinery in 1900.....	510,430
Domestic animals, poultry, and bees in 1910.....	2,518,947
Domestic animals, poultry, and bees in 1900.....	1,637,451

## Domestic Animals on Farms and Ranges.

Cattle—	
Dairy cows .....	7,197
Other cows .....	3,761
Yearling heifers .....	2,654
Calves .....	2,649
Yearling steers and bulls.....	1,194
Other steers and bulls.....	1,522

Total .....	18,977
Value .....	\$553,417

## Horses—

Mature horses .....	7,127
Yearling colts .....	814
Spring colts .....	374

Total .....	8,315
Value .....	\$907,487

## Mules—

Mature mules .....	3,501
Yearling colts .....	265
Spring colts .....	189

Total .....	3,955
Value .....	\$555,410

## Asses and burros—

Number .....	46
Value .....	\$10,480

## Swine—

Mature hogs .....	15,483
Spring pigs .....	8,714
Total .....	24,197
Value .....	\$152,155

## Sheep—

Rams, ewes, and wethers.....	49,807
Spring lambs .....	29,639
Total .....	79,446
Value .....	\$284,627

## Goats—

Number .....	716
Value .....	\$1,552

Total value all domestic animals \$2,465,128

## Poultry and bees—

Poultry of all kinds.....	76,972
Value .....	\$43,326
Colonies of bees.....	2,442
Value .....	\$10,472

## Principal Crops.

Description.	Acres.	Bushels.
Corn .....	201	5,123
Oats .....	515	12,365
Wheat .....	13,452	237,593
Barley .....	49,530	1,236,884
Kafir corn and milo maize.....	21	710
Dry edible beans.....	1,820	50,974
Potatoes .....	402	45,493
Hay and forage—	Acres.	Tons.
Clover alone .....	326	1,080
Alfalfa .....	16,496	66,110
Other tame and cultivated grasses .....	3,927	5,323
Wild, salt, or prairie grasses .....	534	740
Grains cut green.....	24,479	31,106
All other hay and forage....	97	424

Total .....

## Poultry products—

Poultry raised, number.....	84,010
Eggs produced, dozen.....	347,209
Value poultry and eggs produced..	\$131,892

## Honey and wax—

Honey produced, pounds.....	106,982
Wax produced, pounds.....	1,125
Value of honey and wax produced..	\$8,313

## Wool—

Wool, fleeces shorn.....	82,602
Mohair and goat hair, fleeces shorn .....	316
Value wool and mohair produced..	\$76,497

## Special crops—

Potatoes, acres .....	402
Sweet potatoes, acres.....	31
All other vegetables, acres.....	1,086
Sugar beets, acres.....	5,714



## YOLO COUNTY SUMMARY—Continued.

Principal Crops—Continued.		Nuts—		Number bearing trees.
Orchard fruits—	Number bearing trees.	Almonds -----		149,019
Apples -----	2,512	Pecans -----		9
Apricots -----	117,228	Walnuts -----		1,270
Cherries -----	4,534			
Peaches and nectarines -----	116,003	Total -----		150,822
Pears -----	38,115			
Prunes and plums -----	119,193			
Total -----	397,748			
Tropical fruits—	Number bearing trees.	Irrigation.		
Figs -----	10,476	Number of farms irrigated in 1909...		333
Lemons -----	183	Acres irrigated in 1909.....		11,754
Oranges -----	2,371	Acreage enterprises were capable of irrigating in 1910.....		14,697
Pomeloes -----	1,325	Acreage included in projects.....		55,967
Olives -----	4,482	Main ditches, number.....		8
Total -----	18,858	Length, miles -----		87
Grapevines—		Laterals, number -----		8
Number in bearing.....	2,568,019	Length, miles -----		83
Small fruits—		Pumped wells, number.....		58
Strawberries, acres -----	1	Cost of irrigation enterprises up to July 1, 1910.....		\$311,660
Blackberries and dewberries, acres.....	6	Average cost per acre irrigation enterprises were capable of irrigat- ing in 1910.....		\$21.21
All others, acres.....	3			
Total -----	10			

## YUBA COUNTY.

Date of creation, February 18, 1850.

Land area, 639 square miles.	Population-----	1890. 9,636	1900. 8,620	1910. 10,042
County seat, Marysville, city.	Population-----	3,991	3,497	5,430
Population per square mile, 15.7.				
	Highest.	Lowest.	Inches.	Inches.
Elevation, 67 feet.	1914: Temperature---105	28	Rainfall---20.64	Snow--- 0

Yuba County is about half valley and half mountains. In the mountainous portion the industries are mining, lumbering, and stock raising. Deciduous fruits of all kinds are also raised with success.

At Hammonton and Marigold, on the Yuba River, dredge mining is carried on extensively. The machines are in operation day and night. Many important quartz mines are operated. The Feather River forms most of the western boundary. This stream is the second largest watercourse in the Sacramento Valley, and is navigable as far up as Marysville. Bear River is the southern boundary of the county. The Yuba River passes through the county about midway. These rivers are never failing in water supply. Subterranean water is available in most parts of the county. There are two irrigation districts that take water from the Yuba River.

The county has at Wheatland probably the largest hop fields in California. The production of gold ranks fourth among the counties of the State. Farm crops are not large, wheat having the largest acreage, and in fruits, pears and peaches take the lead.

Much of the desirable area of the county is practically undeveloped.

## YUBA COUNTY SUMMARY.

Number of Farms Classified by Size.		Value of All Farm Property.	
3 to 9 acres-----	13	Total value in 1910-----	\$3,666,211
10 to 19 acres-----	20	Total value in 1900-----	4,703,613
20 to 49 acres-----	33	Per cent increase 1900-1910-----	41.7
50 to 99 acres-----	34	Land in 1910-----	4,911,611
100 to 174 acres-----	82	Land in 1900-----	3,375,150
175 to 259 acres-----	30	Buildings in 1910-----	688,565
260 to 499 acres-----	93	Buildings in 1900-----	637,130
500 to 999 acres-----	64	Implements and machinery in 1910--	171,735
1,000 acres and over-----	67	Implements and machinery in 1900--	151,650
Total-----	436	Domestic animals, poultry, and bees	
Total in 1900-----	483	in 1910-----	894,300
		Domestic animals, poultry, and bees	
		in 1900-----	539,683
Land and Farm Areas.		Domestic Animals on Farms and Ranges.	
Approximate land, acres-----	408,960	Cattle—	
Land in farms in 1910-----	249,108	Dairy cows-----	2,255
Land in farms in 1900-----	312,321	Other cows-----	4,773
Improved land in farms in 1910-----	94,250	Yearling heifers-----	1,628
Improved land in farms in 1900-----	154,013	Calves-----	1,827
Woodland in farms-----	70,175	Yearling steers and bulls-----	1,152
Other unimproved land-----	84,683	Other steers and bulls-----	1,959
		Total-----	13,594
		Value-----	\$276,046

## YUBA COUNTY SUMMARY—Continued.

Domestic Animals on Farms and Ranges—Continued.		
<b>Horses—</b>		
Mature horses .....	2,803	
Yearling colts .....	288	
Spring colts .....	153	
Total .....	3,244	
Value .....	\$278,764	
<b>Mules—</b>		
Mature mules .....	726	
Yearling colts .....	48	
Spring colts .....	26	
Total .....	800	
Value .....	\$78,900	
<b>Asses and burros—</b>		
Number .....	31	
Value .....	\$3,515	
<b>Swine—</b>		
Mature hogs .....	3,288	
Spring pigs .....	2,251	
Total .....	5,539	
Value .....	\$32,101	
<b>Sheep—</b>		
Rams, ewes, and wethers .....	40,344	
Spring lambs .....	27,318	
Total .....	67,662	
Value .....	\$204,939	
<b>Goats—</b>		
Number .....	502	
Value .....	\$964	
Total value all domestic animals .....	\$875,229	
<b>Poultry and bees—</b>		
Poultry of all kinds .....	27,936	
Value .....	\$18,661	
Colonies of bees .....	149	
Value .....	\$410	

## Principal Crops.

Description.	Acres.	Bushels.
Corn .....	360	5,645
Oats .....	1,740	31,834
Wheat .....	10,376	74,227
Barley .....	2,801	36,806
Dry edible beans .....	50	1,112
Potatoes .....	124	7,693
<b>Hay and forage—</b>		
Timothy alone .....	30	40
Timothy and clover mixed .....	73	160
Clover alone .....	176	345
Alfalfa .....	1,798	4,335
Other tame and cultivated grasses .....	283	698
Wild, salt, or prairie grasses .....	3,097	2,421
Grains cut green .....	11,456	10,128
All other hay and forage .....	97	61
Total .....	17,010	18,188
<b>Poultry products—</b>		
Poultry raised, number .....	44,202	
Eggs produced dozen .....	111,892	
Value of poultry and eggs produced .....	\$36,938	

<b>Honey and wax—</b>	
Honey produced, pounds .....	545
Wax produced, pounds .....	10
Value of honey and wax produced .....	\$83
<b>Wool—</b>	
Wool, fleeces shorn .....	63,383
Mohair and goat hair, fleeces shorn .....	208
Value wool and mohair produced .....	\$45,777
<b>Special crops—</b>	
Potatoes, acres .....	124
Sweet potatoes, acres .....	6
All other vegetables, acres .....	235
<b>Orchard fruits—</b>	
	Number bearing trees
Apples .....	5,468
Apricots .....	1,481
Cherries .....	559
Peaches and nectarines .....	8,744
Pears .....	10,220
Prunes and plums .....	3,487
Total .....	30,264
<b>Tropical fruits—</b>	
	Number bearing trees
Figs .....	3,159
Lemons .....	109
Oranges .....	1,263
Olives .....	6,600
Total .....	11,205
<b>Grapes—</b>	
Grapes, vines .....	162,751
<b>Small fruits—</b>	
Strawberries, acres .....	4
Blackberries and dewberries, acres .....	6
All others, acres .....	9
Total .....	19
<b>Nuts—</b>	
	Number bearing trees
Almonds .....	3,163
Pecans .....	6
Walnuts .....	287
Total .....	3,458

## Irrigation.

Number of farms irrigated in 1909 .....	112
Acres irrigated in 1909 .....	3,073
Acreage enterprises were capable of irrigating in 1910 .....	6,401
Acreage included in projects .....	46,322
Main ditches, number .....	36
Length, miles .....	128
Laterals, number .....	13
Length, miles .....	87
Pumped wells, number .....	11
Cost of irrigation enterprises up to July 1, 1910 .....	\$198,268
Average cost per acre irrigation enterprises were capable of irrigating in 1910 .....	30.97

## Mineral Production in 1913.

Substance.	Value.
Gold .....	\$2,491,595
Silver .....	7,571
Stone industry .....	8,063
Total .....	\$2,507,139

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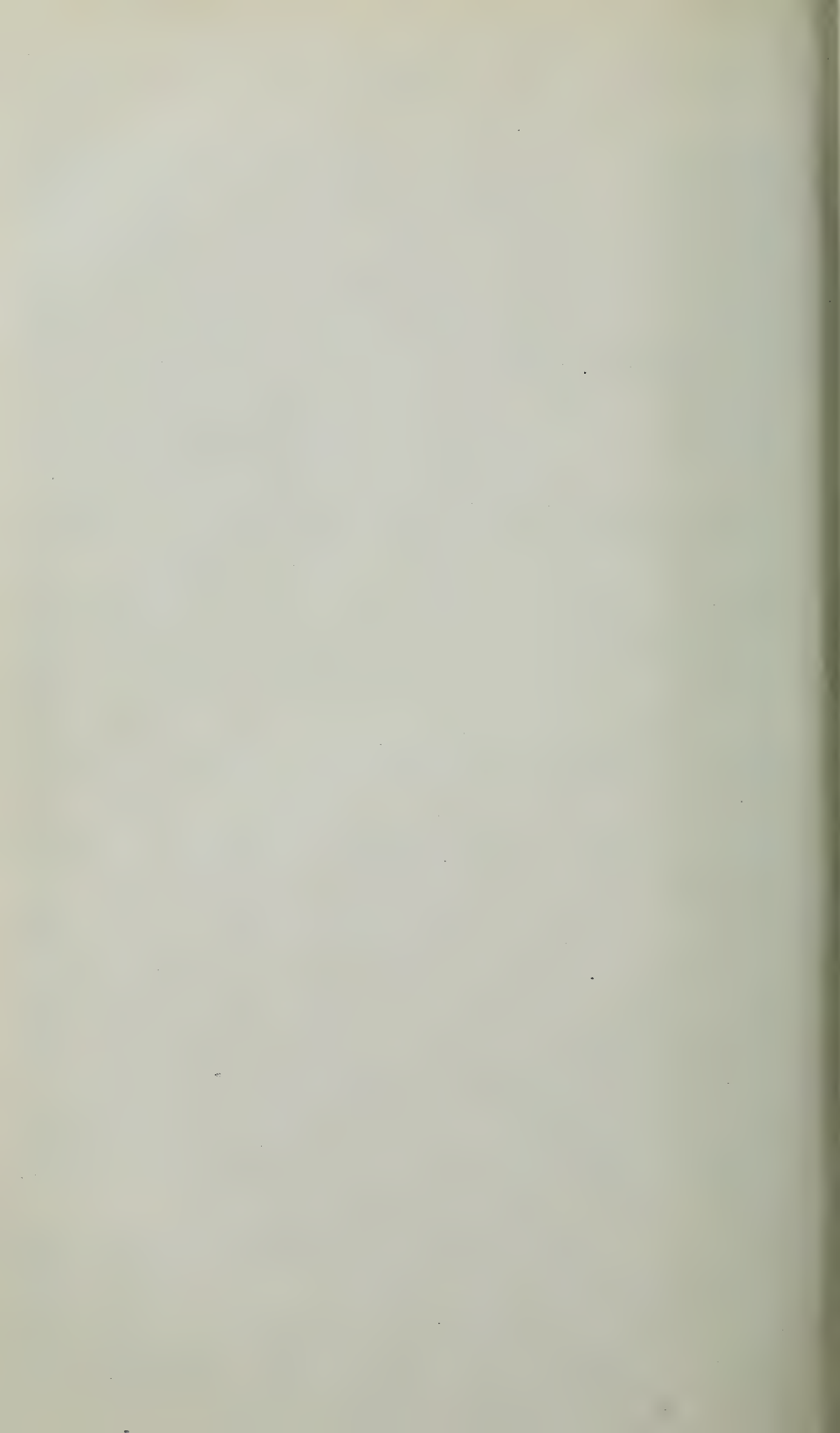
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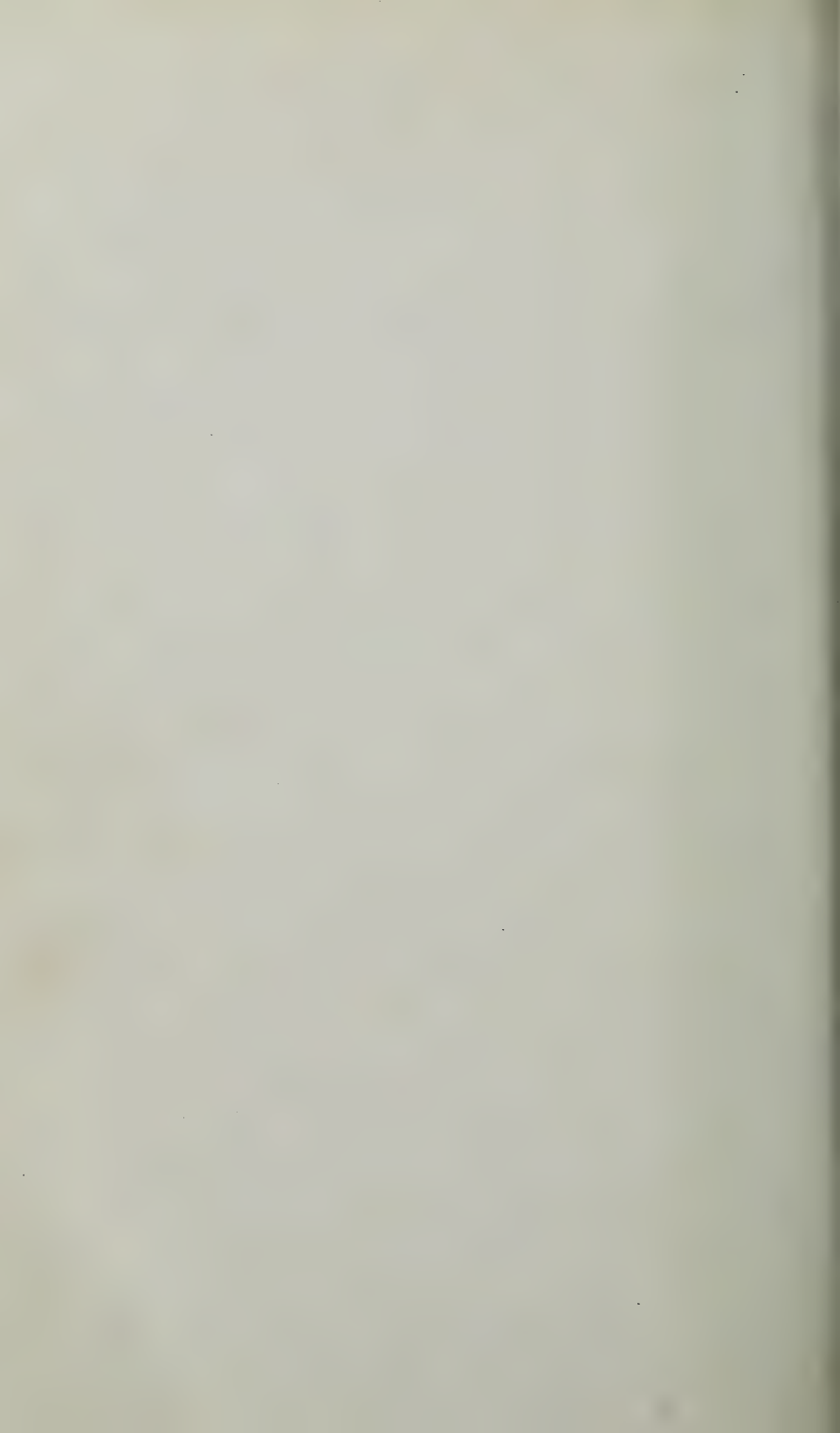
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Twenty-Eighth Annual Report

OF THE

# Industrial Home for the Adult Blind

OF THE

State of California

1912-1913



CALIFORNIA  
STATE PRINTING OFFICE  
1914



## BOARD OF DIRECTORS.

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GEO. S. MEREDITH	Secretary
MYRA KNOX, M.D.	Physician

# INDUSTRIAL HOME FOR THE ADULT BLIND.

## REPORT OF THE PRESIDENT.

*To the Honorable* HIRAM W. JOHNSON,  
*Governor of California.*

SIR: The Directors of the Industrial Home of Mechanical Trades for the Adult Blind have the honor to submit the twenty-ninth annual report of this institution, with the financial, manufacturing and statistical reports for the fiscal years 1912-13, and 1913-14.

The manufacturing branch of the Home continues to pay a profit on its operation, notwithstanding the depression in all business, and Eastern and local competition.

The Home continues to justify its existence and to fulfill its purpose as an industrial refuge for the unfortunate men and women who have lost their sight in adult age.

One of the embarrassments of the management of this and similar institutions is in making the sympathetic public comprehend the polar difference between the condition and management of the juvenile and the adult blind.

With the juvenile blind the problem is scholastic. They are subject to educational processes, to mental training, to acquisition of an education in the ordinary meaning of the term. Having been put in possession of the rudiments of an education, the way is opened for them to go forward in the higher branches of learning, and provided with proper facilities they may acquire skill in the arts, develop a capacity for literary achievements, for a career in music, mathematics, law, medicine, and even in surgery.

Naturally under these circumstances there is a voluminous literature relating to the training of the juvenile blind. On the other hand those who lose sight in adult age have already received, to some extent, their scholastic education. They have passed the plastic period in which anything can be added to their training. They have also passed the period in which hand and brain can be easily coordinated and manual skill be acquired and a handicraft learned. In a vast majority of cases they have no educational nor intellectual resources to apply in gaining a livelihood or in protecting them from that depressing introspection which is caused by their condition.

For them there is only one resource—the acquisition of a handicraft. To teach them this, infinite patience, care and skill are necessary, applied under circumstances that relieve them of all anxiety about

the supply of their daily physical needs, that their minds may be free to take up the hard task of guiding their hands in a novel activity.

Naturally, no literature has appeared relating to them and their struggles, nor to the workers who have guided their fingers into new ways.

Therefore it is that so many sympathetic people, moved upon by a desire to do something for the blind, seeking the literature of the subject, find only what relates to the juvenile blind and attempt its application to the adult blind. This is the cause of much friction, misunderstanding and trouble. This it is which sometimes disturbs and often disrupts institutions for the adult blind. To such an extent has this error been carried that in some parts of Europe all effort for the adult blind has been abandoned, because people with the most sympathetic natures have really been no more than meddlers and destroyers of discipline, seriously injuring those they wanted to help.

A study of the history of institutions for the adult blind will disclose the important pioneering done by this Home. This pioneer work began by the employment of a blind superintendent after two men with sight had failed. This was followed by his organization of the mechanical department to adapt it to the needs and condition of blind workmen. When this organization produced results, the blind superintendent's fine commercial genius organized the mercantile activity necessary to put the product of the blind workmen on a permanent market. All of this was backed by a proper discipline and through it all ran a wise sympathy for the blind.

Out of this pioneer work issued the only institutional workshop for the blind in the world that pays a profit.

This, however, does not protect the Home from attacks which attract the professionally sympathetic, whose ignorant interference does what it can to nullify the good results of ripe experience and years of effort to usefully help the adult blind without hurting them.

The Home was long handicapped by insufficient and unsuitable buildings. Thanks to the generosity of the legislature and the Governor, this will soon be remedied by the completion of a fine modern dormitory, of noble architecture and fine equipment.

A suggestion is made that an official commission be created to serve the needs of the blind in their homes by teaching them trades. The Directors have to suggest that the Home has already in hand the means to ascertain if such work is necessary, and to administer it if found

advisable. Such provision is already made in some states that have no institution like this. Here a duplication of work and expense must be carefully considered before its adoption.

JNO. P. IRISH,  
President of the Board.

Oakland, California, Dec. 1, 1914.

Subscribed and sworn to before me this 14th day of December, 1914.

RILLA P. YOUNG,  
Notary Public in and for the County of Alameda,  
State of California.

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## SUPERINTENDENT'S ANNUAL REPORT FOR THE YEAR ENDING JUNE 30, 1913.

OAKLAND, CALIFORNIA,  
June 30, 1913.

*To the Honorable, the Board of Directors  
of the Industrial Home for the Adult Blind.*

GENTLEMEN: In accordance with the provision of section 4, subdivision 11, of the act governing the Home, I herewith submit to you my report of the affairs and conditions of the Home for the year ending June 30, 1913.

The year just ending is the twenty-eighth of the Home's existence, and the fourteenth in which it has been under the control and management of your present Superintendent since his reinstatement by your honorable body in 1899.

Annexed hereto are presented the several statistical tables of the affairs of the Home required to be set forth in this report.

### Officers of the Home.

		Salary.
Superintendent	-----Joseph Sanders-----	\$2,100 00
Secretary	-----Geo. S. Meredith-----	600 00
Physician	-----Myra Knox, M.D.-----	1,200 00



## HOME FOR ADULT BLIND.

## Employees of the Home and their rate of compensation per month.

Clerk of the Home	T. W. Williston	\$90 00
Matron	Mrs. A. Sanders	50 00
Assistant matron	Miss O. B. Smith	45 00
In charge of women	Miss L. Gilbert	40 00
Engineer	A. Haywood	40 00
First cook	S. Valeria	60 00
Second cook	T. Maney	35 00
Janitor and nurse	A. H. Wulzen	35 00
Janitor	J. Hamilton	25 00
Waitress	Mrs. Ferrel	23 00
Waitress	Mrs. Slater	23 00
Waitress	Miss Cannon	23 00
Waitress	Mrs. McCloud	23 00
Waitress	Mrs. Koprian	23 00
Laborer	E. McAverney	25 00
Driver	J. Lee	25 00
Reader	W. Glavin	8 00
Gardener	W. Gustafson, when employed, per day	3 00
Watchman	J. W. Taylor	40 00
Total		\$636 00

## Inmates employed by the month.

Shop assistant	D. Weider	\$37 50
Dishwasher	J. H. Kuhle	10 00
Teacher in men's shop	J. M. Thompson	25 00
Laborer	M. Hogan	2 00
Teacher, tuning	L. B. Ness	10 00
Total		\$84 50

## Employees of the shop, and their rate of compensation per month.

Shop assistant	E. Timmell	\$25 00
Shop assistant	F. Venturi	30 00
Shop assistant	J. O. Reves	25 00
Teacher, girl's shop	Mrs. K. Jarrett	25 00
Laborer	A. Haywood	5 50
Total		\$110 50

Names of inmates present during the year ending June 30, 1913.

Name	Date of admission	Age when admitted	Native of
1. Maggie Aitken	Oct. 1, 1887	28	California.
2. W. E. Allen	June 15, 1910	19	California.
3. J. L. Buckley*	June 10, 1911	69	Ireland.
4. W. H. Boyle	April 17, 1913	51	New York.
5. M. J. Bryan	April 6, 1909	42	Ireland.
6. F. J. Beebe	May 20, 1909	72	Indiana.
7. U. Bautisti	May 30, 1909	44	Mexico.
8. S. Brown	Aug. 17, 1901	42	Connecticut.
9. P. M. Behan	March 23, 1898	34	Ireland.
10. J. E. Buskirk	May 6, 1905	44	Indiana.
11. Anna Brisell	March 30, 1888	38	New York.
12. P. Conrad*	Aug. 26, 1909	44	New York.
13. J. F. Cloutman*	May 4, 1911	20	Oregon.
14. Isabella Cienega	Feb. 9, 1890	29	California.
15. Margaret Clifford	Oct. 25, 1898	25	California.
16. C. N. Crum	June 6, 1913	47	Kansas.
17. J. Coffey	Dec. 1, 1890	20	California.
18. E. Coleman	Aug. 13, 1907	37	Wisconsin.
19. T. Carr	June 9, 1905	59	Ireland.
20. J. Didier*	April 17, 1898	38	Illinois.
21. L. Denlis	Dec. 30, 1904	19	California.
22. J. F. Dondero	May 4, 1911	26	California.
23. E. B. Deckard	Jan. 19, 1911	22	California.
24. Leon Dominic	Nov. 10, 1908	58	Colombia, S. A.
25. F. Dodge	Feb. 23, 1908	28	California.
26. E. DeWitt	Oct. 22, 1907	32	Illinois.
27. Viola Doudell	March 16, 1903	37	Virginia.
28. A. Escala	July 12, 1910	56	Spain.
29. Sarah Fryberg	Jan. 25, 1904	27	Germany.
30. W. Flannigan	Dec. 9, 1896	35	New York.
31. Alice Fields	Jan. 12, 1895	25	Maine.
32. C. Gertzheim	April 15, 1913	41	California.
33. F. Gonzales	July 14, 1906	18	California.
34. Helen Gittoe	May 26, 1890	26	Germany.
35. W. J. Goldworthy†	Feb. 19, 1912	29	California.
36. A. Gibbons	April 18, 1910	39	Missouri.
37. T. George	Aug. 1, 1907	37	California.
38. S. D. Grant†	April 4, 1906	19	Michigan.
39. J. Giblin	May 22, 1907	52	California.
40. J. Gafferny	Jan. 3, 1885	32	California.
41. G. E. Hartman	April 8, 1913	32	Nebraska.
42. Julia A. Hensen	March 24, 1913	36	Illinois.
43. M. Hogan	Dec. 11, 1910	70	Ireland.
44. Clara Haight	Oct. 12, 1903	43	California.
45. H. Hansen	Nov. 10, 1908	66	Denmark.
46. G. Hayes*	April 13, 1909	49	Canada.
47. F. W. Hummerston*	Sept. 7, 1907	69	England.
48. Lizzie Hannah	Sept. 7, 1887	41	England.
49. P. Hoban	Sept. 25, 1893	44	Ireland.
50. Pauline Howe	Feb. 2, 1889	29	California.
51. Regina Johnson	Nov. 12, 1912	37	California.
52. W. Johnston	Feb. 16, 1889	49	North Carolina.
53. D. Kane	April 25, 1910	37	California.
54. F. King	June 13, 1890	17	Massachusetts.
55. D. Krasky	June 16, 1890	18	Minnesota.
56. Lizzie Logan	Oct. 7, 1891	22	California.
57. H. Lutz	Jan. 24, 1912	42	Germany.
58. E. H. Lyons	May 24, 1912	21	California.
59. Jos. Leon	May 30, 1912	44	Ohio.
60. T. Ludy	May 7, 1910	44	California.
61. M. Miller	June 6, 1913	55	Austria.
62. Mrs. L. I. Morgan	March 14, 1912	53	Texas.
63. D. P. Hooet	Aug. 3, 1911	43	Tennessee.
64. J. H. Kuhle	Dec. 5, 1911	62	Pennsylvania.
65. W. A. Lang	Oct. 23, 1911	27	Canada.
66. Celia Marks	April 11, 1911	45	California.
67. H. Moeckel	July 13, 1909	34	California.

\*Left the Home during the year. 14. †Inmates on leave of absence. 6. ‡Died during the year. 1. Inmates admitted during the year. 15. Inmates on the roll July 1, 1912, 113. Total number of inmates on the roll June 30, 1913, 113.

## Names of inmates present during the year ending June 30, 1913—Continued.

Name	Date of admission	Age when admitted	Native of
68. Margaret Morrison	Aug. 9, 1909	48	California.
69. J. McDonalds	July 12, 1905	37	Ireland.
70. Mollie McCabe	June 30, 1911	56	Indiana.
71. C. Martin	Sept. 3, 1903	44	Sweden.
72. C. S. Morgan	Dec. 8, 1904	41	California.
73. Eliza Matlock	Dec. 16, 1899	35	Virginia.
74. J. Moore	Nov. 11, 1899	29	California.
75. Dorinda Mullaney†	Nov. 11, 1899	27	New York.
76. L. B. Ness	Feb. 27, 1911	28	Norway.
77. J. Nolan	May 18, 1902	48	Ireland.
78. N. P. Neilson	July 28, 1903	31	Sweden.
79. J. P. Nall	Nov. 2, 1903	21	Illinois.
80. L. Orth	Sept. 2, 1895	37	California.
81. B. Oakland	April 15, 1903	55	Sweden.
82. D. O'Mara	Oct. 17, 1910	57	Ireland.
83. C. H. Polley	April 28, 1913	39	Missouri.
84. P. Peterson	Nov. 24, 1910	27	Norway.
85. O. Phillips	Feb. 14, 1911	20	California.
86. J. Paseo	Dec. 20, 19 5	45	England.
87. J. Paulsen	Aug. 22, 1904	45	Sweden.
88. Claudie Piggott*	Jan. 30, 1908	54	California.
89. Eliza Parker	April 30, 1893	43	California.
90. W. A. Plowmant†	June 1, 1899	48	Kansas.
91. Johanna Redderhof	Feb. 20, 1913	66	Netherlands.
92. Alice Richardson†	Jan. 28, 1913	42	Scotland.
93. W. A. Renneck	March 20, 1907	29	California.
94. W. J. Rafferty	July 9, 1909	39	Ireland.
95. G. Richville	April 27, 1896	19	Mississippi.
96. J. Riley	June 10, 1890	47	Ireland.
97. J. B. Roach	Oct. 9, 1908	63	Massachusetts.
98. G. J. Sullivan	Sept. 23, 1912	21	Minnesota.
99. J. B. Shepherd	March 23, 1912	21	California.
100. C. S. Stanton	Sept. 12, 1911	46	New York.
101. F. C. Stoddard	Jan. 15, 1912	62	New York.
102. J. T. Smith	April 5, 1911	51	New York.
103. A. Scott	June 30, 1910	60	Ohio.
104. W. E. Smith	Sept. 5, 1911	59	New York.
105. F. R. Smith	June 3, 1905	55	Illinois.
106. A. Svensen*	Feb. 3, 1908	20	Chile.
107. H. Salmon	April 21, 1890	21	California.
108. J. Sexton	April 27, 1885	42	Ireland.
109. W. Shakeley	Aug. 29, 1898	44	Pennsylvania.
110. Mary Slattery†	Aug. 27, 1892	44	Ireland.
111. Wm. Staggs*	Nov. 1, 1888	23	California.
112. R. Sublett	May 12, 1887	35	California.
113. V. Svilleich	Sept. 15, 1908	47	Austria.
114. D. Thessereau	March 30, 1907	49	California.
115. J. M. Thompson	May 25, 1900	48	Tennessee.
116. Chas. Tanron*	Sept. 7, 1911	61	France.
117. E. B. Taylor	June 9, 1892	45	Maine.
118. Lulu Tremble	May 28, 1908	40	Kentucky.
119. J. J. Wadermann*	Dec. 5, 1910	60	Germany.
120. F. Woods	Aug. 29, 1910	34	California.
121. E. O. Wagner*	Feb. 25, 1910	30	Germany.
122. A. Wirtz	Nov. 10, 1908	52	Germany.
123. W. Watson	Aug. 16, 1912	23	California.
124. Goda T. Wells	Aug. 25, 1903	49	California.
125. Viola Whipple	June 29, 1895	22	Illinois.
126. H. H. Wisner*	Aug. 22, 1904	45	Kansas.
127. D. Weider	Nov. 1, 1911	33	Iowa.
128. H. E. Walne*	April 3, 1912	28	Mississippi.

\*Left the Home during the year. †Inmates on leave of absence. ‡Died during the year. 1. Inmates admitted during the year. 15. Inmates on the roll July 1, 1912. 113. Total number of inmates on the roll June 30, 1913. 113.

Inventory of raw material on hand June 30, 1913.

Broomcorn, Eastern, 22,200 pounds at \$110 per ton-----	\$1,221 00
California broomcorn, 66,360 pounds at \$85 per ton-----	2,820 30
Broomcorn, Eastern, sized, 9,036 pounds at \$125 per ton-----	564 75
Broomcorn, California, sized, 51,606 pounds at \$95 per ton-----	2,451 28
Broomcorn, California, hurl, 10,653 pounds at \$100 per ton-----	532 65
Broom handles, maple, No. 1, 9,000 at \$28.45 per 1,000-----	256 05
Broom handles, maple, No. 2, 2,000 at \$22.25 per 1,000-----	44 50
Broom handles, warehouse, No. 1, 3,400 at \$28.25 per 1,000-----	96 05
Broom handles, cedar, No. 1, 13,900 at \$24 per 1,000-----	333 60
Broom handles, toy, 350 at \$10.50 per 1,000-----	3 67
Whisk rods, 150 at \$10 per 1,000-----	1 50
Rattan, 2,250 pounds at 6½ cents per pound-----	140 63
Wire, No. 19, 618 pounds at \$5.20 per 100 pounds-----	32 13
Wire, No. 20, 252 pounds at \$5.25 per 100 pounds-----	13 23
Wire, No. 22, 360 pounds at \$5.50 per 100 pounds-----	19 80
Wire, galvanized, 108 pounds at \$5.95 per 100 pounds-----	6 42
Twine, red and green, 1,104 pounds at 37½ cents per pound-----	414 00
Twine, pink, 48 pounds at 60 cents per pound-----	28 80
Twine, No. 36 B., 65 pounds at 15½ cents per pound-----	10 23
Twine, No. 18 B., 223 pounds at 17½ cents per pound-----	38 47
Whisk caps, nickel, 7 gross at 60 cents per gross-----	4 20
Whisk caps, plush, 50 gross at 27½ cents per gross-----	13 75
Nails, No. 7, 250 pounds at \$3.50 per 100 pounds-----	8 75
Nails, No. 6, 250 pounds at \$3.50 per 100 pounds-----	8 75
Nails, No. 14, 125 pounds at \$4 per 100 pounds-----	5 00
Broom bands, 7½ inches, 2,000 at \$12.50 per 1,000-----	25 00
Broom bands, 7 inches, 10,000 at \$11 per 1,000-----	110 00
Broom bands, 6½ inches, 2,000 at \$11 per 1,000-----	22 00
Broom locks, 246 gross at 35 cents per gross-----	86 10
Broom dye, 4 pounds at \$1 per pound-----	4 00
Broom staples, 105 pounds at 10 cents per pound-----	10 50
Brimstone, 493 pounds at 2¾ cents per pound-----	13 55
Bluestone, 35 pounds at 10 cents per pound-----	3 50
Rope, 125 pounds at 10 cents per pound-----	12 50
Burlap, 2,900 yards at 8½ cents per yard-----	246 50
Dextrine, 34 pounds at 10 cents per pound-----	3 40
Gum Arabic, 6 pounds at 10 cents per pound-----	60
Tacks, 178 pounds at 8 cents per pound-----	14 24
Chair cane, 342,000 feet at 50 cents per 1,000-----	171 00
Velveteen, 90 yards at 30 cents per yard-----	27 00
Coir, 1 bale-----	15 00
Total-----	\$9,834 40

Inventory of manufactured stock on hand June 30, 1913.

Brooms, 474 9-12 dozen at \$3 per dozen-----	\$1,324 25
Whisk brooms, 108 5-12 dozen at \$1 per dozen-----	108 42
Broom bags, 450 at 6 cents each-----	27 00
Toy hammocks, 34-12 dozen at \$3 per dozen-----	10 00
Total-----	\$1,469 67



## Brooms manufactured, sold and delivered.

Brooms on hand July 1, 1912	4,154
Brooms manufactured July 1, 1912, to June 30, 1913	78,871
Total	83,025
Brooms sold and delivered during the year ending June 30, 1913	77,328
Brooms on hand June 30, 1913	5,697
Whisks on hand July 1, 1912	530
Whisks manufactured July 1, 1912, to June 30, 1913	11,707
Total	12,237
Whisks sold and delivered during the year ending June 30, 1913	10,936
Whisks on hand June 30, 1913	1,301

## Manufacturing statement for the year ending June 30, 1913.

Brooms manufactured	78,871
Whisks manufactured	11,707
Chairs re-seated	1,488
Broom bags manufactured	4,355
Mattresses manufactured	20
Pillows manufactured	78
Sheets manufactured	104
Pillow slips manufactured	40
Mattress ticks manufactured	5
Mattress covers manufactured	120

## Receipts and collections for the year ending June 30, 1913.

1912—July	\$1,297 06
August	1,733 02
September	2,018 98
October	1,974 44
November	2,150 89
December	2,565 70
1913—January	1,583 38
February	1,077 56
March	2,271 13
April	1,667 73
May	2,153 76
June	2,723 83
Total	\$23,217 48

## Expenditure for the year ending June 30, 1913.

1912—July	\$3,900 97
August	3,412 31
September	3,756 55
October	5,541 27
November	3,654 62
December	3,621 04
1913—January	3,232 31
February	4,679 24
March	4,363 46
April	4,092 40
May	5,183 92
June	3,857 31
Total	\$49,295 40

Summary of expenditure for the year ending June 30, 1913.

Month	Provisions	Furniture	Wages	Wages, inmates	Drugs
1912					
July	\$1,041 01	\$18 65	\$993 00	\$533 30	\$29 40
August	1,073 29	64 52	993 80	571 85	28 65
September	796 66	56 53	981 00	527 75	26 65
October	1,038 49	41 30	981 85	694 70	21 40
November	1,036 18	163 96	957 10	550 80	21 70
December	1,259 52	32 85	940 10	455 35	30 00
1913					
January	1,078 19	26 78	986 75	532 70	29 75
February	1,067 28	22 46	986 00	532 55	32 20
March	1,070 03	50	983 00	573 30	21 70
April	986 15	9 25	982 95	610 05	23 15
May	1,079 54	4 65	1,018 50	604 80	23 55
June	978 69	87 58	1,014 00	505 40	22 15
Totals	\$12,505 03	\$529 03	\$11,887 05	\$6,722 55	\$510 30

Summary of expenditure for the year ending June 30, 1913—Continued.

Month	Building and grounds	Washing	Raw material	Miscellaneous	Totals
1912					
July	\$81 90	\$165 00	\$1,004 56	\$31 13	\$3,900 97
August	37 50	165 00	420 24	53 46	3,412 31
September	74 88	165 00	1,090 22	37 86	3,756 55
October	447 36	165 00	2,124 69	23 48	5,541 27
November	183 44	165 00	527 57	38 87	3,634 62
December	412 59	165 00	215 10	60 53	3,621 04
1913					
January	70 54	165 00	255 55	57 05	3,232 31
February	60 46	165 00	1,774 41	38 88	4,679 24
March	251 26	165 00	1,250 45	45 22	4,353 45
April	51 90	165 00	1,213 85	50 10	4,092 40
May	72 86	165 00	2,163 26	51 76	5,183 92
June	628 48	165 00	401 33	54 68	3,857 31
Totals	\$2,373 17	\$1,981 00	\$12,441 23	\$546 04	\$49,295 40

The current expense for the year, after deducting the items of raw material \$12,441.23, and wages of inmates, \$6,722.55—a total of \$19,163.78—amounts to \$30,131.62. The average number of inmates at the Home during the year was 107. The yearly cost per capita was, therefore, \$281.60; the weekly cost was \$5.41; the cost per day was 77 cents.

The cost of provisions alone was \$12,505.03. The cost per capita per year for provisions was, therefore, \$116.87; the cost per week was \$2.25; the cost per day was 32 cents.

The average number of persons residing at the Home during the year (including employees) was 132. The cost per capita per year was, therefore, \$228.27; the cost per week was \$4.39; the cost per day was 63 cents.

The cost for provisions alone was \$12,505.03. The cost per capita per year was, therefore, for provisions alone \$94.74; the cost per week was \$1.82; the cost per day was 26 cents.

## Value of stock, raw material, etc., on hand June 30, 1913.

Raw material on hand	\$9,834 40
Value of manufactured stock	1,469 67
Accounts receivable	1,831 82
Cash in adult blind fund	14,389 86
Total	\$27,525 75

## Industrial and manufacturing statement for the year ending June 30, 1913.

July 1, 1912:		June 30, 1913:	
Accounts receivable	\$1,560 19	Accounts receivable	1,831 82
Raw material on hand	14,383 90	Sales	23,609 73
Raw material purchased	11,656 95	Manufacturing stock on hand	1,469 67
Machinery, repairs, etc.	784 28	Raw material on hand	9,834 40
Labor	6,722 55		
Manufacturing stock on hand	1,095 18		
Profit manufacturing plant	542 57		
Total	\$36,745 62	Total	\$36,745 62

The above showing is not as satisfactory as I would like it to be, as it does not equal the report of former years. This is owing to the fact that the broom trade is very much depressed all over the country; however, we have held our own with the sighted broom shops, and have kept the blind mechanic constantly employed. This report shows that the adult blind fund is in a healthy condition, which is very gratifying to me.

Owing to the fact that the broom factories, conducted by the Chinese, have installed power sewers, which is a great adjunct to the broom maker, coupled with the increased activity of the Eastern manufacturers, who have flooded the state with prison made brooms, which are manufactured at a low cost, I find the problem of disposing of our output a very serious one. I am, however, determined to solve this problem, as I still consider that broom making is the blind man's trade, as it gives employment both to the skilled and the unskilled sightless mechanic. Thanks to the efforts of the State Board of Control, I am assured of the patronage of all of the state institutions; this together with the help of the large corporations, who buy from us, I am satisfied that I will continue to be able to dispose of all the brooms that we are able to manufacture, and to sell them at a small profit.

JOSEPH SANDERS,  
Superintendent.

Twenty-Ninth Annual Report

OF THE

# Industrial Home for the Adult Blind

OF THE

State of California

1913-1914



CALIFORNIA  
STATE PRINTING OFFICE  
1914



## BOARD OF DIRECTORS.

JOHN P. IRISH, <i>President</i>	-----	Oakland
GEORGE E. RANDOLPH, <i>Vice President</i>	-----	Oakland
J. WALTER SCOTT	-----	Oakland

## OFFICERS OF THE HOME.

JOSEPH SANDERS	-----	Superintendent
GEO. S. MEREDITH	-----	Secretary
MYRA KNOX, M. D.	-----	Physician

# SUPERINTENDENT'S ANNUAL REPORT FOR THE YEAR ENDING JUNE 30, 1914.

OAKLAND, CALIFORNIA.

June 30, 1914.

*To the Honorable, the Board of Directors  
of the Industrial Home for the Adult Blind.*

GENTLEMEN: In accordance with the provisions of section 4, subdivision 11, of the act governing the Home, I herewith submit to you my report of the affairs and conditions of the Home for the year ending June 30, 1914.

The year just ending is the twenty-ninth of the Home's existence, and the fifteenth in which it has been under the control and management of your present Superintendent, since his reinstatement by your honorable body in 1899.

Annexed hereto are presented the several statistical tables of the affairs of the Home required to be set forth in this report:

Officers of the Home.		Salary
Superintendent	Joseph Sanders	\$2,100 00
Secretary	Geo. S. Meredith	600 00
Physician	Myra Knox, M.D.	1,200 00
Employees of the Home and their rate of compensation per month.		
Clerk of the Home	T. A. Williston	\$100 00
Matron	Mrs. A. Sanders	50 00
Assistant matron	Miss O. B. Smith	45 00
In charge of women	Miss L. Gilbert	40 00
Engineer	A. Haywood	40 00
Watchman	J. Solomon	40 00
First cook	H. Yaeger	60 00
Second cook	H. Barker	35 00
Janitor and nurse	A. H. Wulzen	35 00
Janitor	J. Hamilton	25 00
Waitress	Mrs. Ferrel	23 00
Waitress	Mrs. Koprian	23 00
Waitress	Mrs. Schreiner	23 00
Waitress	Mrs. McCloud	23 00
Waitress	Miss Lindebeck	23 00
Laborer	E. McVerney	25 00
Driver of wagon	B. Barnes	25 00
Reader	W. Glavin	8 00
Gardener	W. Gustafson, when employed, per day	3 00
Total		\$646 00
Inmates employed by the month.		
Shop assistant	D. Weider	\$37 50
Shop assistant	W. Plowman	25 00
Dishwasher	J. H. Kuhle	10 00
Teacher (men)	J. M. Thompson	25 00
Laborer	M. Hogan	2 50
Total		\$100 00
Employees of the shop, and their rate of compensation per month.		
Shop assistant	F. Venturi	\$30 00
Shop assistant	P. Martioli	25 00
Teacher (girls)	Miss N. Gamlin	25 00
Total		\$80 00

## Names of inmates present during the year ending June 30, 1914.

Name	Date of admission	Age when admitted	Native of
1. Maggie Aitken	Oct. 1, 1887	28	California.
2. W. E. Allen	June 15, 1910	19	California.
3. W. H. Boyle	April 17, 1913	51	New York.
4. M. J. Bryan	April 6, 1909	42	Ireland.
5. T. J. Beebe	May 20, 1909	72	Indiana.
6. Jessa Bowles	Oct. 10, 1913	26	California.
7. U. Bautisti	May 30, 1909	44	Mexico.
8. S. Brown†	Aug. 17, 1901	42	Connecticut.
9. P. M. Behan	March 23, 1898	34	Ireland.
10. J. E. Buskirk	May 6, 1905	44	Indiana.
11. Anna Brisell	March 30, 1888	38	New York.
12. Isabella Cienega	Feb. 9, 1890	29	California.
13. Margaret Clifford	Oct. 25, 1898	25	California.
14. C. N. Crum	June 6, 1913	47	Kansas.
15. J. Coffey	Dec. 1, 1890	20	California.
16. E. Coleman	Aug. 13, 1907	37	Wisconsin.
17. T. Carr	June 9, 1905	50	Ireland.
18. Mrs. C. C. Denlis	June 3, 1914	53	Iowa.
19. L. Denlis	Dec. 30, 1904	19	California.
20. J. F. Dondero*	June 4, 1911	26	California.
21. E. B. Deckard	Jan. 19, 1911	22	California.
22. Leon Dominic	Nov. 10, 1908	58	Colombia, S. A.
23. F. Dodge	Feb. 23, 1908	28	California.
24. E. De Witt	Oct. 22, 1907	32	Illinois.
25. Viola Doudell	March 16, 1903	37	Virginia.
26. A. Escala	July 12, 1910	56	Spain.
27. Sarah Fryberg	June 25, 1904	27	Germany.
28. W. Flannigan	Dec. 9, 1896	35	New York.
29. Alice Field	Jan. 12, 1895	25	Maine.
30. C. J. Gussman	Dec. 26, 1913	52	California.
31. C. Gertzhaint	April 15, 1913	41	California.
32. F. Gonzales	July 14, 1903	18	California.
33. Helen Gittoe	May 23, 1890	26	Germany.
34. W. J. Goldsworthy†	Feb. 19, 1912	29	California.
35. A. Gibbons	April 18, 1910	39	Missouri.
36. T. George	Aug. 1, 1907	37	California.
37. S. D. Grant†	April 4, 1906	19	Michigan.
38. J. Giblin	May 22, 1907	52	California.
39. J. Gafferney	Jan. 3, 1886	32	California.
40. G. W. Hartman	April 8, 1913	32	Nebraska.
41. Julia Hensen*	March 24, 1913	36	Illinois.
42. Clara Haight	Oct. 12, 1903	43	California.
43. M. Hogan	Dec. 11, 1910	72	Ireland.
44. H. Hansen	Nov. 10, 1908	66	Denmark.
45. Lizzie Hannah	Sept. 7, 1887	41	England.
46. P. Hoban	Sept. 25, 1893	44	Ireland.
47. Pauline Howe	Feb. 2, 1889	29	California.
48. Regina Johnson	Nov. 12, 1912	37	California.
49. W. Johnston	Feb. 16, 1889	49	North Carolina.
50. D. Kane	April 25, 1910	37	California.
51. F. King	June 13, 1890	17	Massachusetts.
52. D. Krasky	June 16, 1890	18	Minnesota.
53. Lizzie Logan	Oct. 7, 1891	22	California.
54. H. Lutz†	Jan. 24, 1902	42	Germany.
55. E. H. Lyons	May 24, 1912	21	California.
56. J. Leon	May 20, 1912	44	Ohio.
57. T. Luddy	May 7, 1910	44	California.
58. M. Miller	June 6, 1913	55	Austria.
59. Mrs. L. I. Morgan	March 14, 1912	53	Texas.
60. D. P. Hooet	Aug. 3, 1911	46	Tennessee.
61. J. H. Kuhle	Dec. 5, 1911	62	Pennsylvania.
62. W. A. Lang	Oct. 23, 1911	27	Canada.
63. F. A. Muswick	Oct. 20, 1913	48	Germany.
64. T. E. Mitchell	April 21, 1914	46	California.
65. H. M. Maxwell	April 28, 1913	48	Tennessee.
66. Celia Marks	April 11, 1911	45	California.
67. H. Moeckel	July 13, 1909	34	California.

\*Left the Home during the year 3. †Inmates on leave of absence 6. ‡Died during the year 5. Inmates admitted during the year 10. Inmates on the roll July 1, 1913, 113. Total number of inmates on the roll June 30, 1914, 115.

Names of inmates present during the year ending June 30, 1914.—Continued.

Name	Date of admission	Age when admitted	Native of
68. Margaret Morrison	Aug. 9, 1909	48	California.
69. J. McDonaIs	July 12, 1905	37	Ireland.
70. Mollie McCabe	June 30, 1911	53	Indiana.
71. C. Martin	Sept. 3, 1903	44	Sweden.
72. C. S. Morgan	Dec. 8, 1904	41	California.
73. Miss Matlock	Dec. 16, 1899	35	Virginia.
74. J. Moore	Nov. 11, 1899	29	California.
75. Dorinda Mullaney†	Nov. 11, 1899	27	New York.
76. L. B. Ness†	Feb. 27, 1911	28	Sweden.
77. J. Nolan	May 18, 1902	48	Ireland.
78. N. P. Neilson	July 28, 1903	31	Sweden.
79. J. P. Nall	Nov. 2, 1903	21	Illinois.
80. R. Olsen	May 22, 1914	36	Sweden.
81. L. Orth	Sept. 2, 1895	37	California.
82. B. Oakland‡	April 15, 1903	55	Sweden.
83. D. O'Mara	Oct. 17, 1910	57	Ireland.
84. E. B. Polley	Oct. 27, 1913	37	Missouri.
85. C. H. Polley	April 28, 1913	39	Missouri.
86. P. Peterson	Nov. 24, 1910	27	Norway.
87. O. Phillips	Feb. 14, 1911	20	California.
88. J. Pasco	Dec. 20, 1905	45	England.
89. J. Paulsen	Aug. 22, 1904	45	Sweden.
90. Eliza Parker	April 30, 1893	46	California.
91. W. A. Plowman	June 1, 1899	46	Kansas.
92. Johanna Redderhoff	Feb. 20, 1913	63	Netherlands.
93. Alice Richardsont	Jan. 28, 1913	42	Scotland.
94. W. Renneck	March 20, 1907	29	California.
95. W. J. Rafferty	July 9, 1909	39	Ireland.
96. G. Richville	April 27, 1896	19	Mississippi.
97. J. Riley†	June 10, 1899	47	Ireland.
98. J. B. Roach	Oct. 9, 1908	63	Massachusetts.
99. G. J. Sullivan	Sept. 23, 1912	21	Minnesota.
100. J. B. Shepherd	March 23, 1912	21	California.
101. C. S. Stanton	Sept. 12, 1911	46	New York.
102. C. W. Shaw	April 24, 1914	47	Michigan.
103. F. C. Stoddard	Jan. 15, 1913	62	New York.
104. J. T. Smith	April 5, 1911	51	New York.
105. A. Scott	June 30, 1910	60	Ohio.
106. W. H. Smith	Sept. 5, 1901	59	New York.
107. F. R. Smith	June 3, 1905	55	Illinois.
108. H. Salmon*	April 21, 1899	21	California.
109. J. Sexton	April 27, 1885	42	Ireland.
110. W. Shakeley	Aug. 29, 1893	44	Pennsylvania.
111. R. Sublett	May 12, 1887	35	California.
112. V. Sivillich	Sept. 15, 1908	47	Austria.
113. D. Thessercan	March 30, 1907	49	California.
114. J. M. Thompson	May 25, 1900	48	Tennessee.
115. E. B. Taylor	June 9, 1892	45	Maine.
116. Lulu Tremble	May 28, 1908	49	Kentucky.
117. F. Woods	Aug. 29, 1910	34	California.
118. A. Wirtz	Nov. 10, 1908	52	Germany.
119. W. Watson	Aug. 16, 1912	24	California.
120. W. H. Walker	April 2, 1914	24	California.
121. Goda T. Wells	Aug. 25, 1903	49	California.
122. Viola Whipple	June 29, 1895	22	California.
123. D. Weider	Nov. 1, 1901	36	Iowa.

\*Left the Home during the year 3. †Inmates on leave of absence 6 ‡Died during the year 5. Inmates admitted during the year 10. Inmates on the roll July 1, 1913, 113. Total number of inmates on the roll June 30, 1914, 115.



## Inventory of raw material on hand June 30, 1914.

Broomcorn, California, sized, 20,450 pounds at \$150 per ton	\$1,533 75
Broomcorn, California, 5,672 pounds at \$120 per ton	340 32
Broomcorn, Eastern, sized, 8,223 pounds at \$230 per ton	945 65
Broomcorn, Eastern, 4,614 pounds at \$187 per ton	431 09
Rattan, broom, 2,600 pounds at 6½ cents per pound	156 50
Burlap, 7 oz., 2,000 yards at .085 cents per yard	170 00
Brush caps, plush, 23 gross at 27 cents per gross	6 21
Brush caps, metal, 16 gross at 50 cents per gross	8 00
Cane, chair, medium, 48 bunches at 48 cents per bunch	23 04
Cane, chair, fine, 23 bunches at 40 cents per bunch	9 20
Cane, chair, fine fine, 14 bunches at 36 cents per bunch	5 04
Cane, chair, superfine, 68 bunches at 36 cents per bunch	24 88
Cane, chair, common, 45 bunches at 52 cents per bunch	23 40
Broom bags, 300 at 5 cents	15 00
Velvet, broom, 40 yards at 30 cents per yard	12 00
Tacks, 71 pounds at 10 cents per pound	7 10
Staples, broom, 50 pounds at 10 cents per pound	5 00
Nails, 180 pounds at \$3.60 per 100 pounds	6 48
Broom handles, maple, 850 at \$28.15 per 1,000	23 96
Broom handles, maple No. 1, 24,000 at \$28.40 per 1,000	681 60
Broom handles, maple No. 2, 1,000 at \$22.10 per 1,000	22 10
Wire, broom, 132 pounds at \$5.50 per 100 pounds	7 26
Wire, broom, 336 pounds at \$5.25 per 100 pounds	17 64
Wire, broom, 300 pounds at \$5.20 per 100 pounds	15 60
Wire, broom, 456 pounds at \$5.95 per 100 pounds	27 13
Rope, 100 pounds at 12½ cents per pound	12 50
Twine, 28 pounds at 50 cents per pound	14 00
Twine, broom, 1,610 pounds at 36¼ cents per pound	591 67
Twine, broom, 268 pounds at 20 cents per pound	53 60
Twine, broom, 168 pounds at 22 cents per pound	36 96
Broom twine, 93 pounds at 18½ cents per pound	17 20
Toy broom handles, 500 at \$15.75 per 1,000	7 88
Brush rods, 900 at \$9.50 per 1,000	8 55
Bluestone, 15 pounds at 10 cents per pound	1 50
Broom locks, 293 gross at 35 cents per gross	10 25
Broom bands, 7½ inch, 1,600 at \$13.50 per 1,000	21 60
Broom bands, 7 inch, 2,600 at \$12 per 1,000	31 20
Coir, 1 bale	15 00
Total	\$5,339 86

## Inventory of manufactured stock on hand June 30, 1914.

Brooms, 407 10-12 dozen at \$3 per dozen	\$1,223 50
Whisk brooms, 113 10-12 dozen at \$1 per dozen	113 84
Total	\$1,337 34

## Brooms manufactured, sold and delivered.

Brooms on hand July 1, 1913	5,697
Brooms manufactured July, 1913, to June 30, 1914	76,335
Total	82,032
Brooms sold and delivered during the year ending June 30, 1914	77,138
Brooms on hand June 30, 1914	4,894
Whisks on hand July 1, 1913	1,301
Whisks manufactured July 1, 1913, to June 30, 1914	15,133
Total	16,434
Whisks sold and delivered during the year ending June 30, 1914	15,068
Whisks on hand June 30, 1914	1,366

Manufacturing statement for the year ending June 30, 1914.

Brooms manufactured .....	76,335
Whisks manufactured .....	15,133
Chairs re-seated .....	1,442
Broom bags manufactured .....	3,060
Mattresses manufactured .....	37
Pillows manufactured .....	1
Sheets manufactured .....	297
Pillow slips manufactured .....	90
Mattress ticks manufactured .....	53
Frames re-caned .....	1

Receipts and collections for the year ending June 30, 1914.

1913—July .....	\$1,694 79
August .....	1,217 99
September .....	1,809 27
October .....	2,659 30
November .....	1,905 82
December .....	2,162 47
1914—January .....	1,179 37
February .....	1,531 29
March .....	2,019 38
April .....	1,857 25
May .....	1,378 19
June .....	1,996 06
Total .....	\$21,411 18

Expenditure for the year ending June 30, 1914.

1913—July .....	\$4,971 89
August .....	3,581 76
September .....	3,430 98
October .....	3,201 00
November .....	3,711 74
December .....	6,904 31
1914—January .....	3,400 39
February .....	3,694 43
March .....	3,836 07
April .....	4,826 29
May .....	3,320 09
June .....	3,554 80
Total .....	\$48,433 75

Summary of expenditure for the year ending June 30, 1914.

Month	Provisions	Furniture	Salaries	Wages, inmates	Fuel, light, water
1913					
July .....	\$980 50	\$28 15	\$1,047 50	\$527 25	\$113 78
August .....	1,138 90	29 90	1,001 50	535 25	70 50
September .....	1,054 96	8 60	1,021 50	484 20	186 40
October .....	978 31	81 99	995 65	487 65	112 22
November .....	982 82	104 58	991 50	411 40	139 47
December .....	1,014 51	13 70	989 80	399 40	216 72
1914					
January .....	1,064 50	13 50	994 00	579 95	244 55
February .....	874 30	32 03	987 85	535 85	191 26
March .....	942 85	33 80	1,023 60	625 05	130 06
April .....	993 22	14 75	1,017 50	597 90	165 78
May .....	1,031 69	164 69	1,017 50	600 80	135 88
June .....	1,068 94	1 69	1,024 50	613 40	148 11
Totals .....	\$12,125 50	\$527 36	\$12,112 40	\$6,428 10	\$1,854 73

## Summary of expenditure for the year ending June 30, 1914—Continued.

Month	Drugs	Washing	Miscellaneous	Raw material	Totals
1913					
July -----	\$32 30	\$166 25	\$80 87	\$1,640 36	\$4,971 89
August -----	41 15	165 00	45 07	365 45	3,581 76
September -----	21 30	165 00	40 71	262 93	3,430 98
October -----	18 30	165 00	58 16	235 73	3,201 00
November -----	16 95	165 00	31 15	813 01	3,711 74
December -----	19 90	165 00	35 62	4,011 10	6,904 31
1914					
January -----	18 10	165 00	44 30	186 06	3,400 39
February -----	18 05	165 00	34 95	777 74	3,694 43
March -----	24 60	165 00	75 03	736 64	3,836 07
April -----	22 20	165 00	58 19	1,715 46	4,826 29
May -----	23 45	166 50	27 51	85 70	3,320 09
June -----	17 20	165 00	32 02	396 85	3,554 80
Totals -----	\$273 50	\$1,982 75	\$563 58	\$11,227 03	\$48,433 75

The current expense for the year, after deducting the following items of raw material, \$11,227.03, and wages of inmates, \$6,428.10—a total of \$17,655.13—amounts to \$30,778.62. The average number of inmates at the Home during the year was 110. The yearly cost per capita was, therefore \$279.80; the weekly cost was \$5.32; the cost per day was 76 cents.

The cost of provisions alone was \$12,125.50. The cost per capita per year for provisions was, therefore, \$110.23; the cost per week was \$2.12; the cost per day was 31 cents.

The average number of persons residing at the Home during the year (including employees) was 133. The cost per capita per year was therefore \$231.41; the cost per week was \$4.45; the cost per day was 63 cents.

The cost for provisions alone was \$12,125.50. The cost per capita per year was therefore, for provisions alone \$91.19; the cost per week was \$1.75; the cost per day was 25 cents.

## Value of stock, raw material, etc., on hand June 30, 1914.

Raw material on hand-----	\$5,339 86
Value of manufactured stock-----	1,337 34
Accounts receivable -----	3,224 80
Cash in Adult Blind Fund-----	18,048 01
Total -----	\$27,950 01

## Industrial and manufacturing statement for the year ending June 30, 1914.

July 1, 1913:		June 30, 1914:	
Accounts receivable -----	\$1,831 82	Accounts receivable -----	\$3,224 80
Raw material on hand-----	9,834 40	Sales -----	22,828 21
Raw material purchased----	9,691 04	Manufacturing stock on hand	1,337 34
Machinery, repairs, etc. ---	1,535 99	Raw material on hand-----	5,339 86
Labor -----	6,428 10		
Manufacturing stock on hand	1,469 67		
Balance -----	1,939 19		
Total -----	\$32,730 21	Total -----	\$32,730 21

The past year has been a satisfactory one. All our inmates who have been able to labor, have been constantly employed. The shops have run full time, and nothing has arisen that would cause me any doubt as to the future of our industries. It is true, that at times our output moved slowly; but I have never been forced to store, in our warehouse, any great number of brooms. Our adult blind fund is in a healthy condition; and although the outlook is for a high cost of broom corn, we are well prepared to meet every demand that may be made upon our resources.

Contracts for our new dormitory have been let, and building operations will begin in the near future. This building will add greatly to the appearance of our grounds, and will fill a long-felt want, as it will insure safety and comfort to the sightless wards of the state. The Workers for the Blind intend to hold their convention in San Francisco in 1915. I am gratified to state, that by that time, we will have an institution of which any state may well be proud. It reflects the generosity of the state legislature, and the philanthropic nature of Governor Johnson, to whom the blind owe a deep debt of gratitude. Without his aid and assistance, the securing of the necessary funds to erect this building would have been impossible.

I have had plans prepared for an incinerator, to burn the corn cuttings from our broom factory. At the present time these cuttings are hauled to the public dump, at a cost of between \$250 and \$300 a year. This incinerator we expect will pay for itself in about two years, as the cost of construction will not exceed \$600. The construction is to be under the control of Director Randolph. Mr. R. McC. Beanfield, the state inspector on our new building, is to supervise the work and material used in its construction.

Respectfully submitted.

JOSEPH SANDERS,  
Superintendent.









# First Report

OF THE

# California School for Girls

Whittier, California

For the Year 1914



CALIFORNIA  
STATE PRINTING OFFICE  
1914





## INTRODUCTION.

Since the establishment of the Whittier State School twenty-five years ago, with a department for delinquent girls, there have been recommendations made to the different governors for a separate school for girls, but not until 1913 was this request given any consideration.

GOVERNOR HIRAM W. JOHNSON

then declared that the delinquent girls of California should be given equal opportunities for education and reformation with the delinquent boys. The legislature, in accordance with his wish, made an appropriation of two hundred thousand dollars towards the establishment of the California School for Girls, as per chapter 401, statutes of 1913.



# REPORT OF BOARD OF TRUSTEES.

WHITTIER, CALIFORNIA,

September 1, 1914.

*To His Excellency, HIRAM W. JOHNSON,  
Governor of California.*

Your Board of Trustees of the California School for Girls respectfully submit this report for the fiscal year ending June 30, 1914.

On January 12, 1914, we assumed the control and management of the girls' department of the Whittier State School, with an enrollment of 26 inmates. Our initial expenditures were necessarily heavy, due to the depleted conditions of the girls' wardrobes, linens, furnishings, etc.

This depletion existed because the state legislature made an appropriation of \$200,000, which included maintenance for the girls' department at Whittier (hereafter to be known as the California School for Girls), but which was not yet available. During the interim of organization this department was supported out of the funds of the Whittier State School to the extent of over \$12,000, which curtailed their appropriation.

We have endeavored to establish a policy of cooperation between the officers and the pupils. The response has been gratifying. The girl is being made to realize that only through her own endeavor can character be developed sufficiently to enable her to be returned to society and useful citizenship.

Our only discipline is loss of privileges for an indeterminate period, following which the girl may again reestablish herself.

We have done some preliminary work in establishing vocational departments. This will be enlarged when we move to the new school at Ventura.

One of the most noticeable factors in the upbuilding of the girl is the physical culture that has become a part of the daily required work, and to which the girls have responded with enthusiasm.

To ascertain the actual causes of each girl's failure to lead a normal life and to supply, if possible, the course of training that will induce mental balance, we have had a psychological examination of every inmate. For this beneficial work we are indebted to Dr. Grace M. Fernald of the Los Angeles State Normal School, who has been and is devoting much time to this survey. We propose following, wherever possible, the recommendations given by our psychologist with the hope that a large percentage of permanent reformations will result within the next few years.

We are requiring as officers women of such culture and education that each may be a daily inspiration to the girl.



We are indebted to Mr. Fred C. Nelles, superintendent of the Whittier State School, for valuable advice and continued cooperation.

#### THE NEW SCHOOL.

In November, 1913, the site selecting commission purchased 125 acres of land two and one half miles northeast of Ventura for \$22,000. The expenses of said commission were \$787.50. The contracts for bids are now being advertised for the erection of a hospital cottage at an expense of \$35,000, and two typical cottages at \$25,000 each. The water supply, grading, sewerage, roads, storm water disposal, etc., will cost approximately \$15,000. The requirement for maintenance and salaries in the present quarters is \$57,000, leaving an approximate balance of \$20,212.50 for furnishings, etc. These three buildings will house 54 girls and the officers necessary to care for them, and will be ready for occupancy in May, 1915.

There are over 300 girls in the state who have been committed to different institutions, where no vocational training is offered them, and 66 $\frac{2}{3}$  per cent of them are affected with venereal diseases. The new school at Ventura will afford the only opportunity in the whole state to meet these needs, therefore it will be necessary for the legislature to provide for the erection of six additional typical cottages and an administration building. In addition to these buildings provision should be made for the fence, trees, live stock, etc., necessary to develop the orchard and farm.

Tabulation of recommendations are as follows:

Receiving cottage .....	\$7,500 00
Administration building .....	30,000 00
Six typical cottages at \$22,500.00 each.....	135,000 00
Garage for motor truck and one machine.....	2,500 00
Tool house and general shop.....	3,000 00
Dairy barn and dormitory.....	15,000 00
Hog pens and horse barn.....	6,000 00
Building for commissary .....	7,000 00
Fence around 125 acres, with front gate.....	4,500 00
Two cottages for employees at \$3,750.00 each.....	7,500 00
Motor truck .....	3,000 00
Spring wagon, harness, etc.....	500 00
Trees, shrubs, gardens, implements and tools.....	7,500 00
Furniture for receiving cottage.....	1,000 00
Furniture for six typical cottages at \$2,500.00 each.....	15,000 00
Furniture for administration building.....	4,000 00
Total .....	\$249,000 00

MRS. D. G. STEPHENS,  
MRS. C. M. WEYMANN,  
MRS. E. P. FOSTER,  
MRS. I. LEA COLLINS,

*Trustees.*

## SUPERINTENDENT'S REPORT.

*To the Board of Trustees,  
California School for Girls,  
Whittier, California.*

LADIES: Herewith I have the honor to submit my report of the California School for Girls:

Following the expression of your wishes, all officers have endeavored in every way to establish your policy of cooperation between themselves and the girls. The need of the individual girl has been considered. She has been guided to take up the work to which she seemed best adapted, thus trying to make this the vocational school you desire. In order to show just how far this has been done, the work of each department will be considered. The endeavor is to train the girl in as many different lines as our equipment permits.

When a new girl enters the school she is examined by the school physician, is studied by the psychologist, and is interviewed as to her own preference in earning a living. After a consideration of all sides of the girl's character she is started in the line of work which seems best for her future life.

On January 12, 1914, there were 26 girls in the school. Of this original number 15 have been paroled. At this time we have 57 girls; 60 is our capacity in the present quarters. The training cottage accommodates 40, the home cottage 20. A receiving cottage is used for new girls as vacancies occur, also for a period of discipline for such girls as lose hold of themselves and temporarily need quiet and solitude to help them regain their mental poise. This cottage accommodates seven. A schedule of daily detail follows:

Care of live stock.....	4
Gardening .....	13
Housekeeping .....	24
Sewing and dressmaking.....	15
Hospital .....	2
Laundry .....	17
Kitchen .....	9
School .....	20
Office work .....	2

There is certain work in which every girl is instructed, such as practical cookery, housework, laundry, and kindred duties that each girl will need in the life as housewife, for which we endeavor to fit her, irrespective of whether she is also trained in a definite trade.

### Gardening and Raising of Live Stock.

In planning gardening and the raising of live stock, we have had help from the University of California, which sent us an expert to go over the ground and advise as to our best mode of development. Also we

have had assistance from the gardener and head of the farm at the Whittier State School, who, owing to the former connection of the two schools, understood the needs and possibilities of our establishment.

#### **Chickens.**

We have sixty chickens of which the girls take complete care. A little later when the girls have the work thoroughly in hand, we hope to use incubators and make this a paying department.

#### **Hogs.**

The girls are caring for the hogs and are planning for an increase of the stock. We have made some sales and traded for more valuable stock in order to raise the standard of the herd.

#### **Pigeons.**

Just lately we have added a few pairs of pigeons to our live stock.

#### **Gardening.**

Gardening furnishes a valuable means for building up new girls. Vitiated by a false mode of living, after a short period of work among plants and in the soil, a beneficial effect soon shows. We have cleaned up the grounds, set out many plants, done considerable pruning, and started new seeds for future gardens. The girls take care of the irrigation of the walnut orchard. We now have a healthy vegetable garden. All the knowledge gained in gardening will be valuable to the girls in starting the work about the cottages in Ventura.

#### **Dressmaking.**

The girls learn practical sewing thoroughly. Those who wish to take it as a trade, learn to cut and fit such simple articles of clothing as are used by the girls. An opportunity to do more extensive dressmaking is limited, as the only chance afforded for other than simple cotton dresses is in the making of outfits for girls about to go out on parole. The course does so fit them, however, that the girls are qualified to begin work in a dressmaking establishment at from eight to ten dollars a week. There they can thoroughly learn and complete the trade.

#### **Cookery.**

The girls take up the rudiments of cooking in the kitchen of the training cottage. We train each group of girls in cookery at least three months. The course there includes the washing and cleaning of vegetables, cooking of a simple dinner, bread and cake making. The girls have also done canning, preserving, pickling, and jelly making. They will put up about 1,000 quarts of fruit. Besides this there are crocks of pickles and preserves. Jelly making has just commenced, so we have no estimate of this year's output.

In the home cottage the plan is to have the girls go into the detail of cookery, cost of materials, and economy in their use. They study food values in order to prepare and properly balance meals.

### Household Work.

In the housekeeping department the girls are learning to sweep, clean, and dust thoroughly. Care and polishing of furniture and woodwork, waxing of floors and cleansing of rugs and carpets are taught. Dish washing and the setting of a simple table are included.

### Office Work.

Two girls are employed in work of the main office and of the commissary department. Here they have opportunity to put into practice what they are learning in the commercial course of the school. Girls assisting in the commissary learn the parts of meat, accuracy in weighing and measuring all goods that are used in a home. They also learn amounts necessary per capita for the support of a home.

### Laundry Work.

The girls are taught proper washing of clothes and fine ironing. We have not the facilities of a large and modern laundry, but the girls do have the opportunity to learn laundering as done in an ordinary home, which is the knowledge that will be most helpful to them later.

### Hospital.

Two girls at a time have taken practice work in the hospital under our trained nurse. Owing to the very good status of health in the school, these girls do not get as varied a practice as would be helpful to them. One girl has been paroled in order that she may take up work in a hospital. Another, already on parole, who took considerable work in our hospital, after working a few months at housework will take up hospital training outside.

### School Work.

We have three sessions of school daily. In the morning a commercial course is taught. We endeavor to keep the number taking this as low as possible, as we feel that ordinarily our girls are not, for their best good, to be fitted for the commercial world. If, however, their talents lie distinctly in that direction, it would be unjust to fit them for other work. The rest of the work of the school is practically ungraded. In all grades English and letter writing are taught. The aim is to give each girl, irrespective of her age, the ability to write a satisfactory letter and to read sufficient English to make life broader and more interesting to her. The evening class is for the benefit of those who, because of other work, are unable to attend the day sessions. All our girls acquire the grammar school work.

### The Home Cottage.

In April, 1914, the home cottage was opened in charge of two officers, a house mother and a dormitory watch. The test for attaining the the privilege of life at the home cottage is not necessarily perfection of work, but the effort put forth. The girls do all the actual work in cooking, housekeeping, etc. The intent is to make this a real home so



that from it the girl can go out to take charge of other homes. As the girls complete their training in dressmaking they are allowed to do their cutting and sewing at the home cottage. We are endeavoring to make it a complete unit as nearly as is possible on these grounds. Whenever a girl fails to make good after reaching the home cottage she forfeits her privilege and drops back to try over again.

#### **Physical Culture.**

The instructor in physical culture gives classes daily which include every girl in the school. Besides this, in each of the dormitories five minutes of breathing exercises are given when the girls first arise. Special corrective exercises are given to individual girls to meet their special needs. Games include volley ball, base ball, basket ball, tennis, and circle games, under the supervision of the physical director. There is also a time for free play. Competition is encouraged by games between the training cottage and the home cottage. There is a class in folk dancing once a week.

#### **Recreation.**

In addition to games under the physical culture director, a social dance is given in the assembly room once a week. Simple parlor games are enjoyed in the sitting room during the evenings. The assembly room is at the disposal of such girls as wish to use the piano for playing or singing, other groups pass the time in reading or doing fancy work. A victrola is used for concerts Sunday evenings, and occasionally at the request of the girls on other nights. While keeping the standard of the records high, such records as will appeal to the girls are provided. A few records of the world's best music are included, and these also the girls enjoy heartily.

#### **Library.**

The Los Angeles County Library has established a branch at the school. There are 100 books. These are changed monthly and a regular card catalogue kept. The issuance of all books is in charge of one of the girls, the detail being changed from time to time, thus affording another means of training. The selection of the books is carefully considered before they are placed on our shelves. In this the county librarian has been very helpful. She has also sent out books on special subjects and along vocational lines on request.

#### **Industrial Work.**

A department of industrial work has been established. Materials are purchased by the school and the girls are allowed to make articles of fancy work during their leisure hours and as a reward of merit. These articles are then sold, the actual cost of material is returned to the school fund and the balance placed to the girl's account in the bank, there to form a valuable nucleus for her use when she again starts work. Mending and other services are also permitted, the proceeds going to the girl's account.

**Parole Work.**

The girls sent out are carefully placed by our parole officer. First understanding the need of the girl, the parole officer carefully investigates each home and, as far as possible, places the girl in the work and environment which she needs. After a trial, if the girl and home seem unsuited, or if for any reason it seems wise, the girl is given a chance in another home. The school is always the home of our girls and during any period of change or lack of occupation, she is urged to return there for a visit. Bank accounts are encouraged and a careful record of every girl paroled is being kept. In two years these records should show results. These results will be the test as to the training in the school.

**Spiritual Life of the Girls.**

The spiritual life of the girls is given careful consideration. Selected groups who have earned the privilege are sent out to various churches each Sunday. In addition, Sunday school is held in the assembly room on Sunday morning and a non-denominational sacred service on Sunday afternoon at which one of the local ministers takes charge. There are, besides, occasional praise services of song and Bible verses in the evenings. In addition to this, the Catholic priest has been very courteous in caring for the needs of the Catholic girls by giving weekly instructions.

Owing to the fact that many of the records (especially of the girls on parole) date back several years, to a time when in many counties there was no juvenile court, and no systematic manner of gathering data, our statistics are not as complete as we could wish. With proposed correlated work on the part of all probation officers throughout the state, we will have more complete and accurate statistics in the future. From such statistics as are now in our possession, causes of delinquency in 62 cases are divided as follows:

Inherent moral tendencies.....	7
Lack of home.....	11
Lax discipline or lack of parental control.....	12
Improper associates .....	4
Criminal charges—larceny, highway robbery, and forgery.....	3
Incorrigible—waywardness or inherited tendencies.....	12
Illegitimate children—no care.....	5
Poor homes .....	8

A study of 111 cases in care of the school at this time gives the following data:

Present .....	57
On parole .....	51
On furlough .....	3
	<hr/>
	111

Girls whose parents are separated .....	20
Half-orphans .....	45
Orphans .....	10
Those without homes (about) .....	15
Parentage unknown .....	17
One parent insane .....	4
	<hr/>
	111

#### NATIVITY.

Alabama .....	1
Arizona .....	2
Arkansas .....	3
Austria .....	1
California .....	47
Colorado .....	3
Canada .....	1
Germany .....	1
Illinois .....	8
Iowa .....	2
Kansas .....	1
Kentucky .....	2
Louisiana .....	1
Minnesota .....	3
Missouri .....	2
North Dakota .....	1
Nebraska .....	1
Nevada .....	2
New Jersey .....	1
New York .....	2
Ohio .....	1
Oklahoma .....	3
Oregon .....	1
Pennsylvania .....	4
Scotland .....	1
Spain .....	1
Tennessee .....	1
Texas .....	7
Unknown .....	5
Utah .....	1
Wisconsin .....	1
	<hr/>
	111

ISABELLE M. FLEISCHER.

## REPORT OF THE PSYCHOLOGICAL EXAMINATION.

The first purpose of the psychological examination is to determine whether the individual possesses normal mentality for her chronological age. It is obviously absurd to place a group of individuals in a single institution and either to expect the same degree of responsibility and rate of development from the mentally defective as from the mentally normal group, or else to adapt the entire institution to the mentally defective group. In the former case we are certain to come to disaster with our defective charges and in the latter case we commit a great wrong against the individuals whose capacities we stunt. The failure to distinguish between these two types of cases is the more serious today because we know how to care for the defective in such a way as to develop the capacities that he possesses and we realize more than we have in the past the wonderful possibilities of the child of normal mentality.

The next purpose of our investigation is to discover those individual characteristics and peculiarities which will promote or hinder the development of the child. Many children who seem defective simply possess some mental peculiarity, an understanding of which makes it possible to do away with the seeming defect. Other children possess characteristics, which, if developed, will make them particularly valuable along some specific line. It is safe to say that each of our girls has her line of best development and that the only effective way to deal with her is to start her along that line. One reason why the girl problem has been considered so much harder to handle than the boy problem is that we have overlooked the fact of individual variation and have tried to fit them all into one mold—the main outlet of their activity being an unscientific form of housework. Briefly stated, our second purpose has been to find what each girl has the ability to do best and to study her development when she is given a chance to develop along that line.

We have used two sets of tests. The first set is the Binet-Simon 1911 series, supplemented by the Terman revision of these tests. We have used this particular series because it has been so widely employed and has the advantage of standardization. Professor Terman's revision has the great advantage of supplying tests for certain years where they are lacking in the original Binet-Simon series and of adaptation of the tests to American children. The girls range in age from fourteen to twenty-one years with an average age of about eighteen years, so that the lack of tests in the Binet-Simon series for the thirteenth and fourteenth years and from the fifteenth year to the adult tests is really a serious matter.

The second set of tests is a compilation of what seem to us the best



standardized special tests. These tests are arranged under the following heads: Sensory acuity, perception, memory for unrelated material, memory for related material, imagery, productive imagination, reasoning, attention, fatigue, motor reactions, emotion. Our record on emotion is dependent upon observations during the tests and under other conditions. Enough tests are given under each group so that our conclusions are not based on single successes and failures. When there is any question concerning the result or any point of special interest the tests can, of course, be multiplied indefinitely at any point.

In addition to the work already described we have tested each child's knowledge of formal school subjects and her general information. In so far as possible we have obtained the school record for each case.

It should be stated that no attempt has been made to base our estimates on single test periods. As much time as was necessary was spent on each case, and constant check-up work was done.

The most important part of our plan has been the verification and correction of our diagnoses by follow-up work. This has involved keeping a record of the development of the girl in school or in any occupation which she takes up. This work will be of value, not only to the girl of whom the study is made, but also for the further standardization of the tests. The real estimate of the value of a test depends upon its actual function.

Up to the present time we have carefully examined fifty-two cases. Of these forty are still in the institution. Among these fifty-two cases we have found every degree of mental ability from the imbecile to the individual of unusually fine mentality.

The results for the cases now in the institution may be summarized as follows:

Cases of unusual ability.....	4
Cases of good average ability.....	20
Slow, rather stupid, not defective.....	8
Border line cases, high grade defective.....	2
Feeble-minded .....	5
Seeming deficiency, almost blind, vision never corrected.....	1

It may be well to state here, that in an examination of selected cases a year and a half ago, ten mental defectives were found and that eight of these have been sent away from the school. This lowers for the present the percentage of defectives, but the old proportion will be reestablished if cases continue to be committed to the school without preliminary examination.

To give the results of the work with the special tests would mean to give a complete history of each individual case. We find every type of mind represented in this group of girls. There is the girl of the keen, analytical mind whose career will be original and clever whether we

help direct it or not; the girl of moderate suggestibility and persistent attention who seems slow, but has splendid possibilities if she isn't hindered too much; the slow reliable girl, of excellent memory and little imagination who will fit into some occupation where the carrying out of directions is essential, but who can't do much independent thinking; the unstable, inaccurate type, who may have considerable ability along some specific line; the child who seems to have a poor memory because of some peculiarity of imagery type which has never been taken into account; and on through the many varieties of individual variation. The two cases outlined later in the report further illustrate the significance of this group of tests.

When we turn to the educational aspect of the problem we find the following facts: Only *seven* of the girls have been *graduated* from the eighth grade; *fifteen* have not gone above the *fifth* grade; *eight* who have very *good ability* are absolutely *illiterate*. At least *three* have been *supposed* to be *defective* because of mental peculiarities which education could have corrected. The *seven mental defectives* have none of them received any *special training* or care. Three of them can not tell time.

The need that seems to stand out most prominently is adequate school education. It is absurd to allow a group of eight girls with good mentality who have become wards of the state to go through life marked by illiteracy when a few months of really good schooling would correct the deficiency.

There is, for example, a girl of eighteen who has been the victim of circumstances beyond her control since she was a child. The case history is almost unprintable. This girl has a remarkably fine mind. She learns things by simply glancing them over. She analyzes everything she touches, doing it in the most efficient, systematic way. She comes to us with almost no formal education, can not write a readable letter, does not know the multiplication tables beyond three's and has read very little that is worth while. She recognizes her deficiency, but is so mortified over it that she is unwilling to go into the school room with the other girls. We have been working with her evenings to give her a start and she could be made to cover the eight grades in a year if she were allowed to set her own pace and not bothered with non-essentials.

In another case, a girl who is now eighteen and who was married at fourteen, had given everyone the impression of being defective. Her case reduced to certain peculiarities of imagery and lack of school. Special work was done with her, an hour a day for a time, with the result that she showed a perfectly normal learning curve. She came in one day with the request that she be allowed to go to both day and night school. She said "I never supposed I had a mind, but now that I find I have one I want to go to school and learn something."

When we have taken steps to correct the defects of early education, the question arises concerning the preparation of the girl for some future occupation. In considering this question, we must keep in mind the fact that the monotony that is intolerable to the individual of active, high grade mentality, is distinctly agreeable to the individual of less mental complexity. One girl said she just "loved to clean bath rooms and scrub floors but she just couldn't cook." This girl could not read, write or tell time. Another girl, one in the group of unusual mentality, who has made the authorities in the school endless trouble, said: "I can't help it. The place makes me crazy. What is there to do except the same thing over and over."

From the psychological point of view, there is only one salvation for the girl of the highest type of mentality, and that is an occupation that interests her and provides her with constant need for new adjustment. Sometimes a home and children save such a girl but the chance for this is a pretty long one unless we have given her a suitable education. If the institution can not be adjusted to this type of girl then the state should make some provision for her outside of the institution. She is worth almost any expense and effort for she is the most dangerous as well as the most valuable type. Her problem is the more difficult because we have neglected her so long that we can not expect the cooperation at the start that we should receive from the well educated, carefully nurtured girl. This upper class must, however, be allowed to choose its own occupation after we have given enough education to provide a basis for that choice.

What we have said of this first group holds, in a somewhat lesser degree, of the girls of merely good average mentality. The first thing that should be done for them is to make sure that any deficiencies due to faulty early education are made good. Then the girl should know that there are various possibilities open to her and that she may choose some line of work suited to her capacity and of interest to her.

It has been most interesting to the examiner to see the changed attitude of the girls since it has been possible for them to *choose* housework, dressmaking or the commercial course. They talk it over seriously, and from the discussion of these three possibilities go on to other plans.

Here are the choices as they have been given us in the test work. Three want to take the business course; nine want domestic science; four want dressmaking; two would like to study millinery; eleven are anxious to go on with school; three of them want eventually to study nursing; two would give almost anything for a chance to study music. Then there are the seven defectives who must have special schooling according to modern methods and who will need constant custody.

GRACE M. FERNALD.

## MEDICAL REPORT.

*To the Board of Trustees,  
California School for Girls,  
Whittier, California.*

LADIES: I herewith submit the following tabulation of medical work of the school accomplished and recommended from January 12, 1914, to date.

Accomplished and Cleaned Up.	
Operations—major .....	2
Operations—minor .....	4
Abortion—natural .....	1
Fractures .....	1
Pregnancies .....	2
Dentistry .....	10
Miscellaneous .....	2
Syphilis .....	2
Gonorrhea—discharged as cured .....	3
Gonorrhea—infected at present .....	39

Recommended.	
Operations—major .....	7
Operations—minor .....	1
Tonsils and adenoids .....	10
Miscellaneous .....	1
Dentistry .....	19

At the present time there is one case of syphilis in the school, thirty-nine girls are being treated for gonorrheal affections and seventeen not infected.

Respectfully submitted.

AUGUSTA ZUBER, M. D.



## PAY ROLL.

Position	Salary per month
Superintendent -----	\$150 00
Assistant superintendent -----	75 00
Clerk -----	75 00
Parole officer -----	85 00
Commissary clerk -----	60 00
Physician -----	60 00
Nurse -----	50 00
Housekeeper -----	50 00
Culinary instructor -----	60 00
Sewing instructor -----	50 00
School teacher -----	60 00
Yard officer -----	50 00
Assistant yard officer -----	50 00
Laundry instructor -----	50 00
Dormitory watch -----	50 00
Relief officer -----	50 00
Physical director -----	60 00
House mother home cottage -----	60 00
Night watch home cottage -----	50 00
Matron receiving cottage -----	55 00
Assistant matron receiving cottage -----	50 00
Day man yard -----	60 00
Night watch yard -----	50 00
Total -----	<hr/> \$1,410 00





First Report

OF THE

Superintendent Capitol Building  
and Grounds of California

Covering Period from July 1, 1911,  
to July 1, 1914

GEORGE G. RADCLIFF,  
Superintendent Capitol Building and Grounds

By J. F. MISPLEY, Secretary



CALIFORNIA  
STATE PRINTING OFFICE  
1914



## CAPITOL BUILDING AND GROUNDS.

Statutes 1911, page 572.

GEORGE G. RADCLIFF	Superintendent
J. F. MISPLEY	Clerk
WM. VORTRIEDE	Head Gardener
ALBERT ALDINGER	Assistant Gardener
THOMAS McDERMOTT	Engineer
JOHN MARSH	Fireman
W. H. SUTTON	Electrician
WM. WICKS	Head Porter

7 policemen, 2 elevator attendants, 14 gardeners, 5 porters, 1 typewriter expert,  
2 telephone operators.

Office, State Capitol.

LETTER OF TRANSMITTAL.

October 1, 1914.

*To the Honorable* HIRAM W. JOHNSON,  
*Governor of the State of California,*  
*Sacramento, California.*

DEAR SIR: Herewith find my report as Superintendent of the Capitol Building and Grounds for the period from July 1, 1911, to June 30, 1914, inclusive.

Respectfully,

GEORGE G. RADCLIFF,  
Superintendent Capitol Building and Grounds.

By J. F. MISPLEY, Secretary.



## INTRODUCTION.

Prior to 1911 the department of Capitol Building and Grounds was divided and managed as follows: The custody of the Capitol Building and the hiring and direction of the employees therein was under the jurisdiction of the Secretary of State, while the park and the property thereof was managed by a commission known as the Capitol Park Commission, consisting of the State Treasurer, Governor, and the Secretary of State. This triple-headed system of management was, as every legislator well knows, a failure.

In 1911 the legislature consolidated both departments and placed the executive management thereof in the Superintendent of Capitol Building and Grounds. The newly created department also assumed, cooperating with the State Board of Control, additional duties, particularly in the purchasing of and contracting for supplies required by the State Capitol and the offices therein.

Immediately upon assuming office in April, 1911, the Superintendent installed a stock record system by which a record of all purchases of supplies and the disposition of same is kept. Prior to that date, several thousand dollars worth of supplies were purchased each year and no record of same kept; even the bills for supplies were not filed away for reference. Only a portion of the bills for stationery and supplies purchased prior to 1911 could be found. No record of the disposition of the supplies was made. Supplies were purchased in small lots as needed, no competitive bids were secured, and no uniformity of supplies was attempted, resulting in great waste to the state.

A comparative table follows, showing prices paid for office supplies prior to 1911 and the prices paid by this department in 1911, 1912, 1913 and 1914. The years date from July 1 to June 30, inclusive. As stated above, only a few of the bills prior to 1911 could be found, therefore only a comparison is given on supplies that appeared on the invoices that could be located. Since assuming office the list of supplies has been greatly increased, it being the aim of this department to supply any item of stationery that might reasonably be desired by any of the state offices. Each office formerly purchased many items from their contingent funds, paying full retail prices in most instances. This department combines the requirements of all the departments and is able to obtain a wholesale price and make a material saving.



## CAPITOL BUILDING AND GROUNDS.

COMPARATIVE TABLE SHOWING PRICES PAID FOR STATIONERY SUPPLIES FOR THE YEARS 1910, 1911, 1912, 1913, AND 1914.  
 As no complete or accurate record of purchases was kept prior to 1911, the prices listed under 1910 were obtained by a search of the bills on file in the Controller's office.

	Prices paid					Saving of 1914 over 1910
	1910	1911	1912	1913	1914	
2 dozen desk pads, 19 x 24.....	\$18 00	\$18 00	\$4 96	\$4 96	\$4 88	\$13 12 or 73 per cent.
7 gross typewriter erasers, circular.....	50 40	25 20	26 88	26 88	22 40	28 00 or 57 per cent.
2 gross letter files.....	144 00	108 00	108 00	54 00	57 60	86 40 or 60 per cent.
8 dozen inkstands.....	48 00	32 40	31 04	29 60	28 80	19 20 or 40 per cent.
6 dozen Shannon indexes.....	2 88	1 80	1 80	1 74	1 68	1 20 or 41 per cent.
1 gross letter trays, 3-inch.....	43 20	18 00	18 00	18 00	18 75	24 45 or 56 per cent.
6 reams blotting paper.....	130 00	72 00	50 40	54 00	49 50	70 50 or 38 per cent.
300 dozen manila pads, legal size.....	306 00	244 00	334 00	180 00	180 00	216 00 or 54 per cent.
50 dozen manila pads, letter size.....	66 00	37 00	30 00	30 00	26 50	39 50 or 50 per cent.
400 packages mimeograph paper, legal size.....	220 00	135 00	144 00	132 00	136 00	84 00 or 38 per cent.
200 packages mimeograph paper, letter size.....	88 00	54 00	54 00	52 00	53 00	34 00 or 38 per cent.
500 boxes typewriter paper, 8½ x 11, 20 pound.....	350 00	235 00	200 00	192 00	280 00	70 00 or 20 per cent.
500 boxes typewriter paper, 8½ x 11, 16 pound.....	300 00	195 00	195 00	150 30	210 00	60 00 or 20 per cent.
100 boxes onion-skin paper, 8½ x 11.....	125 00	32 00	32 00	31 80	28 00	97 00 or 77 per cent.
100 boxes onion-skin paper, 8½ x 13.....	178 50	94 35	93 07	94 80	35 00	90 50 or 80 per cent.
2,500 pounds wrapping paper.....	180 00	156 00	93 07	94 80	90 01	88 19 or 42 per cent.
24 cases toilet paper.....	2 40	61	141 60	110 40	128 00	42 00 or 23 per cent.
12 boxes eyelets, No. B.....	2 36	1 26	61	60	60	1 80 or 65 per cent.
12 boxes eyelets, No. JN.....	2 36	3 00	98	81	81	1 72 or 67 per cent.
18 boxes eyelets, No. CZ.....	17 50	12 00	2 46	2 46	2 43	37 or 19 per cent.
100 boxes OK clips, No. OB.....	17 50	12 00	10 00	9 00	11 00	6 50 or 37 per cent.
100 boxes OK clips, No. IB.....	17 50	12 00	10 00	9 00	11 00	6 50 or 37 per cent.
50 boxes OK clips, No. 2B.....	11 00	5 42	5 42	5 00	6 50	4 50 or 49 per cent.
80 boxes Challenge eyelets, No. 1.....	11 20	11 20	5 72	7 36	8 00	3 20 or 28 per cent.
30 boxes Dennison No. 22RH fasteners.....	4 50	1 87	1 80	1 80	1 80	2 70 or 60 per cent.
40 boxes Dennison No. 24RH fasteners.....	10 00	4 40	4 00	3 60	3 80	6 20 or 62 per cent.
100 boxes Hotchkiss staples, No. 1.....	25 00	25 00	11 25	10 60	8 75	16 25 or 65 per cent.
1,200 boxes Hotchkiss staples, No. 1.....	120 00	36 00	28 00	27 00	27 00	93 00 or 77 per cent.
5 gross paste, 8 ounce jars.....	223 20	165 60	105 00	146 40	137 40	85 80 or 38 per cent.
15 gross Eagle draughting pencils.....	72 00	72 00	60 00	45 00	45 00	27 00 or 37 per cent.
20 gross Blaisdell blue pencils.....	180 00	122 48	120 00	119 80	130 00	50 00 or 27 per cent.
10 gross Eagle copygraph pencils.....	60 00	36 70	36 70	35 50	35 00	25 00 or 41 per cent.

150 gross Leon Ismaes ghettum pens	375 00	135 00	119 70	112 50	114 00	261 00 or 69 per cent
5 gross penholders, cork grip	30 00	15 00	15 00	13 75	13 75	16 25 or 54 per cent
6 gross reporters' notebooks	216 00	102 00	125 28	114 00	123 00	93 00 or 43 per cent
300 gross rubber bands, No. 18	125 00	40 50	48 00	48 75	42 00	83 00 or 66 per cent
100 gross rubber bands, No. 30	70 00	27 00	27 00	27 30	24 00	46 00 or 65 per cent
300 gross rubber bands, No. 33	300 00	117 00	102 00	114 00	108 00	192 00 or 64 per cent
72 gross rubber bands, No. 00 <sup>1</sup>	53 75	22 50	10 72	10 00	8 63	25 12 or 74 per cent
10 pounds sealing wax	5 00	3 00	2 30	2 50	2 05	2 95 or 59 per cent
40 boxes gold seals, No. 21	12 00	9 40	5 88	8 00	8 00	4 00 or 33 per cent
15 M gold seals, No. 31	135 00	100 95	94 50	93 75	93 00	42 00 or 31 per cent
9 dozen stamps pads, No. 2	12 15	12 15	11 25	11 25	11 05	1 08 or 8 per cent
4 gross No. 18 twine, BC flax	80 61	40 32	40 32	34 72	54 12	26 32 or 31 per cent
5 gross No. 36 twine, BC flax	108 00	54 00	51 00	61 80	64 80	43 20 or 40 per cent
200 boxes carbon paper	500 00	166 77	106 77	157 50	157 50	312 50 or 68 per cent
7 gross typewriter ribbons	350 00	350 00	281 40	281 40	302 40	47 00 or 13 per cent
Totals	\$9,361 38	\$3,200 88	\$3,034 92	\$2,776 06	\$2,949 56	\$2,611 82 or 17 per cent

The saving in cost of supplies in 1914 over that of 1910 ranges from 8 per cent to 80 per cent. In the total the saving amounted to 47 per cent.

NOTE.—Typewriter paper in 1913 was supplied by State Printing Office from their stock; could secure no uniform stock throughout the year, so purchased from dealers in 1914.

A complete record of the disposition of supplies issued from our regular stock is kept. Supplies are furnished only on requisition signed by an authorized representative of the departments. These requisitions are filed and a monthly record is made up which shows at any time the amount of stationery drawn by each office each month.

Stock record showing stationery and supplies drawn from superintendent's office for sixty-third, sixty-fourth and sixty-fifth fiscal years.

	Sixty-third fiscal year	Sixty-fourth fiscal year	Sixty-fifth fiscal year
Governor's office .....	\$68 53	\$88 68	\$90 01
Secretary of State .....	507 00	511 77	340 14
Controller .....	169 56	166 06	191 96
Treasurer .....	64 75	63 70	118 96
Attorney General .....	76 50	95 51	40 01
Surveyor General .....	104 12	84 05	78 72
Clerk Supreme Court .....	27 98	18 97	13 72
Superintendent Public Instruction .....	89 81	70 11	91 18
State Printer .....	66 34	115 58	80 26
Board of Equalization .....	36 28	40 14	25 11
Board of Control .....	118 15	138 95	136 44
Adjutant General .....	67 73	110 25	70 31
State Library .....	154 22	212 77	219 19
Engineering Department .....	323 78	390 34	535 53
Highway Commission .....	35 29	80	1 48
State Forester .....	49 14	53 50	38 25
Agricultural Society .....	64 97	63 24	56 96
Board of Horticulture .....	109 28	169 72	107 67
Board of Health .....	124 98	104 98	154 49
Lunacy Commission .....	21 55	34 01	30 89
Veterinarian .....	39 12	21 90	17 38
Water Commission .....	55 16	35 93	15 31
Superintendent Building and Grounds .....	84 94	199 38	381 09
Third District Court of Appeal .....	19 82	39 54	27 89
Assembly .....	81 14	827 93	
Senate .....	33 00	727 60	73
Textbook Committee .....	6 94	3 77	
Fish and Game Commission .....	5 27		
Civil Service Commission .....			264 40
Labor Commissioner .....			16 21
Motor Vehicle Department .....			162 62
Viticulture Commission .....			17 34
Board of Medical Examiners .....			48 12
Board of Education .....			71 63
Legislative Counsel Bureau .....			11 22
Totals .....	\$2,605 30	\$4,389 18	\$3,455 22

The steady growth of the state's business can be noted by the increased amount of supplies used each year. In the sixty-fourth fiscal year \$1,553.55 in supplies was furnished to the legislature. The new state departments have, in the main, all been equipped and furnished with office supplies by this department. The new departments in the Capitol Building are as follows: Civil Service Commission, State Labor Commissioner, Motor Vehicle Department, Viticulture Commission, Board of Medical Examiners, Board of Education and Legislative Counsel Bureau.

**Financial statement for sixty-third, sixty-fourth and sixty-fifth fiscal years.**

## Stationery, fuel, lights and supplies, sixty-third fiscal year.

Appropriation .....		\$20,000 00
Credit by revolving fund .....		15 00
Stationery .....	\$4,877 75	
Office fixture .....	183 98	
Typewriters and parts .....	363 69	
Oil and fuel .....	746 99	
Electrical supplies .....	517 97	
Lumber and boxes .....	74 26	
Electric lamps .....	877 03	
Electric energy .....	1,754 32	
Janitor supplies .....	537 00	
Totals .....	\$10,008 37	\$20,015 00
Deduct .....		10,008 37
Balance .....		\$10,006 63

## Stationery, fuel, lights and supplies, sixty-fourth fiscal year.

Balance .....		\$10,006 63
Credit by revolving fund .....		85 00
Stationery .....	\$3,130 90	
Typewriter and parts .....	130 45	
Oil and fuel .....	1,042 20	
Electrical supplies .....	466 22	
Lumber and boxes .....	74 26	
Electric lamps .....	1,153 03	
Electric energy .....	3,150 73	
Janitor supplies .....	568 50	
Paints and hardware .....	191 78	
Drayage .....	50 96	
Totals .....	\$9,959 03	\$10,091 63
Deduct .....		9,959 03
Balance returned to general fund .....		\$132 60

## Repairs to building, furniture and fixtures, sixty-third fiscal year.

Appropriation .....		\$5,000 00
Material .....	\$790 91	
Labor .....	2,066 09	
Totals .....	\$2,857 00	\$5,000 00
Deduct .....		2,857 00
Balance .....		\$2,143 00

## Repairs to building, furniture and fixtures, sixty-fourth fiscal year.

Balance .....		\$2,143 00
Material .....	\$564 10	
Labor .....	1,578 90	
Totals .....	\$2,143 00	\$2,143 00

## Purchase of implements and hose, care and improvement of grounds, sixty-third fiscal year.

Appropriation .....		\$7,000 00
Plants, seeds, bulbs, etc .....	\$1,018 25	
Tubs and pots .....	210 53	
Fertilizer and disinfectant .....	421 61	
Hose .....	214 90	
Garden implements .....	351 81	
Paints and oils .....	231 12	
Hauling rubbish .....	678 00	
Cement work .....	101 67	
Teaming, rock and soil .....	527 15	
Board of horse .....	240 00	
Water pipe and connections .....	385 83	
Lumber .....	131 00	
Hardware .....	176 77	
Totals .....	\$4,688 64	\$7,000 00
Deduct .....		4,688 64
Balance .....		\$2,311 36



## CAPITOL BUILDING AND GROUNDS.

## Purchase of implements and hose, etc., sixty-fourth fiscal year.

Balance .....		\$2,311 36
Plants, seeds, bulbs, etc. ....	\$321 07	
Tubs and pots .....	37 50	
Fertilizer and disinfectant .....	167 90	
Hose .....	239 15	
Garden implements .....	115 38	
Paints and oils .....	175 89	
Hauling rubbish .....	670 00	
Waste cans .....	67 20	
Board of horse .....	240 00	
Cement work .....	10 52	
Teaming, rock and soil .....	138 35	
Lumber .....	85 04	
Hardware .....	43 36	
Totals .....	\$2,311 36	\$2,311 36

## Purchase of carpets and furniture, sixty-third fiscal year.

Appropriation .....		\$2,000 00
Filing equipment .....	\$245 25	
Lumber .....	157 92	
Linoleum and carpets .....	61 60	
Office furniture .....	94 53	
Totals .....	\$559 30	\$2,000 00
Deduct .....		559 30

Balance ..... \$1,440 70

## Purchase of carpets and furniture, sixty-fourth fiscal year.

Balance .....		\$1,440 70
Lumber .....	\$54 25	
Linoleum and carpets .....	439 52	
Office furniture .....	163 75	
Typewriters .....	224 61	
Totals .....	\$882 13	\$1,440 70
Deduct .....		882 13

Balance returned to general fund..... \$558 57

## Pay of gardeners, laborers, porters, etc., sixty-third fiscal year.

Appropriation .....		\$32,500 00
Deduct pay rolls .....		16,234 83
Balance .....		\$16,265 17

## Pay of gardeners, porters, etc., sixty-fourth fiscal year.

Balance .....		\$16,265 17
Deduct pay rolls .....		16,265 17
Balance .....		\$0 00

## Water, Capitol Building, sixty-third fiscal year.

Appropriation .....		\$1,200 00
Deduct City of Sacramento, water 12 months .....		600 00
Balance .....		\$600 00

## Water, Capitol Building, sixty-fourth fiscal year.

Balance .....		\$600 00
Deduct City of Sacramento, water 12 months .....		600 00
Balance .....		\$0 00

## Water, Capitol Grounds, sixty-third fiscal year.

Appropriation .....		\$2,400 00
Deduct City of Sacramento, water for 12 months .....		1,200 00
Balance .....		\$1,200 00

## Water, Capitol Grounds, sixty-fourth fiscal year.

Balance .....		\$1,200 00
Deduct City of Sacramento, water for 12 months.....		1,200 00
Balance .....		\$0 00

## Lighting, Capitol Grounds, sixty-third fiscal year.

Appropriation .....		\$2,200 00
Deduct electric energy (arcs).....		936 14
Balance .....		\$1,263 86

## Lighting, Capitol Grounds, sixty-fourth fiscal year.

Balance .....		\$1,263 86
Deduct electric energy (arcs).....		1,164 50
Balance to general fund.....		\$98 56

## Stationery, fuel, lights and supplies, sixty-fifth fiscal year.

Appropriation .....		\$28,000 00
Stationery .....	\$3,838 24	
Janitor supplies .....	335 06	
Electric energy .....	3,468 37	
Electric lamps .....	941 03	
Electric supplies .....	1,012 29	
Fuel and oil .....	972 42	
Hardware, paints and oils.....	290 08	
Electric pump .....	175 00	
Drayage .....	52 23	
Typewriter and parts.....	20 00	
Totals .....	\$11,104 72	\$28,000 00
Deduct .....		11,104 72
Balance for sixty-sixth fiscal year.....		\$16,895 28

## Repairs to building, fixtures and furniture, sixty-fifth fiscal year.

Appropriation .....		\$5,000 00
Material .....	\$992 01	
Labor .....	1,376 90	
Totals .....	\$2,368 91	\$5,000 00
Deduct .....		2,368 91
Balance for sixty-sixth fiscal year.....		\$2,631 09

## Purchase of implements and hose, care and improvement of grounds, sixty-fifth fiscal year.

Appropriation .....		\$7,000 00
Plants, seeds, bulbs, etc.....	\$368 40	
Tubs and pots.....	10 75	
Fertilizer and disinfectants.....	407 55	
Hose .....	322 34	
Garden implements and hardware.....	441 53	
Paints and oils.....	190 04	
Hauling rubbish .....	660 00	
Cement work .....	128 55	
Teaming, rock and soil.....	104 50	
Board of horse .....	331 10	
Lumber .....	13 31	
Phone, ice, shoeing horse, etc.....	80 25	
Totals .....	\$3,058 32	\$7,000 00
Deduct .....		3,058 32
Balance for sixty-sixth fiscal year.....		\$3,941 68

## CAPITOL BUILDING AND GROUNDS.

## Purchase of carpets and furniture, sixty-fifth fiscal year.

Appropriation .....		\$2,000 00
Office furniture and filing equipment.....	\$143 23	
Lumber .....	37 60	
Typewriters .....	545 15	
Totals .....	\$725 98	\$2,000 00
Deduct .....		725 98
Balance for sixty-sixth fiscal year.....		\$1,274 02

## Pay of gardeners, laborers, porters, etc., sixty-fifth fiscal year.

Appropriation .....		\$42,500 00
Deduct pay rolls.....		20,920 00
Balance for sixty-sixth fiscal year.....		\$21,580 00

## Water, Capitol Building and Grounds.

Appropriation .....		\$3,600 00
Deduct City of Sacramento, water for 12 months.....		1,800 00
Balance for sixty-sixth fiscal year.....		\$1,800 00

## Traveling and contingent, sixty-fifth fiscal year.

Appropriation .....		\$240 00
Deduct traveling expenses.....		86 50
Balance for sixty-sixth fiscal year.....		\$153 50

## STATEMENT OF APPROPRIATIONS.

	1909	1911	1913
*Stationery, fuel, lights and supplies.....	\$25,000 00		
Lighting Capitol Grounds .....	2,280 00		
Deficiency .....	2,500 00		
	\$29,780 00	\$22,200 00	\$28,000 00
Pay of gardeners, porters, etc.....	42,960 00	32,500 00	42,500 00
Repairs to building and furniture .....	5,000 00	5,000 00	5,000 00
Purchase of carpets and furniture.....	5,000 00	2,000 00	2,000 00
Purchase of implements and hose, care and improvement of grounds .....	12,000 00	7,000 00	7,000 00
Water, Capitol building and grounds.....	3,600 00	3,600 00	3,600 00
Traveling and contingent.....			240 00
Totals .....	\$98,340 00	\$72,300 00	\$88,340 00

\*The appropriation for stationery, fuel, lights and supplies was \$25,000 in 1909. In 1911 the legislature made an additional appropriation of \$2,500 to cover a deficiency in that fund. In 1913 the appropriation for lighting Capitol grounds was included with the appropriation for stationery, fuel, lights and supplies.

In 1911, in making the appropriation for pay of gardeners, laborers, porters, etc., the legislature overlooked the fact that in 1909 there were two appropriations, one of \$32,160 for pay of gardeners, and one of \$10,800 for pay of porters. The legislature made the appropriation for 1911-1912 of \$32,500 for pay of gardeners, laborers, porters, etc., which was over \$10,000 short of the 1909 appropriation. Fortunately, there was a special appropriation of \$25,000 for improving the Capitol grounds, made by the legislature of 1911, out of which this department was able to keep the work on the grounds in hand, using approximately \$5,000 for this purpose. The balance of this special appropriation of \$25,000 was spent for soil, rock, walks, teaming, installing a storm drain system, improving the California section of Capitol Park, and installing the electric lighting system in the grounds, which cost approximately \$15,000.

The following are the special appropriations made for the department of Capitol Building and Grounds:

	1909	1911	1913
Repair of greenhouse, walks, lawns and gardens.....	\$3,000 00	-----	-----
Repairs to building and purchase of legislative furniture....	75,000 00	-----	-----
Improving Capitol grounds.....	-----	\$25,000 00	-----
New greenhouse.....	-----	-----	\$3,500 00
Decorating rotunda of Capitol Building.....	-----	-----	10,000 00
New elevators.....	-----	-----	10,000 00
Painting Capitol Building.....	-----	-----	12,000 00
Totals .....	\$78,000 00	\$25,000 00	\$35,500 00

#### FINANCIAL STATEMENT OF SPECIAL APPROPRIATIONS.

Repairs to greenhouse, walks, lawns and gardens. Chap. 548, Stats. 1909.

Appropriation .....		\$3,000 00
Advertising .....	\$8 18	
Stakes .....	4 80	
Dirt and gravel.....	1,967 90	
Labor and teaming.....	1,019 12	
Total .....		3,000 00
Balance .....		\$0 00

This appropriation was spent in filling and teaming and installing a useless underground pipe system on the old pavilion site, that had to be removed. Much of the dirt and refuse had to be hauled away when we commenced improvement work in June, 1911. We found this section of the park a dumping ground for that section of the city. None of the above appropriation was spent on the greenhouse, walks or lawns of the Capitol Park, necessitating the appropriation of \$3,500 by the 1913 session of the legislature for the construction of a new greenhouse. This work has been done under the direction of the



engineering department, but the appropriation was not sufficient to build the size greenhouse desired.

Improving Capitol Grounds. Chap. 552, Stats. 1911.

Appropriation .....		\$25,000 00
Electric lighting system, including rectifier outfit, poles, lamps, underground conduit system, etc.:		
Electric material .....	\$9,327 01	
Advertising .....	30 00	
Labor .....	5,326 20	
Rock, sand, cement, etc. ....	166 55	
Water pipe .....	40 00	
Total .....		\$14,889 76
Improving California section of Capitol Park:		
Labor .....	\$1,831 89	
Hardware and implements .....	430 49	
Lumber .....	30 00	
Plants, seeds, etc. ....	351 97	
Soil, rock, sand, fertilizer and teaming .....	1,470 10	
Board of horse .....	32 50	
Total .....		4,146 95
Storm drain sewer installation:		
Labor .....	8470 75	
Material .....	442 56	
Total .....		913 31
Pay of gardeners and laborers account shortage in pay roll appropriation of 1911 .....		5,049 97
Total .....		\$24,999 99
Balance .....		\$0 01

The work of decorating the rotunda of the Capitol Building, authorized by the special appropriation of the 1913 session of the legislature, chapter 155, has just been completed. The work has been done by Mr. Arthur Mathews, an artist of San Francisco.

The new elevators, authorized under chapter 538, statutes of 1913, at a cost not to exceed \$10,000 are installed and in operation. The installation has been under the direction of the State Department of Engineering.

The special appropriation of \$12,000, chapter 603, statutes of 1913, for painting the Capitol Building, inside and outside, came when needed most. The building had not been painted since 1907. The cost of the outside painting was \$6,398.01, leaving a sufficient balance to properly clean and paint the corridors of the building.

#### PURCHASING DEPARTMENT.

It has been the aim of this department to so centralize the purchases that a considerable saving might be made owing to the quantity purchased and the competition secured. In this manner savings ranging from 8 per cent to 80 per cent were made on our stationery contracts, and the same method has been followed in purchasing the small items of hardware, electrical supplies and paints and oils. We arranged

schedules covering the requirements of the different branches of this department and submitted them to the various dealers for competitive bids.

The quantities purchased under these schedules are as follows:

	Sixty-third fiscal year	Sixty-fourth fiscal year	Sixty-fifth fiscal year
Hardware -----	\$64 82	\$224 38	\$117 20
Electrical supplies -----	229 36	567 11	574 50
Paints and oils -----		38 98	133 01

These materials are kept in a central stock room. Formerly there was a great deal of delay in waiting for materials, besides the inconvenience of making small purchases as the articles were needed.

#### TYPEWRITER REPAIR DEPARTMENT.

In November of 1911 the attention of this department was directed to the matter of the care of typewriters in the Capitol building which numbered approximately 100. The offices were compelled to call in outside repairmen whenever their typewriters were in need of attention, paying for the same from their contingent funds.

In November, 1911, with the consent of the State Board of Control, there was appointed a typewriter repairman. It was his duty to inspect, clean and repair all the typewriters and adjust new ribbons whenever needed. In addition to this, all the small general repair work, such as keys, locks, etc., was turned over to him. During the legislative session we were able to render prompt service to the numerous typewriters used by the legislature, which amounted to about sixty machines. The key work for the legislature is also handled by the typewriter repairman. There are at the present time over 140 machines taken care of by this department. A record is kept of all machines, showing the number, operator, when purchased and when traded in for a late model.

In April, 1913, we took up the matter of mimeograph work done by the various offices in the building.

There was in use at that time nine old style duplicators, or mimeograph machines. The work was done by the various stenographers and clerks in the offices, few of whom were familiar with that kind of work. This resulted in a great deal of wasted time, wasted materials and unsatisfactory work.

This department, with the consent of the Board of Control, traded the nine old style duplicators, at an allowance of \$20 each, for two new Edison mimeographs, one with self feed and motor drive. We were also allowed full price for all the supplies we then had on hand

for the old machines. That the transaction was made at no outlay of cash can be seen from the following statement:

Trade in value		Cost of new machines	
9 duplicators at \$20.....	\$180 00	1 No. 77 mimeograph .....	\$52 50
Supplies on hand.....	91 52	1 No. 78 electric mimeograph.....	132 50
Total .....	\$271 52	Total .....	\$185 00

This left a balance in our favor of \$86.52, for which we received mimeograph supplies. The small hand feed machine was for use in the Engineering Department for specification and other work, and the electric machine was installed in this office.

This department furnishes the stencils to any department desiring same and when the stencil is cut, our typewriter repairman runs the desired number of copies. The mimeograph department has been of great assistance to the offices in the building, particularly the Civil Service Commission. When that commission was first inaugurated this department did all the mimeograph work, such as announcements, forms, circular letters and examination questions. There are many rush jobs that the printing office would be unable to fill in a hurry, which the mimeograph department is able to turn out on short notice. Since inaugurating this department, up to September 10, 1914, the following work has been done:

	Number of stencils	Number of copies
Governor's office .....	32	8,030
Secretary of State .....	92	21,970
Controller .....	87	11,154
Treasurer .....	5	2,875
Surveyor General .....	2	800
Superintendent Public Instruction .....	63	16,190
State Printer .....	4	700
Board of Equalization .....	1	750
Board of Control .....	62	7,625
Adjutant General .....	122	34,370
Engineering Department* .....	5	1,475
Forester .....	16	3,600
Horticultural Commission .....	37	7,250
Board of Health .....	44	10,335
Lunacy Commission .....	6	1,675
Veterinarian .....	10	1,395
Superintendent Building and Grounds.....	48	10,553
Civil Service Commission .....	657	132,330
Motor Vehicle Department* .....	56	31,675
Viticulture Commission .....	24	4,665
Board of Medical Examiners.....	169	10,455
Board of Education .....	43	6,950
Legislative Counsel Bureau .....	4	1,150
Fish and Game Commission.....	3	840
State Reclamation Board .....	7	685
Totals .....	1,599	329,497

\*The Engineering department and the Motor Vehicle department have a machine to do their own work, but occasionally a rush of work makes it necessary for this department to come to their assistance.

**ICE SERVICE.**

This department has recently installed an ice storage plant in the basement of the Capitol Building, from which all the departments therein receive ice. Formerly the ice was purchased by each department from their contingent funds at about one cent per pound, or \$20.00 per ton. Our plant has a capacity of approximately three tons, if crowded. However, we usually purchase in lots of two tons at a rate of \$5.50 per ton. This ice for the building is purchased from our own funds.

The work of constructing the plant was done by our regular employees, one rated as a gardener and the other as fireman. The cost of the storage room was as follows:

Lumber .....	\$26 50
Building paper .....	2 95
Tools and galvanized iron .....	15 15
Wagon for delivery .....	5 65
Lining wagon .....	5 00
Sawdust .....	3 75
Cement .....	66
Rubber gloves .....	1 35
<b>Total .....</b>	<b>\$61 01</b>

Below is given a statement showing the saving made in the first two months under the present system of handling ice. The first column shows the ice delivered in July and August of 1913 and the cost of same. The second column gives the amount and cost of the ice delivered in July and August, 1914.

1913		1914	
July .....	13,945 pounds, \$137 10	July .....	20,200 pounds, \$55 55
August .....	14,985 pounds, 149 85	August .....	16,000 pounds, 33 00
<b>Totals .....</b>	<b>29,575 pounds, \$286 95</b>	<b>Totals .....</b>	<b>36,200 pounds, \$88 55</b>
	88 55		
<b>Saving first two months.....</b>	<b>\$198 40</b>		

It will be seen that we have more than saved the initial cost of the storage room the first month, and have received 5,625 pounds more ice. During the year 1913 the ice delivered to the Capitol Building totaled 129,290 pounds and cost \$1,177.20. The same quantity of ice will cost us \$355.55, making a yearly saving of \$821.65, or approximately 70 per cent.

**WATER SERVICE.**

During the coming session of the legislature this department will assume charge of the water service, and expects to make a considerable saving in this item. The water and ice for the legislature will be furnished by this department from our funds, which will save the legislature over \$700.



The amounts spent for water and ice by the legislature for the past three years are as follows:

	Water	Ice	Total
1909 -----	\$534 00	\$384 00	\$918 00
1911 -----	564 00	170 95	734 95
1913 -----	478 25	288 00	766 25

By taking over the water service, this department will be able to furnish well water from a depth of 1,000 feet, samples of which have been submitted by the State Board of Health to the State University at Berkeley for test and which has been pronounced free from all bacterial matter, and which is undoubtedly better than any water that is served in the city of Sacramento at the present time, at a cost not to exceed \$60 for the entire session.

#### ELECTRIC LIGHTING.

In 1909 and 1911 the state was paying 4 cents per kilowatt hour for the building lights, which was seven eighths of the monthly bill, 3 cents per kilowatt hour for the dome lights, 2 cents per kilowatt hour for the elevators, and a monthly rate of \$72 for eight old style obsolete arc lamps on the grounds.

In the spring of 1911, after the new department had been created, the Superintendent of the Capitol began negotiations with the electric power companies doing business in Sacramento, with the result that in July a contract was effected for three years with the Great Western Power Company whereby the state was to pay  $1\frac{7}{8}$  cents per kilowatt hour for all electric energy consumed, the same to be measured from the meter in the basement of the Capitol Building and which meter was to be read jointly by a representative of the corporation and a representative of this department.

When this contract was entered into with the Great Western Power Company, which corporation was the lowest bidder, the same rate ( $1\frac{7}{8}$  cents) was made to apply to the State Printing Office, which for years had been paying 5 cents per kilowatt hour for all energy.

Since this contract went into effect the state has installed in the Capitol Park what is termed an underground conduit system for park lights, with the result that to-day there are 28 luminous arc lamps, 53 walk lamps and 12 dome arc lamps in operation, giving a total candle power of 132,500, as against 8 arc lamps in the park and 12 in the dome previous thereto, and only giving a candle power of 10,000.

When this favorable rate was made, and at the time the increased lighting service was installed, it was hardly thought that there would be any great financial saving made over previous years, but that the

efficiency of the lighting situation would be increased many fold. The latter has been accomplished as well as a financial saving made each month.

At the present time and for three years past, the electrician of the Capitol Building has become a most important officer of the government. He has charge of the lighting system, under the supervision of this department, in the Capitol Building and Grounds which of course includes the elevator service, the installation of new equipment and the management of the rectifier, dynamo and meters.

An illustration of the saving made and the increased efficiency of the lighting system can be noted below: The bills for the month of January in 1909, 1911 and 1913 are taken, as these are the legislative years.

	Candle power	Kilowatt hours	Amount of bill
1909 -----	10,000	28,228	\$1,026 55
1911 -----	10,000	38,457	1,429 75
1913 -----	132,000	29,640	555 81

Since this department was created there has been installed the following electrical equipment:

Department	Equipment	Consumption	Remarks
Engineering -----	Blue print machine----	9,600 watts	Efficiency increased.
Building and Grounds--	53 arc lamps -----	26,500 watts	Increase of 122,000 candle power.
Library -----	Mercury arc -----	800 watts	For copying rare documents.
Building -----	2 5-horsepower motors	7,920 watts	2 ventilating fans in attic for ventilating legislative chambers.
Building -----	Small generator -----	742 watts	Testing arc lamps.
Library -----	New equipment -----	3,550 watts	Lighting system.
Building -----	New equipment -----	320 watts	Lighting flags.
Building -----	New equipment -----	700 watts	Entrance and rotunda lights.
Building -----	Additional fan -----	500 watts	Fans.
Building -----	1 80-horsepower motor generator set -----	61,960 watts	To be used when power fails.
	5 electric heaters -----	7,500 watts	
	Total -----	119,092 watts	

The old style arc lamps on the grounds cost \$9.00 each per month for energy, and only gave 500 candle power per lamp. The new arcs we have installed give a candle power of 2,500, while the expense of operating is but \$2.97 per month.

In May, 1913, there was installed a modern electric pump in the basement of the Capitol Building to replace an old steam pump used for lifting water to the two storage tanks in the attic. The installation complete cost \$175.

Prior to this time the water was pumped by an old steam pump operated by a small auxiliary boiler, which required constant attention of the engineer or fireman, besides consuming from \$75 to \$100 in fuel each summer, when the regular boilers were not in service. Since installing the electric pump the engineer and fireman have been available for other duties in and about the building. The storage rooms in the basement have been overhauled and whitewashed this summer, the iron chains and arc lamp posts around the grounds painted, all the park benches repainted, entirely with the help of the engineer and fireman during the past season. They have also been available for work in the park, such as trimming palms and trees, rough painting and repairing the sanitary drinking fountains, etc.

#### LEGISLATIVE SUPPLIES.

At the beginning of the 1913 session of the legislature the following letter was sent to the sergeant-at-arms of each house:

January 7, 1913.

DEAR SIR: In conformity to section 716, article XX, chapter 340, page 572 of the statutes of 1911, and section 1 of chapter 705, page 1373 of the statutes of 1911, this office, during the present session of the legislature, is prepared to furnish your department of the legislature with what supplies will be necessary to properly conduct the same. If we have not in stock what you may desire, we are prepared to purchase the same in an expeditious manner and at the lowest possible cost.

This is officially confirmatory of what I have previously informed you orally.

This department will cheerfully cooperate with your department at all times during the session of the legislature, extending all possible courtesies with the aim in view that the work of the legislature may be in a measure beneficially assisted thereby.

I remain, yours most respectfully,

(Signed) GEO. G. RADCLIFF,  
Superintendent Capitol Building and Grounds.

Notwithstanding this letter, the sergeant-at-arms of both the Assembly and the senate proceeded to purchase supplies identical to what is carried in our stock and which they had previously drawn from our stock. It was along about 1900 that the sergeant-at-arms of each house and the secretary of the senate acquired the habit of purchasing stationery and other supplies for the legislature that had been previously secured from what was then known as the janitor's office of the Secretary of State. The high prices paid by the sergeant-at-arms for such supplies can be seen from the following table, in which comparison is made between the prices paid by the sergeant-at-arms of the 1913 session

of the legislature, and the prices paid by this department on our 1913 schedule:

	Sergeant-at-arms	Superintendent building	Difference
3 dozen 4-ounce ink .....	\$3 62	\$1 02	\$2 00 or 55 per cent
2 dozen 8-ounce paste .....	8 26	5 50	2 76 or 33 per cent
6 dozen legal tablets .....	8 10	4 68	3 42 or 42 per cent
150 packages blotters .....	7 50	2 16	4 34 or 56 per cent
1 gross No. 2 pencils .....	5 40	3 46	1 94 or 36 per cent
2 dozen indelible pencils .....	1 30	61	69 or 53 per cent
1 dozen fountain pen ink .....	2 75	1 50	1 25 or 45 per cent
2 dozen letter tablets .....	2 50	1 48	1 02 or 40 per cent
6 boxes carbon paper .....	9 00	3 99	5 01 or 55 per cent
6 dozen pencil erasers .....	2 75	1 80	95 or 34 per cent
4 dozen typewriter erasers .....	3 60	1 28	2 32 or 64 per cent
6 reams typewriter paper, 8½ x 11 .....	4 50	3 12	1 38 or 30 per cent
6 reams typewriter paper, 8½ x 13 .....	6 00	3 24	2 76 or 49 per cent
2 dozen red pencils .....	1 80	1 08	72 or 40 per cent
2 dozen blue pencils .....	1 60	1 03	57 or 35 per cent
2,000 Gem clips .....	1 50	50	1 00 or 67 per cent
2 dozen pyramid pins .....	2 00	1 19	81 or 40 per cent
3 dozen shorthand pencils .....	2 70	87	1 83 or 68 per cent
2 dozen circular erasers .....	1 00	64	36 or 36 per cent
6 stamp pads .....	1 25	63	62 or 49 per cent
6 box files .....	2 75	2 25	50 or 18 per cent
97 pairs shears .....	145 50	59 17	86 17 or 59 per cent
2 dozen waste paper baskets .....	15 00	8 81	6 19 or 41 per cent
5 dozen 5-ounce paste .....	13 15	8 75	4 40 or 33 per cent
4 balls twine .....	80	32	48 or 60 per cent
2 gross thumb tacks .....	3 00	1 68	1 32 or 44 per cent
1,000 O K fasteners, No. 1 .....	1 65	1 00	65 or 40 per cent
1,000 O K fasteners, No. 2 .....	2 00	1 08	92 or 46 per cent
1 Triumph punch .....	2 25	1 75	50 or 22 per cent

These are only a few items taken from bills presented by the sergeant-at-arms of the assembly, and are for articles purchased by him and which he could have secured from this department on requisition. In fact, he was drawing the same articles from this department, as well as purchasing them on the outside.

Previous to 1911, no itemized bills for purchases made by the chief secretary or sergeant-at-arms of either house of the legislature were filed in the Controller's office, and a search of the archives in the Secretary of State's office has resulted in finding only the itemized bills of the sergeant-at-arms of the senate for 1909. For total purchases made by the aforesaid officers of the legislature, but not itemized previous to 1911, a search of the journals, page by page, has had to be made.

The law, undoubtedly, always contemplated that supplies should come from the janitor's office, and at the present time from the Superintendent of Capitol Building and Ground's department. This latter view was taken by Chief Clerk Mallory of the assembly and Secretary Parrish of the senate upon the convening of the last session of the legislature.



Previous to the 1913 session of the legislature there had never been any record kept that will show when, how and to whom supplies are furnished legislators, officers, committees and clerks, and the cost of each item. During the past session this department was prepared to furnish at any time to the chairman of the contingent expense committees the number of each and every article furnished, the cost thereof and by what legislator, officer or clerk received on requisition signed by the secretary of either house, the sergeant-at-arms or the chairmen of the various committees. The establishment of such a system proved of great value in estimating and purchasing supplies for the 1915 session of the legislature, and I trust will result in doing away with the nefarious system of purchasing by appointive officers of the legislature at excessively high prices.

In 1909, the senate, through its secretary and sergeant-at-arms, expended for stationery and office supplies, exclusive of the cost of codes, statutes, express and post office charges, ice, water, etc., the sum of \$7,839.73. That year a monthly rental of \$10 was paid for typewriters. During the 1913 session a monthly rental of \$3.00 was paid on a contract price secured by this department prior to the convening of the last session by and with the consent of several of the leaders of both houses of the legislature. In 1909 an electrical firm secured from the assembly over \$550 for supplies and work that now is done by the electrician and his assistant of this department, and no special charge has been made against that house therefor. The electrical bill for the senate for that year was also very large. The total purchases made by the sergeant-at-arms of the assembly in 1909 for the same articles as enumerated above was about \$5,500.

In 1909, miscellaneous supplies, exclusive of codes, binders, ice, water, telegraph, etc., cost the legislature \$11,906.36; in 1911, \$7,013 and in 1913, with a session that lasted four months and a half as against less than three months in 1909 and 1911, cost \$3,336.10. The items are segregated as follows:

## Senate.

	1909	1911	1913
Stationery purchased by Sergeant-at-Arms.....	\$4,411 85	\$2,036 14	\$36 45
Stationery furnished by Superintendent Building.....		314 11	727 60
	\$4,411 85	\$2,350 25	\$764 05
Electric lamps, drop cords, etc.....	559 15	259 35	*
Supplies, general.....	1,032 01	709 54	88 35
Rent of typewriters.....	652 00	289 00	1357 00
Incidentals, rubber stamps, etc.....	444 50	39 60	15 50
Keys.....	146 25	374 15	95 55
Totals.....	\$7,245 76	\$3,979 89	\$1,320 45

## Assembly.

	1909	1911	1913
Stationery purchased by Sergeant-at-Arms-----	\$3,311 04	\$1,552 64	\$398 98
Stationery furnished by Superintendent Building-----		371 50	827 93
	\$3,311 04	\$1,924 14	\$1,226 91
Electric lamps, drop cords, etc.-----	144 00	131 85	*2 00
Supplies, general-----	528 41	561 65	322 55
Rent of typewriters-----	537 05	267 70	†276 00
Incidentals, rubber stamps, etc.-----		157 85	121 55
Keys-----	140 10	122 60	66 70
Totals-----	\$4,660 60	\$3,033 94	\$2,015 71

## Totals.

	1909	1911	1913
Senate-----	\$7,245 76	\$3,979 89	\$1,320 45
Assembly-----	4,660 60	3,033 94	2,015 71
Totals-----	\$11,906 36	\$7,013 83	\$3,336 16

\*Electric lamps, drop cords, etc., were furnished by this department without cost to the legislature. The charge of \$2.00 for the senate was for rent of an electric heater in one of the committee rooms.

†Typewriters were rented in 1913 at a flat rate of \$3.00 each per month. In 1911 visible machines were rented at \$4.00 per month and blind machines at \$3.00. In 1909 and for prior sessions as high as \$10 per month was paid for rent of typewriters.

## RECOMMENDATIONS FOR PURCHASING DEPARTMENT.

If the purchasing of stationery and office supplies for all the state departments throughout the state could be centralized in one general supply department, as has been done with the offices in the Capitol Building, much greater economy and efficiency would result. At the present time each institution and department, outside of the Capitol Building, secures bids on its own particular requirements, there is no standardization of office supplies, and purchases are made from time to time in small lots, as the supplies are needed.

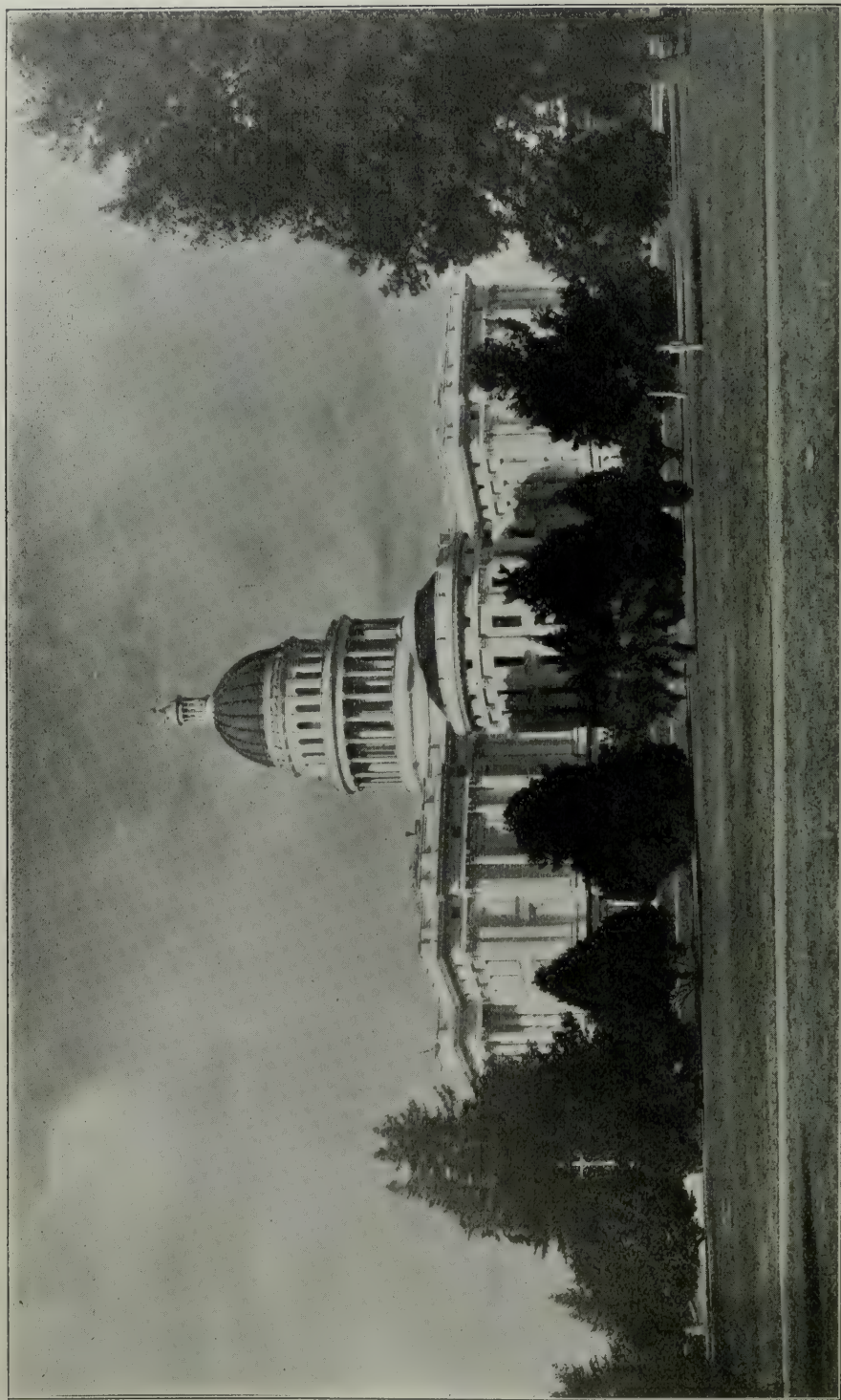
This plan of a central store or supply department is one that is followed successfully by the federal government, particularly in the post office department. The same system is used in the large corporations, such as the Southern Pacific Railroad Company, the Standard Oil Company, The Pacific Telephone and Telegraph Company, and many other large consumers of such supplies. They have their central purchasing departments, from which supplies are shipped to their branch offices.

The ensuing statement shows how the prices vary in the different institutions throughout the state. There can be shown only the unit price, taken from the various awards made on their schedules, it being impossible to give the total quantities consumed, owing to the fact that they purchase the supplies in small lots as needed. If their purchases for the year were combined and purchased at one time, a substantial reduction in price would be made. Some of these institutions are much nearer the source of supply than the Capitol Building, but notwithstanding this fact, this department in almost every instance secured supplies at lower prices. The following table gives the prices paid by some of the institutions as compared to prices paid by this department. Only a comparison on a few items are possible, as the institutions purchase many items that are not on our schedule, and likewise, we have many items that are not used at the institutions:

Prices paid by various institutions compared with prices paid by department of Capitol Building and Grounds.

	Polsom Prison	San Quentin Prison	Whittier State School	California School for Girls	Preston State School	Stockton State Hospital	Veterans' Home	Southern California State Hospital	Agnews State Hospital	Mendocino State Hospital	Superintendent Capitol Building and Grounds
Shannon binding cases, No. 12, dozen-----	\$2 80	\$3 94		\$2 00		\$2 50		\$2 37	\$2 57	\$2 57	\$2 68
Blotters, 4 x 9, dozen-----	02			20		05		02	03	03	01 65
Blotters, 19 x 24, ream-----	11 25	5 00	\$12 00	11 88	11 66	10 00	8 00	8 33	02 1/2	12 50	8 25
Memo, books, dozen-----	2 75	5 00				2 40		2 25	10 00		1 80
Stenographers' notebooks, gross-----	24 00					27 00	18 00		27 00	24 00	20 50
Erasers, circular, gross-----	4 56	5 40		12 60		4 20		4 20	3 84	4 44	3 20
Erasers, soft rubber, gross-----	4 80	4 20	4 20	12 60		4 08		3 36	3 84	4 44	3 20
Files, box letter, dozen-----	2 90							2 50	4 50	3 50	2 40
Ink, black, quarts, dozen-----	3 96		4 80	3 96	5 76			6 00	6 00		4 00
Ink, Higgin's India, dozen-----		3 00									1 78
Shannon indexes, gross-----		6 00									3 36
Paste, quarts, dozen-----			4 80		4 00						4 40
Paste, 8-ounce, dozen-----	2 30			2 30				2 30	3 00	2 30	2 29
Penholders, gross-----	3 20	4 50	4 20				4 68	3 36		4 20	2 75
Pencils, Eagle draughting, gross-----											3 00
Pencils, Mikado, gross-----				3 75		4 00		3 60	3 75	4 00	3 00
Pencils, indelible, gross-----			4 20	4 00	5 04	4 60		4 10	5 00	5 00	3 50
Pens, glucinum, gross-----		1 15			84		75				76
Pens, pyramids, dozen-----		95									59 1/2
Rubber bands, No. 10, gross-----		13									06 3/4
Rubber bands, No. 30, gross-----				42		32 1/2		35	20	28	24
Rubber bands, No. 33, gross-----		70									36
Steel erasers, dozen-----		8 50									3 10
Sanford's ink eraser, dozen-----		2 40									1 70
Mucilage, quarts, dozen-----		5 00					4 80				3 60
Adding machine paper, 2 1/2-inch, roll-----			054								075
Carbon paper, box-----		80			1 05	80			80	80	63
Sealing wax, pound-----		45			30						20 1/2
Gum clips, thousand-----		90	35			80		65	1 20		22 1/2
Manila pads, legal, dozen-----					72					85	60





The Capitol (rear or east side).

## CAPITOL PARK REPORT.

By WM. VORTRIEDE, State Gardener.

*Honorable G. G. RADCLIFF,**Superintendent Capitol Building and Grounds,  
Sacramento, California.*

DEAR SIR: I respectfully submit my report on the Capitol Park from September, 1911, to September, 1914, stating how the grounds were improved where it was possible and how future improvement can and should be made.

In September, 1911, a rainwater drain covering the blocks from Tenth to Eleventh streets and L to N streets was placed.

In October and November, 1911, an electric light system covering the whole of the grounds was installed.

In the fall of 1911 the block between Fourteenth and Fifteenth and M and N streets was graded, walks laid out and lawns sown. This block took, for finishing, 68 loads of soil of two cubic yards each, 91 loads of manure and 46 loads of gravel. The whole of this block is planted to California native plants, and more of them are added as they can be procured. Ninety trees and 56 shrubs have been planted, and about 3,000 annual and perennial native flowers are planted here each year.

The block between Fourteenth and Fifteenth and L and M streets, wherein are located the conspicuously ugly state printing buildings, has been improved by planting trees and shrubs and flowers on the north, west and south sides, to take the eye away from these buildings and hide them as much as possible; 15 trees and 38 shrubs were planted on this block, and 4,000 annual and perennial bedding plants are planted here each year. Ten loads of gravel were used in surfacing the walks. One extra electric light was placed.

The block between Thirteenth and Fourteenth and L and M streets has been improved by a new greenhouse. Here and in its nursery enclosure all annual plants are raised from seeds, and all perennial plants for the grounds and decorative plants for the building are also raised from seeds or cuttings, or nursed on from small, inexpensive seedlings. About 60,000 plants are produced here each year; 6,000 annual and perennial plants for bedding and cut flowers are used on this block; 8 trees and 32 shrubs were planted, 15 loads of gravel were used in surfacing the walks. Two extra electric lights were placed. The tool yard and dirt yard were properly screened by latticework. The gardener's tool house was given two coats of paint on the inside.

The block between Thirteenth and Fourteenth and M and N streets

has been improved by a new eight foot gravel walk 230 feet long. This walk and the surfacing of the rest of the walks in this block required 32 loads of gravel. A large rosary containing 350 roses was planted; 6,000 annual and perennial bedding plants each year are planted on this block. One extra electric light was placed here.

The block between Twelfth and Thirteenth and M and N streets had its walk resurfaced with 12 loads of gravel. A rainwater discharge connection was made with a formerly hidden rainwater sewer; 12 trees and 3 shrubs were planted, and 1,000 annual and perennial bedding plants are used each year.

The block between Twelfth and Thirteenth and L and M streets had its walks improved by resurfacing with 14 loads of gravel, and opening and connecting in six different places with a formerly hidden rainwater sewer. Seven large trees were removed from the Memorial Grove collection and replanted in other locations with more room to grow. Memorial Grove was improved with 34 loads of loam, and the flag pole given a heavy coat of paint; 6 new trees were planted on this block, and 1,500 annual and perennial bedding plants are used a year. One extra electric light was placed in this block.

On the block between Eleventh and Twelfth and L and M streets the concrete walks were repaired, 1 tree and 12 shrubs planted and 6,000 annual and perennial plants for bedding are used each year; 4 rockeries were placed in this block.

The block between Eleventh and Twelfth and M and N streets had its concrete walks repaired, 7 shrubs were planted and 6,000 annual and perennial bedding plants a year are used; 1 rockery was placed in this block.

The block between Tenth and Eleventh and L and M streets had its large graveled resting place resurfaced with gravel, using 10 loads. All concrete walks were repaired, 56 shrubs were planted, and 12,000 annual and perennial bedding plants are used yearly; 5 rockeries were placed here.

On the block between Tenth and Eleventh and M and N streets the concrete walks were repaired, a large graveled resting place was made. using 36 loads of gravel; 46 shrubs were planted and 12,000 annual and perennial bedding plants are used yearly; 5 rockeries were placed.

The concrete drive and asphaltum drive around the Capitol Building were repaired. The granite blocks on the property line fence from Tenth to Eleventh street on N street, on Tenth street from L to N, and on L street from Tenth to Eleventh, were put back into straight line; the iron railing on top was given two coats of paint. The rest of the property line fence had ten loose granite blocks reset with concrete, all chain bolts tightened and chains painted two coats.



Of the park trees, 20 with large cavities were filled with cement, 45 smaller wounds were similarly treated or made sanitary by cleaning and painting. The large pine near Tenth and M streets, on the south side of the entrance, was supported by iron rods to keep from splitting. Most of the park trees and shrubs have been trimmed and freed from dead wood. Insects and fungi have been fumigated and sprayed, and gotten quite well under control.

For filling and surfacing, 136 loads of soil were used; 115 loads of stable manure for flower beds and nursery purposes, 17 tons of fertilizers for lawns and flower beds and 70 loads of our own made leaf-mold were used.

The work has been so divided that the same number of men have done the new work, and also put the park in its present condition. The mechanic of the force, with the help of other men when needed, has kept all tools in repair, made new garden tools, such as two horse-mower grass catchers, 24 hand-mower grass catchers, 12 lawn rakes, 18 garden benches, 30 hotbed sashes, 6 coldframes, etc. All park benches received two coats of paint a year.

Eight thousand Holland bulbs are purchased and set out each year, in addition to about 2,000 bulbs set out from the previous year.

Labels with the correct names of all trees and shrubs have been placed on several specimens of each kind within the last month.

The last year the head gardener, or state gardener, has been sent to any public institution, free of charge, upon request of such institution to the Superintendent of Capitol Building and Grounds, to advise in the landscape work.

Donations of trees and shrubs for the Capitol Park were received from the following:

- A. A. Yost, Sacramento, 3 California native trees.
- A. H. Foot, Sacramento, 1 digger pine.
- Leonard Coates Nursery Co., Morgan Hill, 9 trees, 2 shrubs.
- Mrs. H. W. Tilton, Alberta, Canada, 2 hemlocks.
- Mrs. Bell Herr, Sacramento, 5 trees.
- California State Redwood Park, 24 trees, 22 shrubs.
- State Forester, 6 trees.
- State Horticulture Commission, trees, shrubs and ferns.
- Panama-Pacific Exposition, San Diego, 12 Del Mar pines.
- Sonoma State Home, 30 shrubs, 15 perennial plants.
- J. B. Harrell, Sacramento, 3 pines.
- Judge P. J. Shields, Sacramento, 1 rhododendron.

#### Recommendations for Future Improvement of Capitol Park.

The block between Fourteenth and Fifteenth and M and N streets should have its collection of California native plants enlarged whenever possible to obtain such plants. The old concrete walk around this block along N and Fifteenth street sides should be replaced by a new one of the proper width of 10 feet 5 inches. The granite block and



chain fence should be continued around this block. For the missing California fan palms around this block on the sidewalk space, large specimens of this palm should be planted.

For the block between Fourteenth and Fifteenth and L and M streets no correct recommendation for future improvement can be made until the removal of the State Printing Office buildings is decided on.

On the block between Thirteenth and Fourteenth and L and M streets an addition of 51 feet in length should be added to the new greenhouse. A modern public comfort station should be placed where the present gardeners' toolhouse is located.

The blocks between Twelfth and Fourteenth and M and N streets and Twelfth and Thirteenth and L and M streets should have a few more groups of flowering shrubs. On N and L streets' sidewalk lines, joining the flower bed borders on chain fence line between Eleventh and Twelfth streets, concrete curbing should be placed. On the lower lawn near N street, between Eleventh and Twelfth streets, 3 old blackwood acacia trees should be removed and other trees substituted. Spruces or cedars would harmonize better in this place.

On blocks between Tenth and Eleventh and N and L streets, on the lower terrace in front or west of the Capitol Building, on each side of M street walk on this block, one magnolia and one orange tree should be removed, also the two wistarias on the upper terrace forming the arch over the M street steps. This would allow a good view of the front of the Capitol Building from in front of the lower terrace steps. The two fountain basins should be restored to their former purpose, and in each one an artistic fountain placed. A fountain and basin should also be placed at the junction of M and Thirteenth streets.

The asphaltum drives around the Capitol Building and the drive leading east on M street from the building should be renewed, or at least newly surfaced. All concrete walks need some repairing every year; there are at present over 400 slabs more or less damaged.

More permanent resting places should be placed on the blocks east of Twelfth street.

For corner trees, on each side of all entrances to the park, California big trees were planted. A number of them have died, some have been crippled by faster growing trees growing over them. The crippled trees should be taken out and places simply filled by lawn, or dwarf, slow-growing palms, put in their places. The park police should be increased by one man to help in the hours from 4 to 12 p. m. An additional gardener should be furnished in 1915 from the first of March to the last of October, on account of exposition year.

### The Systematic Work in Capitol Park.

The park work is kept up by one florist and nurseryman, one general mechanic and 13 gardeners, under the direction of the Superintendent, through the head gardener. Eight hours constitute a day's work, starting at 6 o'clock in the morning and stopping at 3 o'clock in the afternoon, from the middle of May to the end of September. From the beginning of October to the middle of May the working hours are from 7 a. m. to 4 p. m. On all holidays gardeners are required to clean the park of waste or scattered trash only, after that they are free on full pay. Each man is allowed two weeks vacation on full pay a year, but vacation must be taken at the proper time, when the park work allows it.

The florist grows nearly all plants used in the park nursery, except a few trees and shrubs and the bulbs. The hardier plants are grown in seed boxes and transplanted from these into other boxes holding about 100 plants each. The more tender plants are also grown, first in shallow seed boxes, then transplanted into two and three inch pots, and once or twice shifted into larger pots before being planted into the flower beds and borders. About 60,000 plants a year are grown for park purposes.

In September and October seeds are sown for the winter blooming plants, and from January to April seeds are sown for summer blooming plants. The plants from cuttings for bedding out are mostly grown through the winter months. Cut flowers and decorative plants for the various offices of the Capitol Building and the Governor's mansion are also grown in the nursery. The florist is assisted from time to time by one of the gardeners.

The park comprises ten city blocks; each block is looked after by one gardener, made responsible to keep it in good shape, but each is assisted by an extra man when needed. The walks and drives around the Capitol Building are kept clean by one man, who also assists the two gardeners on the blocks between N and L and Tenth and Eleventh streets with any garden work as needed.

One man does the lawn mowing with a horse lawn mower wherever possible, otherwise it would take at least five men more to keep the park lawns cut. The lawns are cut every eight or ten days from the beginning of March to the end of October, and in some seasons a few times before and after this time.

All flower beds and borders are planted twice a year, and some three times. All men are under civil service regulations, and a strict monthly merit system is kept and the two having the highest percentage outside the florist are used to take the place of any man on a section whenever needed. They also do most of the planting and keeping up of flower beds, and pruning and spraying the trees and shrubs. In winter all

men are used as wanted for pruning, spraying, fumigating, spading, repairing walks and lawns. On rainy days some paint benches, plant-stakes, wheelbarrows, carts or anything needing paint, in the work-room of the toolhouse. Others do some blacksmith work, carpenter work, repair garden tools, etc., under the direction of the general mechanic. Others clean greenhouse plants, help potting and picking out plants, etc.

On dark rainy mornings the head gardener talks and reads and explains gardening to the other gardeners for a couple of hours. But there are at the utmost only eight or ten days a year so stormy and rainy that the men have to stay in the toolhouse all day to work.

#### Resume of Material Needed for New Work.

New asphalt drive around Capitol Building and on M street east to Twelfth street line .....	\$6,000 00
New concrete walks .....	860 00
Concrete curbing .....	335 00
Concrete walks, repairing .....	100 00
Granite blocks and chains .....	704 00
Addition to greenhouse .....	3,000 00
Public comfort station .....	6,000 00
Park benches and resting places .....	300 00
Lumber for curbing .....	150 00
Pipe for extra garden valves in grounds .....	250 00
Fountains and basins .....	3,000 00
9 large palms .....	630 00
Total .....	\$21,329 00

#### Resume of Material Used Last Three Years.

Soil .....	238 loads.
Manure .....	206 loads.
Fertilizers .....	17 tons.
Gravel .....	175 loads.
Trees planted .....	132
Shrubs planted .....	253
Rockeries made .....	16
Decorative plants used .....	6,000
Annual and perennial, 1911 to 1912 .....	15,000
Annual and perennial, 1912 to 1913 .....	35,000
Annual and perennial, 1913 to 1914 .....	55,000
Annual and perennial, in 1914 .....	60,000

## STATE CAPITOL OF CALIFORNIA.

By GEORGE G. RADCLIFF.

The State of California justly lays claim to having the most magnificent capitol grounds in the country, one of the best capitol buildings for its size to be found in any of the states.

The Capitol grounds cover an area of 33.5 acres, extending from Tenth street on the west to Fifteenth street on the east, five city blocks, and from L street on the north to N street on the south, two city blocks. For further description of this beautiful park reference is made to the article by State Gardener Vortriede.

The Capitol Building is stated to be one of the best constructed, most substantial and beautiful capitols in the United States. It is reached from the four streets surrounding the grounds by means of broad walks and carriage drives, the ascent from the ordinary level being attained by two gently sloping grass-covered terraces. The work on the foundation of the building was commenced on September 24, 1860. The corner-stone was laid with Masonic ceremonies May 15, 1861, and the building completed under original plans as amended, which left the basement unfinished, in the year 1874. It was first occupied by the Governor and state officers November 26, 1869. The Supreme Court met there December 3, 1869, and the legislature took formal possession December 6, 1869. This occasion was observed by a general display of flags and the firing of a salute. The cost of construction up to that time was \$2,600,000.

The plans of the Capitol were drawn by F. M. Butler and were selected by the commission on May 19, 1860, as the best and most artistic of seven competitive plans submitted. Reuben Clark was appointed superintending architect, which position he held until the latter part of 1865, when he had to resign on account of ill health. On January 1, 1866, G. P. Cummings was appointed superintending architect; later A. A. Bennett succeeded Mr. Cummings, and the building was completed under his supervision.

During the years 1906-07-08, under the administrations of Governors Geo. C. Pardee and J. N. Gillett, the State Capitol Commission, composed of the Governor, the Secretary of State and the State Treasurer, expended the sum of \$372,925 in completing the attic and basement, remodeling parts of the interior, installing new engine room machinery and steam heating plant, replumbing and rewiring the building throughout for telephone, telegraph and electric lighting purposes, and furnishing it with new electric light fixtures, putting in two elevators and dynamos, cementing the floors of the basement and of the third and fourth stories, tiling the second story corridor with mosaic, putting



in iron stairways throughout, from the basement to the top of the dome, putting on a steel and concrete and asphaltum roof, repainting the interior and exterior of the building, etc., and making the structure as nearly fireproof as possible. Sutton & Weeks were the architects of the remodeling work, their plans having been selected by the Board of Capitol Commissioners from five competitive sets submitted.

The architecture of the building is of the florid Roman-Corinthian style. The building faces the west, has a basement and four stories surmounted by a dome, and contains 146 rooms. The remodeling work added 70 rooms to the original number. The average size of the offices on the first and second floors is 28 by 28 feet, the height 20 feet on the first floor and 18½ feet on the second. The Appellate Court room is 28 by 30 feet and 20 feet high. Some half dozen of the offices are a few feet smaller than the average given.

The exterior walls of the basement and first story are constructed of California granite, and the three upper stories are of hard burned brick covered with mastic and four coats of white paint.

The north, south and west walls are of perpendicular and horizontal construction. At the north and south ends, on the east or rear side, an L. or wing 81 feet in width extends out 58 feet from the main line of the building, and from the center of the building on the same side a semi-circular wing 69 feet across at its greatest width is built out for a distance of 54 feet. This middle wing is entirely occupied by the State Library.

The following are the principal measurements of the State Capitol in detail:

Elevation of embankment upon which the Capitol stands from street level at junction of Tenth and M streets to grade at base of building.....	10 feet
Height of building from grade at base of Capitol to ball surmounting lantern at top of dome .....	237 feet
Total elevation of ball of Capitol above street level at junction of Tenth and M streets	247 feet
Length of building (greatest dimensions).....	320 feet
Depth of building (greatest dimensions).....	164 feet
Height of building (not including dome).....	94 feet
Height of basement story (in clear, from floor to ceiling).....	8 feet
Height of first story (in clear, from floor to ceiling).....	20 feet
Height of second story (in clear, from floor to ceiling).....	18½ feet
Height of third story (in clear, from floor to ceiling).....	16½ feet
Height of fourth story (in clear, from floor to ceiling).....	10½ feet
Wings at north and south ends (east side) width.....	81 feet
depth.....	58 feet
Semicircular wing in middle (east side) width.....	69 feet
depth.....	54 feet
Space between wings at ends of building and semicircle in middle.....	27 feet
Area covered by building.....	52,480 square feet
Diameter of rotunda, first floor.....	53½ feet
Circumference of rotunda, first floor.....	168.07 feet
Height from first floor to top of rotunda.....	125 feet
Length of main halls.....	222 feet
Width of main halls.....	15½ feet
Size of Senate chamber.....	73 x 56 feet
Size of Assembly chamber.....	73 x 75 feet
Height of Senate and Assembly chambers.....	36½ feet

There are two entrances on the east, one each on the north and south, and one—the main entrance—on the west side of the building. The

entrances to the building on the north, south and west sides are through massive arched granite porticos, supporting colonnades of iron pillars making other porticos on the second or legislative halls story. The main entrance to the building, facing the west, is through a storm door, there being also a small hardwood door on either side of the storm door. The corridor at the entrance is of Utah white sandstone trimmed with a California marble base and large panels of California onyx framed with marble. The doors of the other entrances to the building, to the portico on the front of the building on the second story, and to the entrances to the Assembly and Senate chambers are of massive hand-carved walnut.

The basement is used for storage and record rooms for the several state officers, for the state archives, and for the armory, for the receiving and shipping of goods, books, etc., by the Superintendent, State Library, Armory and other departments. The engine rooms, dynamo and meter rooms are also located in the basement.

The corridors of the first floor are beautifully tiled; a colored representation of the great seal of the state in the floor panels six feet square ornaments the entrance to each corridor. The rotunda is decorated with colored stucco work, the wall panels are scroll and figure work, and to the height of the first story is ornamented with scrolls, and representations of mining, of science, literature, art, music, seed time, and harvest.

On the first floor are located the offices of the Governor, Secretary of State, State Controller, Board of Equalization, State Treasurer, Clerk of the Supreme Court, Attorney General, the law library, the court room of the Second District Court of Appeal, the chambers of the judges, and the offices of the clerk, bailiff, and stenographer of the court.

On the second floor are located the offices of the Lieutenant Governor, Superintendent of Capitol Building and Grounds, State Superintendent of Schools, State Printer, State Forester, and Surveyor General; the Senate Chamber also is located in the south L and the Assembly Chamber in the north L on this floor, east of the corridor. In accordance with custom, the Senate Chamber is furnished in red and the Assembly in green, the desks of the members are of black walnut, and those of the presiding officers are of hand-carved mahogany. Neither one of these rooms is decorated, and the ceilings and walls of both are white with the exception of the lobbies under the galleries, which are painted green in the Assembly and blue in the Senate. In the Senate Chamber hangs a magnificent oil painting of Washington, and in the Assembly Chamber one of Lincoln. On the frieze over the Lieutenant Governor's chair in the Senate Chamber is the following Latin motto in gold leaf: "Senatoris est civitatis liberatem tueri," which being translated means,

"It is the duty of a Senator to guard the liberty of the commonwealth." On the frieze over the Speaker's chair in the Assembly is the following Latin motto: "Legislatorum est justas leges condere," which being translated means, "It is the duty of legislators to make just laws." The Senate and Assembly chambers are wainscoted with California marble, and are large, roomy, and well lighted. The acoustics are excellent. Accommodations are provided for the presiding officers, clerks, and sergeants-at-arms of the two houses in rooms adjacent to the chambers, and a large gallery in each house for the sightseeing public.

The corridor of this, the second floor, is tiled with marble mosaic, in panels; in each corner and the center are representations of bunches of California poppies.

The Library has a large semicircular room off the corridor on this floor; in fact, the library has been assigned rooms on every floor of the building, and occupies about thirty per cent of the floor space of the entire Capitol.

On the third floor are the galleries of the Senate and Assembly chambers, and the offices of the State Board of Control, Adjutant General, Horticulture Commissioner, State Veterinarian, State Board of Health, State Commission in Lunacy, and State Engineering Department.

The fourth floor, with the exception of the space occupied by the library, has been arranged for legislative committee rooms and employees' offices, which were much appreciated by the members of the last two legislative sessions, as heretofore there had not been enough rooms in the Capitol to provide a sufficient number of committee rooms for the accommodation of the legislature. But owing to the crowded condition of many of the departments, it is necessary to use all these committee rooms during the recesses of the legislature sessions for relief purposes.

From the dome the scenic beauty impresses the visitor. The view will repay one for climbing the iron stairs from the fourth floor level to the top of the dome. If one should get tired, he can stop at the first or second landings, one quarter or half-way to the top, and walk around the outside of the dome, at either of those stations, and the view will be delightful; but if he will continue on and climb the winding stairs to the very top he will obtain a magnificent panoramic view of the Sacramento Valley and its surrounding mountain ranges. On the east can be seen the Sierra Nevada, on the west the Coast Range, away off to the north the snow-capped peak of Mount Shasta, and to the south, Mount Diablo. The course of the Sacramento and of the American rivers can be traced for miles through the valley to where the American is seen to empty into the Sacramento at the northwest corner of the capitol city, and their course as one river can be traced for miles on its winding way towards the sea.





The State Capitol.



## STATE CAPITOL PARK.

BY STATE GARDENER VORTRIEDE.

The grounds within which the State Capitol stands extend from Tenth street on the west to Fifteenth street on the east, and from L street on the north to N street on the south, taking in ten blocks in all, of the city of Sacramento, including the space which would otherwise be occupied by intersecting streets, and comprising an area of 33.5 acres. The western 11.9 acres were donated by the city of Sacramento to the state; the eastern portion, containing 21.6 acres were bought by the state for the sum of \$100,000.

The grounds are well planted with trees and shrubs; their grateful shade is enjoyed by many visitors. Their growth to large size in comparatively few years, and their evident health and vigor speak volumes for the fertile soil in which they grow and the fine climate they enjoy.

The two magnificent terraces set off the imposing Capitol Building to its best advantage, leading all around the same, and planted with geometric precision in harmony with the architecture of the building. East, or back, of the Capitol the planting is more in the natural style.

All continents and all climes have contributed to the wealth of plants in these choice grounds. The date palms from Asia, Africa and South America; the fan palms from Asia, North America and Australia; the bamboos from Asia; the dracenas from Australia; the pampas from South America; the cedars of the Himalaya mountains; the cedars of Lebanon; the incense cedar from the California mountains; the stone pine of Italy; the Aleppo pine from Southern France; the cypresses of North America, South Europe, Eastern Asia; the Araucarias of South America and Australia; the fir trees of Norway and California; the Cunninghamias, maidenhair trees, Cryptomerias from China and Japan; the gum trees, rubber trees, silk oaks, acacias, bottle-brushes from Australia; the orange, lemon, loquats, persimmon, pomegranate from Europe and Asia; the walnuts from Asia and America; the horsechestnut from Asia; the butternut and hickorynut from America; the elms from Europe and America; the oaks, evergreen and deciduous, from Europe and America; the pepper tree from South America; the olive of Europe; the laurels of Europe and California; the camellias of Asia; the strawberry bush of Europe; the Pittosporums of Australia; the magnolias of America and Asia; the varnish tree of Asia; the locust of America; the tulip tree and Catalpa from the east; the box elder from the east and west; the redwoods from the west; and many more could be named, all of which find a congenial home on these beautiful grounds of rich soil in such a mild and equable climate.

About in the center of the grounds is a plot of half an acre, densely planted with eastern North American trees. This is an interesting grove of trees and shrubs, collected, planted and dedicated to the State of California by the ladies of the Grand Army of the Republic. They are historic trees collected from the most prominent battlefields of the Civil War. We find here the black walnut, the shellbark hickory, the ash, the water oak, the willow oak, the blackjack oak, the silver maple, the red maple, the rock maple, the tulip tree, the basswood tree, the mulberry, the juniper, the black locust, the American or white elm, the slippery elm, the wahoo elm, and the dogwood.

The three acres southeast between Fourteenth and Fifteenth streets and N street and Capitol avenue will be exclusively used for native California flora. Here the plants of the desert, such as the many different and interesting cacti and yuccas, plants loving sunshine to its fullest extent, will meet the moisture and coolness of shade preferring plants, like the many different ferns, the azalea and huckleberries.

The *Sequoia gigantea* from the Sierra Nevada meets here its only relative, the *Sequoia sempervirens* of the northern coast ranges; the sugar pine of the high Sierras; the ocean spray loving Monterey pine, the valley and Douglas oaks of the sunny, dry valley, the tanbark and holly oak of cooler, moister Coast Range; the almost extinct Torrey pine and the silver fir, *Abies venusta*, meet here the omnipresent bull pine and digger pine. The orders of California Native Sons and Daughters will furnish most of the plants for this timely and instructive planting.



## CATALOGUE OF TREES AND SHRUBS IN CAPITOL PARK.

<i>Botanical Name.</i>	<i>Common Name.</i>	<i>Nativity.</i>
<i>Araucaria Bidwilli</i> .....	Bunya-Bunya .....	Australia
<i>Araucaria Imbricata</i> .....	Chili Pine (or Monkey Puzzle) .....	South America
<i>Thuya Plicata</i> .....	Giant Arbor Vitæ .....	California
<i>Thuya Plicata Aurea</i> .....	Golden Giant Arbor Vitæ .....	California
<i>Thuya Orientalis</i> .....	Chinese Arbor Vitæ .....	Asia
<i>Tumion Californicum</i> .....	California Nutmeg .....	California
<i>Cedrus Deodara</i> .....	Indian Cedar .....	Himalya Mountains
<i>Cedrus Libani</i> .....	Cedar of Lebanon .....	Asia Minor
<i>Cedrus Atlantica</i> .....	Mount Atlas Cedar .....	Northern Africa
<i>Cryptomeria Japonica</i> .....	Japanese Cedar .....	Japan
<i>Cunninghamia Sinensis</i> .....	Cunninghamia .....	China
<i>Cupressus Funebis</i> .....	Weeping Cypress .....	China
<i>Cupressus Goveniana</i> .....	Goven's Cypress .....	California
<i>Cupressus Guadalupensis</i> .....	Guadalupe or Blue Cypress .....	Guadalupe Islands
<i>Chamaecyparis Lawsoniana</i> .....	Lawson Cypress .....	Pacific Coast
<i>Chamaecyparis Lawsoniana</i> Alumi .....	Variety of Lawson Cypress .....	Pacific Coast
<i>Chamaecyparis Lawsoniana</i> Lutea .....	Variety of Lawson Cypress .....	Pacific Coast
<i>Chamaecyparis Lawsoniana</i> Glauca Coerulea .....	Variety of Lawson Cypress .....	Pacific Coast
<i>Chamaecyparis Lawsoniana</i> Stricta Viridis .....	Variety of Lawson Cypress .....	Pacific Coast
<i>Chamaecyparis Nutkatensis</i> .....	Sitka or Yellow Cypress .....	Pacific Coast
<i>Cupressus Macrocarpa</i> .....	Monterey Cypress .....	California
<i>Cupressus Macrocarpa Lutea</i> .....	Golden Monterey Cypress .....	California
<i>Cupressus Sempervirens</i> Fastigiata .....	Italian Cypress .....	Southern Europe
<i>Juniperus Occidentalis</i> .....	Western Juniper .....	California
<i>Juniperus Communis</i> .....	Common Juniper .....	Europe
<i>Juniperus Chinensis</i> .....	Chinese Juniper (or Red Cedar) .....	Asia
<i>Juniperus Chinensis Procumbens</i> Variegata .....	Chinese Juniper (or Red Cedar) .....	Asia
<i>Juniperus Virginiana</i> .....	Pencil Cedar .....	Southeast United States
<i>Libocedrus Decurrens</i> .....	Incense Cedar .....	Pacific Coast
<i>Pinus Lambertiana</i> .....	Sugar Pine .....	Pacific Coast
<i>Pinus Contorta</i> .....	Scrub Pine .....	California
<i>Pinus Coulteri</i> .....	Big Cone Pine .....	Pacific Coast
<i>Pinus Monophylla</i> .....	Nut Pine .....	Pacific Coast
<i>Pinus Jeffreyi</i> .....	Jeffrey's Pine .....	Pacific Coast
<i>Pinus Ponderosa</i> .....	Yellow Pine .....	Pacific Coast
<i>Pinus Radiata</i> .....	Monterey Pine .....	California
<i>Pinus Sabiniana</i> .....	Digger Pine .....	California
<i>Pinus Torreyana</i> .....	Torrey Pine .....	California
<i>Pinus Parryana</i> .....	Parry Pine .....	California
<i>Pinus Pinea</i> .....	Italian Stone Pine .....	Southern Europe
<i>Pinus Halepensis</i> .....	Aleppo Pine .....	Western Asia
<i>Pinus Rigida</i> .....	Pitch Pine .....	Eastern United States
<i>Chamaecyparis Plumosa Viridis</i> .....	Retinospora .....	Japan
<i>Sequoia Wellingtonia</i> .....	Big Tree .....	California
<i>Sequoia Sempervirens</i> .....	Redwood .....	California
<i>Abies Concolor</i> .....	White Fir .....	Pacific Coast
<i>Abies Nobilis</i> .....	Red Fir .....	Pacific Coast
<i>Abies Grandis</i> .....	White Fir .....	Pacific Coast
<i>Pseudotsuga Mucronata</i> .....	Douglas Spruce .....	Pacific Coast
<i>Pseudotsuga Macrocarpa</i> .....	Hemlock .....	South Pacific Coast
<i>Picea Glehnii</i> .....	Japanese Dwarf Spruce .....	Japan
<i>Picea Parryana</i> .....	Blue Spruce .....	Western United States
<i>Picea Sitchensis</i> .....	Tideland Spruce .....	Pacific Coast
<i>Picea Excelsa</i> .....	Norway Spruce .....	Europe
<i>Tsuga Mertensiana</i> .....	Mountain Hemlock .....	Pacific Coast
<i>Taxus Floridana</i> .....	Yew .....	Southeastern United States
<i>Taxus Baccata Fastigiata</i> .....	Irish Yew .....	Southern Europe
<i>Abelia Rupestris</i> .....	Abelia .....	China
<i>Acacia Baileyana</i> .....	.....	Australia
<i>Acacia Cultriformis</i> .....	.....	Australia
<i>Acacia Dealbata</i> .....	Silver Wattle .....	Australia



Acacia Decurrens	Black Wattle	Australia
Acacia Mollissima	Green Wattle	Australia
Acacia Melanoxylon	Black Acacia	Australia
Acacia Nerifolia		Australia
Arbutus Unedo	Strawberry Tree	Southern Europe
Arbutus Menziesi	Madrone	Pacific Coast
Azara Microphylla		Chile
Berberis Darwini		South America
Berberis Aquifolium	Oregon Grape	Pacific Coast
Berberis Pinnata	Mahonia	Pacific Coast
Buxus Sempervirens	Boxwood	Southern Europe, Africa
Buxus Sempervirens Aborescens	Boxwood	Southern Europe, Africa
Buxus Sempervirens Aureo-Marginata	Variegated Boxwood	Southern Europe, Africa
Sterculia Diversifolia	Bottle Tree	Australia
Cytisus Scoparius	Scotch Broom	Europe
Rhamnus Purchiana	California Wild Coffee	Pacific Coast
Callistemon Speciosum	Bottle Brush	Australia
Camellia Japonica	Camellia	Eastern Asia and Japan
Ceratonia Siliqua	Carob Tree	Western Asia and Northern Africa
Camphora Officinalis	Camphor Tree	Asia
Carpenteria Californica	Carpenteria	California
Ceanothus Azureus	California Lilac	Pacific Coast
Ceanothus Thyrsiflorus	California Lilac	Pacific Coast
Ceanothus Gloire de Plantieres		Garden Hybrid
Ceanothus Gloire de Versailles		Garden Hybrid
Cestrum Aurantiacum	Cestrum	Guatemala
Cestrum Elegans	Cestrum	Mexico
Prunus Illicifolia	California Evergreen Cherry	Catalina Island
Prunus Integrifolia	California Evergreen Cherry	Catalina Island
Choisya Ternata	Mexican Orange	Mexico
Coronilla Emerus	Coronilla	Southern Europe
Cotoneaster Microphylla	Cotoneaster	Himalaya Mountains
Pyracantha Coccinea	Burning Bush	Europe
Eleagnus Pungens Argentea	Eleagnus	Japan
Escallonia Rosea	Escallonia	Southern America
Eucalyptus Coccifera		Australia
Eucalyptus Globulus	Blue Gum	Tasmania
Eucalyptus Polyanthema	Red Box	Australia
Eucalyptus Robusta	Swamp Mahogany	Australia
Eucalyptus Rostrata	Red Gum	Australia
Eucalyptus Rudis	Desert Mahogany	Australia
Eucalyptus Pulverulenta	Powdery Leafed Gum	Australia
Eucalyptus Viminalis	Manna Gum	Australia
Eucalyptus Crebra	Narrow Leafed Ironbark	Australia
Eugenia Myrtifolia	Brush Cherry	Australia
Euonymus Japonicus	Euonymus	Japan
Euonymus Japonicus Albo-Marginatus	Variegated Euonymus	Japan
Euonymus Japonicus Aurei		
Variegatus	Variegated Euonymus	Japan
Ficus Macrophylla	Moreton Bay Fig	Australia
Grevillea Robusta	Silk Oak	Australia
Ilex Aquifolium	Holly	Europe
Laurus Nobilis	Sweet Bay	Southern Europe
Cerasus Laurocerasus	English Laurel	Southern Europe
Cerasus Lusitanica	Portugal Laurel	Southern Europe
Umbellularia Californica	California Laurel	Pacific Coast
Viburnum Tinus	Laurustinus	Southern Europe
Ligustrum Japonicum	Privet	Japan
Eriobotrya Japonica	Loquat	Japan
Photinia Serrulata	Photinia	China
Magnolia Foetida	Magnolia Grandiflora	Southern United States
Melaleuca Decussata	Bottlebrush	Australia
Melaleuca Ericifolia	Bottlebrush	Australia
Melaleuca Hypericifolia	Bottlebrush	Australia
Melaleuca Styphelioides	Bottlebrush	Australia
Myrtus Communis	Myrtle	Southern Europe
Nandina Domestica	Nandina	Japan
Quercus Agrifolia	California Live Oak	Pacific Coast
Quercus Suber	Cork Oak	Southern Europe and Northern Africa
Quercus Phellos	Willow Oak	Southeastern United States
Quercus Chrysolepis	Golden Oak	California

Pasania Densiflora	Tanbark Oak	Pacific Coast
Olea Europaea	Olive	Southern Europe
Nerium Oleander	Oleander	Asia
Citrus Aurantium	Seville Orange	Asia
Citrus Bigaradia	Sour Orange	Asia
Citrus Dulcis	Sweet Orange	Asia
Citrus Decumana	Grape Fruit	Asia
Parkinsonia Aculeata	Jerusalem Thorn	Southwestern United States
Shinus Molle	Pepper Tree	Chile
Polygala Dalmatiana		Garden Hybrid
Pittosporum Eugenioides	Pittosporum	Australia
Pittosporum Tennifolium	Pittosporum	Australia
Pittosporum Tobira	Pittosporum	China and Japan
Pittosporum Tobira Variegatum	Pittosporum	China and Japan
Rhamnus Crocea	Evergreen Haw	Pacific Coast
Rhododendron Ponticum	Rhododendron	Europe and Asia
Veronica Speciosa Imperialis	Veronica	New Zealand
Abutilon Darwinii	Abutilon	Brazil
Atriplex Breweri	Saltbush	California
Arctostaphylos Glauca	Manzanita	Pacific Coast
Myrica Californica	California Wax Myrtle	California
Feijoa Selowiana	Feijoa	South America
Datura Svaveolens	Angels Trumpet	Mexico
Kunzia Corifolia	Kunzia	Australia
Plumbago Capensis	Plumbago	Southern Africa
Heteromeles Arbutifolia	California Christmas Berry	California
Poinciana Pulcherrima	Flowering Fence	Central America
Gardenia Florida	Cape Jasmine	China
Fraxinus Americana	American White Ash	Eastern United States
Æsculus Californica	California Buckeye	California
Catalpa Bignonioides	Catalpa	Southeastern United States
Catalpa Speciosa	Hardy Catalpa	Southeastern United States
Prunus Avium Floreplenum	Double White Cherry	Garden Hybrid
Prunus Cerasus Ranunculiflora	Double White Cherry	Garden Hybrid
Ulmus Americana	White Elm	Eastern United States
Ulmus Campestris	English Elm	Europe
Ulmus Alata	Wahoo Elm	Eastern United States
Ulmus Crassifolia	Cedar Elm	Southeastern United States
Ulmus Suberosa	Cork Elm	Europe
Hicoria Alba	Big Bud Hickory	Eastern United States
Gleditschia Triacanthus	Honey Locust	Eastern United States
Æsculus Hippocastanum	Horse Chestnut	Europe
Cercis Canadensis	Red Bud	Eastern United States
Cercis Occidentalis	Red Bud	Western United States
Robinia Pseudacacia	Black Locust	Eastern United States
Ginkgo Biloba	Maidenhair Tree	China
Acer Macrophyllum	Oregon Maple	Pacific Coast
Acer Negundo	Box Elder	Eastern United States
Acer Negundo Californicum	California Box Elder	Pacific Coast
Acer Rubrum	Scarlet Maple	Eastern United States
Acer Sacharinum	Silver Maple	Eastern United States
Acer Saccharum	Sugar Maple	Eastern United States
Acer Palmatum	Japanese Maple	Japan
Ficus Carica	Figtree	Asia
Morus Alba	White Mulberry	Asia
Morus Nigra	Black Mulberry	Asia
Paulownia Imperialis	Empress Tree	China
Quercus Douglassii	Blue Oak	California
Quercus Garryana	White Oak	Pacific Coast
Quercus Lobata	Valley Oak	California
Quercus Macrocarpa	Bur-Oak	Eastern United States
Quercus Rubra	Red Oak	Eastern United States
Quercus Californica	Black Oak	California
Prunus Persica Double Red	Double Flowering Peach	Garden Hybrid
Sophora Japonica	Pagoda Tree	Asia
Melia Azedarach Umbraculiformis	Texas Umbrella Tree	
Melia Azadirachta	Japanese Umbrella Tree	India
Liriodendron Tulipifera	Tulip Tree	Eastern United States
Juglans Nigra	Eastern Black Walnut	Eastern United States
Juglans Californica	California Black Walnut	California
Juglans Regia	English Walnut	Persia
Juglans Cinerea	Butternut Tree	Western and Eastern United States

Hicoria Pecan	Pecan	Southeastern United States
Kohlruteria Paniculata	Varnish Tree	Japan
Salix	Lick's Weeping Willow	Hybrid California
Alnus Rhombifolia	Alder	Pacific Coast
Cornus Florida	Dogwood	Eastern United States
Cornus Nuttallii	Dogwood	Western United States
Diospyrus Kaki	Persimmon	Japan
Zizyphus Jujube	Chinese Date	China
Althea Syriacus	Rose of Sharon	Syria
Berberis Thunbergii	Thurberry's Barberry	Japan
Berberis Vulgaris	Common Barberry	Europe and Asia
Berberis Vulgaris Atropurpurea	Purple Leaved Common Barberry	Europe and Asia
Kerria Japonica	Corchorus	Japan
Lagerstroemia Indica	Crape Myrtle	China
Corylus Rostrata	Hazel Nut	California
Deutzia Scabra	Deutzia	Japan
Hydrangia Hortensis	Hydrangia	China and Japan
Erythrina Crista-Galli	Coral Bush	Mexico
Lippia Citriodora	Lemon Verbena	Brazil
Lonicera Tartarica	Tartarian Honeysuckle	Asia
Cydonia Japonica	Japanese Quince	Japan
Diervilla Florida	Weigela	Japan and China
Laburnum Vulgare	Golden Chain	Europe
Spiraea Cantoniensis	Bridal Wreath	China
Magnolia Obovata Gracilis	Magnolia	China
Magnolia Conspicua	Yulan Magnolia	China
Rhus Cotinus	Smoke Tree	Southern Europe
Punica Granatum	Pomegranate	Southern Europe
Tamarix Gallica	Tamarix	Southern Europe
Tamarix Parviflora	African Tamarix	Northern Africa
Crataegus Oxyacantha	Hawthorn	Europe
Syringa Vulgaris Alba	White Lilac	Asia
Syringa Vulgaris Rosea	Red Lilac	Asia
Philadelphus Coronarius	Mock Orange	Europe and Asia
Prunus Mume	Japanese Flowering Plum	Japan
Viburnum Vulgare	Snowball	Europe
Symphoricarpos Racemosus	Snowberry	United States
Ribes Speciosum	Gooseberry	California
Ribes Aureum	Gooseberry	California
Fraxinus Oregana	Oregon Ash	Pacific Coast
Platanus Racemosa	California Sycamore	Pacific Coast
Casuarina Srista	She Oak	Australia
Abies Venusta	Santa Lucia Fir	California
Jubæa Spectabilis	Wine Palm	Chile
Cocos Alphonsii	Belair Palm	Brazil
Cocos Campestris	Peach Palm	Uruguay
Trichocarpus Excelsus	Japanese Fan Palm	Japan
Erythea Edulis	Guadalupe Fan Palm	Guadalupe Islands
Erythea Armata	Blue Palm	Guadalupe Islands
Livistonia Australis	Corypha Palm	Australia
Phoenix Canariensis	Date Palm	Canary Islands
Phoenix Dactylifera	Date Palm	Asia and Africa
Phoenix Reclinata	Date Palm	South Africa
Washingtonia Robusta	California Fanpalm	California
Arundinaria Metake	Bamboo	Japan
Agave Americana Variegata	Variegated Century Plant	California
Agave Americana	Century Plant	Mexico
Cordylone Stricta	Dracæna	Australia
Yucca Baccata	Spanish Bayonet	California
Yucca Gloriosa Recurvifolia	Weeping Yucca	Southern United States
Yucca Whipplei	Yucca	California
Cortaderia Argentea	Pampas Grass	South America
Phormium Tenax	New Zealand Flax	Australia

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